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# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

# FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the Quarterly Period Ended June 30, 2018**

**OR**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from to**

**Commission File Number 001-33389**

# VIVUS, INC.

(Exact name of registrant as specified in its charter)

| **Delaware** | **94-3136179** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (IRS employer identification number) |
| **900 E. Hamilton Avenue, Suite 550 Campbell, California** | **95008** |
| (Address of principal executive office) | (Zip Code) |

**(650) 934-5200**

(Registrant's telephone number, including area code)

**N/A**

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer ☐ | Accelerated filer ☒ | Non-accelerated filer ☐ (Do not check if a smaller reporting company) | Smaller reporting company ☐ |
|---|---|---|---|
| | | | Emerging growth company ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

At July 31, 2018, 106,227,162 shares of common stock, par value $.001 per share, were outstanding.

**VIVUS, INC.**

**Quarterly Report on Form 10-Q**

**INDEX**

**PART I: FINANCIAL INFORMATION**

**ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)**

**VIVUS, INC.**

**CONDENSED CONSOLIDATED BALANCE SHEETS**
**(In thousands, except par value)**

| | June 30, 2018 | December 31, 2017 |
|---|---|---|
| ASSETS | Unaudited | |
| Current assets: | | |
| Cash and cash equivalents | $ 57,181 | $ 66,392 |
| Available-for-sale securities | 66,361 | 159,943 |
| Accounts receivable, net | 11,071 | 12,187 |
| Inventories | 22,259 | 17,712 |
| Prepaid expenses and other current assets | 6,399 | 7,178 |
| Total current assets | 163,271 | 263,412 |
| Property and equipment, net | 445 | 542 |
| Intangible and other non-current assets | 141,545 | 1,014 |
| Total assets | $ 305,261 | $ 264,968 |
| LIABILITIES AND STOCKHOLDERS' DEFICIT | | |
| Current liabilities: | | |
| Accounts payable | $ 4,345 | $ 10,072 |
| Accrued and other liabilities | 26,879 | 21,475 |
| Deferred revenue | 1,897 | 2,075 |
| Current portion of long-term debt | — | 5,147 |
| Total current liabilities | 33,121 | 38,769 |
| Long-term debt, net of current portion | 295,498 | 230,536 |
| Deferred revenue, net of current portion | 4,243 | 4,674 |
| Non-current accrued and other liabilities | 283 | 327 |
| Total liabilities | 333,145 | 274,306 |
| Commitments and contingencies | | |
| Stockholders' deficit: | | |
| Preferred stock; $1.00 par value; 5,000 shares authorized; no shares issued and outstanding at June 30, 2018 and December 31, 2017 | — | — |
| Common stock; $.001 par value; 200,000 shares authorized; 106,187 and 105,977 shares issued and outstanding at June 30, 2018 and December 31, 2017, respectively | 106 | 105 |
| Additional paid-in capital | 839,310 | 834,730 |
| Accumulated other comprehensive loss | (508) | (608) |
| Accumulated deficit | (866,792) | (843,565) |
| Total stockholders' deficit | (27,884) | (9,338) |
| Total liabilities and stockholders' deficit | $ 305,261 | $ 264,968 |

See accompanying notes to unaudited condensed consolidated financial statements.

**VIVUS, INC.**

**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**
**(In thousands, except per share data)**
**(Unaudited)**

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 |
| Revenue: | | | | |
| Net product revenue | $ 13,250 | $ 8,518 | $ 22,882 | $ 26,138 |
| License and milestone revenue | — | — | — | 5,000 |
| Supply revenue | 1,042 | 2,119 | 2,725 | 5,931 |
| Royalty revenue | 668 | 590 | 1,253 | 1,170 |
| Total revenue | 14,960 | 11,227 | 26,860 | 38,239 |
| | | | | |
| Operating expenses: | | | | |
| Cost of goods sold (excluding amortization) | 3,286 | 3,389 | 5,916 | 9,375 |
| Amortization of intangible assets | 1,273 | 181 | 1,364 | 362 |
| Selling, general and administrative | 11,711 | 11,630 | 21,779 | 23,061 |
| Research and development | 2,042 | 1,014 | 3,445 | 3,194 |
| Total operating expenses | 18,312 | 16,214 | 32,504 | 35,992 |
| | | | | |
| (Loss) income from operations | (3,352) | (4,987) | (5,644) | 2,247 |
| | | | | |
| Interest expense and other expense, net | 9,218 | 8,398 | 17,567 | 16,700 |
| Loss before income taxes | (12,570) | (13,385) | (23,211) | (14,453) |
| Provision for (benefit from) income taxes | 4 | 1 | 16 | (11) |
| Net loss | $ (12,574) | $ (13,386) | $ (23,227) | $ (14,442) |
| | | | | |
| Basic and diluted net loss per share: | $ (0.12) | $ (0.13) | $ (0.22) | $ (0.14) |
| Shares used in per share computation: | | | | |
| Basic and diluted | 106,116 | 105,712 | 106,065 | 105,596 |

**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**

**(In thousands)**
**(Unaudited)**

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 |
| Net loss | $ (12,574) | $ (13,386) | $ (23,227) | $ (14,442) |
| Unrealized gain on securities, net of taxes | 576 | 109 | 99 | 234 |
| Translation adjustment | 1 | — | 1 | — |
| Comprehensive loss | $ (11,997) | $ (13,277) | $ (23,127) | $ (14,208) |

See accompanying notes to unaudited condensed consolidated financial statements.

**VIVUS, INC.**

**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In thousands)**
**(Unaudited)**

| | Six Months Ended June 30, | |
|---|---|---|
| | 2018 | 2017 |
| **Operating activities:** | | |
| Net loss | $ (23,227) | $ (14,442) |
| Adjustments to reconcile net loss to net cash used for operating activities: | | |
| Depreciation and amortization | 1,495 | 501 |
| Amortization of debt issuance costs and discounts | 10,706 | 9,973 |
| Amortization of discount or premium on available-for-sale securities | 616 | 442 |
| Share-based compensation expense | 1,974 | 1,468 |
| Changes in assets and liabilities: | | |
| Accounts receivable | 1,116 | 1,037 |
| Inventories | (2,785) | 558 |
| Prepaid expenses and other assets | 779 | 2,912 |
| Accounts payable | (5,727) | (323) |
| Accrued and other liabilities | (2,469) | 4,783 |
| Deferred revenue | (609) | (18,197) |
| Net cash used for operating activities | (18,131) | (11,288) |
| **Investing activities:** | | |
| Property and equipment purchases | (34) | (21) |
| Acquisition of PANCREAZE license | (135,000) | — |
| Purchases of available-for-sale securities | (7,604) | (20,915) |
| Proceeds from maturity of available-for-sale securities | 40,411 | 23,120 |
| Proceeds from sales of available-for-sale securities | 60,259 | 7,208 |
| Net cash (used for) provided by investing activities | (41,968) | 9,392 |
| **Financing activities:** | | |
| Net proceeds from debt issuance | 107,991 | — |
| Repayments of notes payable | (57,187) | (6,507) |
| Net proceeds from exercise of common stock options | 60 | — |
| Sale of common stock through employee stock purchase plan | 24 | 26 |
| Net cash provided by (used for) financing activities | 50,888 | (6,481) |
| **Net decrease in cash and cash equivalents** | (9,211) | (8,377) |
| **Cash and cash equivalents:** | | |
| Beginning of year | 66,392 | 84,783 |
| End of period | $ 57,181 | $ 76,406 |

See accompanying notes to unaudited condensed consolidated financial statements.

**VIVUS, INC.**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**JUNE 30, 2018**

## 1. BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

VIVUS is a specialty pharmaceutical company with three approved therapies and one product candidate in active clinical development. Qsymia® (phentermine and topiramate extended release) is approved by the U.S. Food and Drug Administration, or FDA, for chronic weight management. STENDRA® (avanafil) is approved by FDA for erectile dysfunction, or ED, and by the European Commission, or EC, under the trade name SPEDRA, for the treatment of ED in the EU. In June 2018, the Company acquired the U.S. and Canadian commercial rights for PANCREAZE® (pancrelipase), which is indicated for the treatment of exocrine pancreatic insufficiency due to cystic fibrosis or other conditions. The Company commercializes Qsymia and PANCREAZE in the U.S. through a smalls sales force supported by an internal commercial team. The Company licenses the commercial rights to STENDRA/SPEDRA in the U.S., EU and other countries and to PANCREAZE in Canada. VI-0106 (tacrolimus) is in active clinical development and is being studied in patients with pulmonary arterial hypertension, or PAH.

When reference is made to the “Company” or “VIVUS” in these footnotes, it refers to the Delaware corporation, or VIVUS, Inc., and its California predecessor, as well as all of its consolidated subsidiaries.

*Basis of Presentation*

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. Management has evaluated all events and transactions that occurred after June 30, 2018 through the date these unaudited condensed consolidated financial statements were filed. There were no events or transactions during this period that require recognition or disclosure in these unaudited condensed consolidated financial statements. The December 31, 2017 condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP.

The unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and notes thereto included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 as filed on March 14, 2018 with the Securities and Exchange Commission, or SEC, and as amended by the Form 10-K/A filed on April 26, 2018 with the SEC. Certain amounts have been reclassified to conform to current year presentation. The unaudited condensed consolidated financial statements include the accounts of VIVUS, Inc. and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated.

*Use of Estimates*

The preparation of these unaudited condensed consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an ongoing basis, the Company evaluates its estimates, including critical accounting policies or estimates related to available-for-sale securities, debt instruments, research and development expenses, income taxes, inventories, revenues, contingencies and litigation and share-based compensation. The Company bases its estimates on historical experience, information received from third parties and on various market specific and other relevant assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ significantly from those estimates under different assumptions or conditions.

*Significant Accounting Policies*

There have been no changes to the Company's significant accounting policies since the Company's Annual Report on Form 10-K for the year ended December 31, 2017 with the exception of its revenue recognition policy as discussed in Note 2.

*Recent Accounting Pronouncement Adopted*

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers*. This standard is a comprehensive new revenue recognition model that requires revenue to be recognized in a manner to depict the transfer of goods or services to a customer at an amount that reflects the consideration expected to be received in exchange for those goods or services. This new standard supersedes most previously-existing revenue recognition guidance. The Company adopted this standard in January 2018 using the modified retrospective basis. See Note 2.

In August 2016, the FASB issued Accounting Standards Update 2016-15, *Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments*. The standard clarifies how certain cash receipts and cash payments will be presented and classified in the statement of cash flows. The Company adopted this standard in January 2018, and it had no impact on its consolidated financial statements.

*Recent Accounting Pronouncements Not Yet Adopted*

In February 2016, the FASB issued Accounting Standards Update 2016-02, *Leases* (Topic 842), which modifies the accounting by lessees for all leases with a term greater than 12 months. This standard will require lessees to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. For public companies, this standard is effective for annual and interim periods beginning on or after December 15, 2018. Early adoption is permitted, but the Company intends to adopt this guidance effective January 1, 2019 using a modified retrospective transition method. The Company's only significant lease is its operating lease for its corporate headquarters, although it has several smaller leases. The Company is completing its analysis, but expects the adoption of this guidance to have a significant impact on its balance sheets as it will recognize right of use assets and corresponding lease liabilities. The Company expects the overall recognition of expense to be similar to current guidance, though the classification of such expense could be significantly different.

## 2. REVENUES

On January 1, 2018, the Company adopted Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers*, or Topic 606. Topic 606 supersedes the revenue recognition requirements in Topic 605 *Revenue Recognition*, or Topic 605, and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services.

The Company adopted Topic 606 as of January 1, 2018 using the modified retrospective transition method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning on or after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Topic 605. Due in large part to the change in accounting estimate made by the Company in the first quarter of 2017, revenue amounts as reported for the three and six months ended June 30, 2017 under Topic 605 are approximately the same as they would have been under Topic 606, and the Company did not have or record a cumulative impact of adopting Topic 606 as of January 1, 2018.

*Revenue Recognition*

For all revenue transactions, the Company evaluates its contracts with its customers to determine revenue recognition using the following five-step model:

1) The Company identifies the contract(s) with a customer
2) The Company identifies the performance obligations in the contract
3) The Company determines the transaction price
4) The Company allocates the transaction price to the identified performance obligations
5) The Company recognizes revenue when (or as) the entity satisfies a performance obligation

*Product Revenue:*

Product revenue is recognized at the time of shipment at which time the Company has satisfied its performance obligation. Product revenue is recognized net of consideration paid to the Company's customers, wholesalers and certified pharmacies. Such consideration is for services rendered by the wholesalers and pharmacies in accordance with the wholesalers and certified pharmacy services network agreements, and includes a fixed rate per prescription shipped and monthly program management and data fees. These services are not deemed sufficiently separable from the customers' purchase of the product; therefore, they are recorded as a reduction of revenue at the time of revenue recognition.

Other product revenue allowances include a reserve for estimated product returns, certain prompt pay discounts and allowances offered to the Company's customers, program rebates and chargebacks. These product revenue allowances are recognized as a reduction of revenue at the date at which the related revenue is recognized. The Company also offers discount programs to patients. Calculating certain of these items involves estimates and judgments based on sales or invoice data, contractual terms, utilization rates, new information regarding changes in these programs' regulations and guidelines that would impact the amount of the actual rebates or chargebacks. The Company reviews the adequacy of product revenue allowances on a quarterly basis. Amounts accrued for product revenue allowances are adjusted when trends or significant events indicate that adjustment is appropriate and to reflect actual experience. See Note 9 for product reserve balances.

*Change in Accounting Estimate in 2017*

The Company ships units of Qsymia through a distribution network that includes certified retail pharmacies. The Company began shipping Qsymia in September 2012 and grants rights to its customers to return unsold product from six months prior to and up to 12 months subsequent to product expiration. This has resulted in a potential return period of from 24 to 36 months depending on the ship date of the product. As the Company had no previous experience in selling Qsymia and given its lengthy return period, the Company was not initially able to reliably estimate expected returns of Qsymia at the time of shipment, which was required by the accounting literature at the time, and therefore recognized revenue when units were dispensed to patients through prescriptions, at which point the product was not subject to return, or when the expiration period had ended.

Beginning in the first quarter of 2017, with 48 months of returns experience, the Company believed that it had sufficient data and experience from selling Qsymia to reliably estimate expected returns. Therefore, beginning in the first quarter of 2017, under the then relevant accounting literature, the Company began recognizing revenue from the sales of Qsymia upon shipment and recording a reserve for expected returns at the time of shipment.

In accordance with this change in accounting estimate, in the first quarter of 2017 the Company recognized a one-time adjustment relating to products that had been previously shipped, consisting of $17.9 million of gross revenues, adjusted for an expected returns reserve of $5.7 million and estimated gross-to-net charges of $4.9 million, for a net impact of $7.3 million in revenues. The Company also recorded increased cost of goods sold of $0.6 million and marketing expense of $0.7 million associated with the change in accounting estimate. The increase in net product revenue resulted in a decrease in net loss of $6.0 million or $0.06 per share for the six months ended June 30, 2017.

*Supply Revenue:*

The Company produces STENDRA/SPEDRA through a contract manufacturing partner and then sells it to its commercialization partners. The Company is the primary responsible party in the commercial supply

arrangements and bears significant risk in the fulfillment of the obligations, including risks associated with manufacturing, regulatory compliance and quality assurance, as well as inventory, financial and credit loss. As such, the Company recognizes supply revenue on a gross basis as the principal party in the arrangements. The Company recognizes supply revenue at the time of shipment and, in the unusual case where the product does not meet contractually-specified product dating criteria at the time of shipment to the partner, the Company records a reserve for estimated product returns. There are no such reserves as of June 30, 2018.

*License and Milestone Revenue*

License and milestone revenues related to arrangements, usually license and/or supply agreements, entered into by the Company are recognized by following the five-step process outlined above. The allocation and timing of recognition of such revenue will be determined by that process and the amounts recognized and the timing of that recognition may not exactly follow the wording of the agreement as the amount allocated following the accounting analysis of the agreement may differ and the timing of recognition of a significant performance obligation may predate the contractual date.

*Royalty Revenue*

The Company relies on data provided by its collaboration partner in determining its contractually-based royalty revenue. Such data includes accounting estimates and reports for various discounts and allowances, including product returns. The Company records royalty revenues based on the best data available and makes any adjustments to such revenues as such information becomes available.

*Revenue by Source and Geography*

Revenue disaggregated by revenue source and by geographic region was as follows (in thousands):

| | Three Months Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2018 | | | 2017 | | |
| | U.S. | ROW | Total | U.S. | ROW | Total |
| Qsymia—Net product revenue | $ 11,134 | $ — | $ 11,134 | $ 8,518 | $ — | $ 8,518 |
| PANCREAZE - Net product revenue | 2,116 | — | 2,116 | — | — | — |
| PANCREAZE - Royalty revenue | — | 74 | 74 | — | — | — |
| STENDRA/SPEDRA—Supply revenue | 525 | 517 | 1,042 | — | 2,119 | 2,119 |
| STENDRA/SPEDRA—Royalty revenue | — | 594 | 594 | — | 590 | 590 |
| Total revenue | $ 13,775 | $ 1,185 (1) | $ 14,960 | $ 8,518 | $ 2,709 (2) | $ 11,227 |

| | Six Months Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2018 | | | 2017 | | |
| | U.S. | ROW | Total | U.S. | ROW | Total |
| Qsymia—Net product revenue | $ 20,766 | $ — | $ 20,766 | $ 26,138 | $ — | $ 26,138 |
| PANCREAZE - Net product revenue | 2,116 | — | 2,116 | — | — | — |
| PANCREAZE - Royalty revenue | — | 74 | 74 | — | — | — |
| STENDRA/SPEDRA—License revenue | — | — | — | 5,000 | — | 5,000 |
| STENDRA/SPEDRA—Supply revenue | 1,071 | 1,654 | 2,725 | 3,775 | 2,156 | 5,931 |
| STENDRA/SPEDRA—Royalty revenue | — | 1,179 | 1,179 | — | 1,170 | 1,170 |
| Total revenue | $ 23,953 | $ 2,907 (3) | $ 26,860 | $ 34,913 | $ 3,326 (4) | $ 38,239 |

(1) $1.1 million of which was attributable to Germany.

(2) $2.7 million of which was attributable to Germany.

(3) $2.8 million of which was attributable to Germany.

(4) $3.3 million of which was attributable to Germany.

Revenue and cost of goods sold by source was as follows (in thousands):

| | Three Months Ended June 30, | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2018 | | | | 2017 | | |
| | Qsymia | PANCREAZE | STENDRA/ SPEDRA | Total | Qsymia | STENDRA/ SPEDRA | Total |
| Net product revenue | $ 11,134 | $ 2,116 | $ — | $ 13,250 | $ 8,518 | $ — | $ 8,518 |
| Supply revenue | — | — | 1,042 | 1,042 | — | 2,119 | 2,119 |
| Royalty revenue | — | 74 | 594 | 668 | — | 590 | 590 |
| Total revenue | $ 11,134 | $ 2,190 | $ 1,636 | $ 14,960 | $ 8,518 | $ 2,709 | $ 11,227 |
| | | | | | | | |
| Cost of goods sold (excluding amortization) | $ 1,652 | $ 567 | $ 1,067 | $ 3,286 | $ 1,400 | $ 1,989 | $ 3,389 |
| Amortization of intangible assets | $ 90 | $ 1,183 | $ — | $ 1,273 | $ 181 | $ — | $ 181 |

| | Six Months Ended June 30, | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2018 | | | | 2017 | | |
| | Qsymia | PANCREAZE | STENDRA/ SPEDRA | Total | Qsymia | STENDRA/ SPEDRA | Total |
| Net product revenue | $ 20,766 | $ 2,116 | $ — | $ 22,882 | $ 26,138 | $ — | $ 26,138 |
| License | — | — | — | — | — | 5,000 | 5,000 |
| Supply revenue | — | — | 2,725 | 2,725 | — | 5,931 | 5,931 |
| Royalty revenue | — | 74 | 1,179 | 1,253 | — | 1,170 | 1,170 |
| Total revenue | $ 20,766 | $ 2,190 | $ 3,904 | $ 26,860 | $ 26,138 | $ 12,101 | $ 38,239 |
| | | | | | | | |
| Cost of goods sold (excluding amortization) | $ 2,695 | $ 568 | $ 2,653 | $ 5,916 | $ 3,884 | $ 5,491 | $ 9,375 |
| Amortization of intangible assets | $ 181 | $ 1,183 | $ — | $ 1,364 | $ 362 | $ — | $ 362 |

## 3. SHARE-BASED COMPENSATION

Total share-based compensation expense for all of the Company's share-based awards was as follows (in thousands):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 |
| Cost of goods sold | $ 18 | $ 14 | $ 30 | $ 27 |
| Selling, general and administrative | 955 | 640 | 1,787 | 1,269 |
| Research and development | 76 | 87 | 157 | 172 |
| Total share-based compensation expense | $ 1,049 | $ 741 | $ 1,974 | $ 1,468 |

Share-based compensation costs capitalized as part of the cost of inventory were $0 and $1,000 for the three months ended June 30, 2018 and 2017, respectively, and $1,000 and $5,000 for the six months ended June 30, 2018 and 2017, respectively.

## 4. CASH, CASH EQUIVALENTS, AND AVAILABLE-FOR-SALE SECURITIES

The fair value and the amortized cost of cash, cash equivalents, and available-for-sale securities by major security type are presented in the tables that follow (in thousands).

| | As of June 30, 2018 | | | |
|---|---|---|---|---|
| Cash and cash equivalents and available-for-sale securities | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
| Cash and money market funds | $ 57,181 | $ — | $ — | $ 57,181 |
| U.S. Treasury securities | 14,513 | — | (172) | 14,341 |
| Corporate debt securities | 52,357 | 9 | (346) | 52,020 |
| Total | 124,051 | 9 | (518) | 123,542 |
| Less amounts classified as cash and cash equivalents | (57,181) | — | — | (57,181) |
| Total available-for-sale securities | $ 66,870 | $ 9 | $ (518) | $ 66,361 |

| | As of December 31, 2017 | | | |
|---|---|---|---|---|
| Cash and cash equivalents and available-for-sale securities | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
| Cash and money market funds | $ 66,392 | $ — | $ — | $ 66,392 |
| U.S. Treasury securities | 21,070 | 1 | (139) | 20,932 |
| Corporate debt securities | 139,481 | 16 | (486) | 139,011 |
| Total | 226,943 | 17 | (625) | 226,335 |
| Less amounts classified as cash and cash equivalents | (66,392) | — | — | (66,392) |
| Total available-for-sale securities | $ 160,551 | $ 17 | $ (625) | $ 159,943 |

As of June 30, 2018, the Company's available-for-sale securities had original contractual maturities up to 57 months. However, the Company may sell these securities prior to their stated maturities in response to changes in the availability of and the yield on alternative investments as well as liquidity requirements. As these securities are readily marketable and are viewed by the Company as available to support current operations, securities with maturities beyond 12 months are classified as current assets. Due to their short-term maturities, the Company believes that the fair value of its bank deposits, accounts payable and accrued expenses approximate their carrying value.

*Fair Value Measurements*

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Three levels of inputs, of which the first two are considered observable and the last unobservable, may be used to measure fair value. The three levels are:

- Level 1 — Quoted prices in active markets for identical assets or liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following table represents the fair value hierarchy for our cash equivalents and available-for-sale securities by major security type (in thousands):

| | As of June 30, 2018 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Cash and money market funds | $ 57,181 | $ — | $ — | $ 57,181 |
| U.S. Treasury securities | 14,341 | — | — | 14,341 |
| Corporate debt securities | — | 52,020 | — | 52,020 |
| Total | $ 71,522 | $ 52,020 | $ — | $ 123,542 |

| | As of December 31, 2017 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Cash and money market funds | $ 66,392 | $ — | $ — | $ 66,392 |
| U.S. Treasury securities | 20,932 | — | — | 20,932 |
| Corporate debt securities | — | 139,011 | — | 139,011 |
| Total | $ 87,324 | $ 139,011 | $ — | $ 226,335 |

## 5. ACCOUNTS RECEIVABLE

Accounts receivable consist of the following (in thousands):

| | Balance as of | |
|---|---|---|
| | June 30, 2018 | December 31, 2017 |
| Qsymia | $ 10,050 | $ 10,400 |
| STENDRA/SPEDRA | 637 | 1,982 |
| PANCREAZE | 571 | — |
| | 11,258 | 12,382 |
| Qsymia allowance for cash discounts | (187) | (195) |
| Net | $ 11,071 | $ 12,187 |

## 6. INVENTORIES

Inventories consist of the following (in thousands):

| | Balance as of | |
|---|---|---|
| | June 30, 2018 | December 31, 2017 |
| Raw materials | $ 16,801 | $ 13,663 |
| Work-in-process | 761 | 2,264 |
| Finished goods | 4,697 | 1,785 |
| Inventories | $ 22,259 | $ 17,712 |

Raw materials inventories consist primarily of the active pharmaceutical ingredients, or API, for Qsymia and STENDRA/SPEDRA. Work-in-process and finished goods inventory consist of Qsymia and STENDRA/SPEDRA and, at June 30, 2018, also included PANCREAZE inventory. Inventories are stated at the lower of cost or net realizable value. Cost is determined using the first in, first out method for all inventories, which are valued using a weighted-average cost method calculated for each production batch. The Company periodically evaluates the carrying value of inventory on hand for potential excess amounts over demand using the same lower of cost or net realizable value approach as that used to value the inventory.

## 7. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consist of the following (in thousands):

| | Balance as of | |
|---|---|---|
| | June 30, 2018 | December 31, 2017 |
| Prepaid sales and marketing expenses | $ 1,633 | $ 1,538 |
| Taxes receivable | 2,016 | 1,222 |
| Prepaid insurance | 466 | 1,124 |
| Other prepaid expenses and assets | 2,284 | 3,294 |
| Total | $ 6,399 | $ 7,178 |

The amounts included in prepaid expenses and other assets consist primarily of prepayments for future services, non-trade receivables, prepaid interest and interest income receivable. These costs have been deferred as prepaid expenses and other current assets on the condensed consolidated balance sheets and will be either (i) charged to expense accordingly when the related prepaid services are rendered to the Company, or (ii) converted to cash when the receivable is collected by the Company.

## 8. INTANGIBLE AND OTHER NON-CURRENT ASSETS

Intangible and other non-current assets consist of the following (in thousands):

| | June 30, 2018 | | | December 31, 2017 | | |
|---|---|---|---|---|---|---|
| | Cost | Accumulated Amortization | Net | Cost | Accumulated Amortization | Net |
| PANCREAZE license (1) | $ 141,895 | $ (1,183) | $ 140,712 | $ — | $ — | $ — |
| Janssen patents (2) | 3,050 | (2,416) | 634 | 3,050 | (2,235) | 815 |
| Other non-current assets | 199 | — | 199 | 199 | — | 199 |
| Total | $ 145,144 | $ (3,599) | $ 141,545 | $ 3,249 | $ (2,235) | $ 1,014 |

(1) In June 2018, the Company acquired the rights to license PANCREAZE in the U.S. and Canada, as described further in Note 12. The rights are being amortized over their estimated useful life of 10 years using the straight-line method.

(2) In September 2014, the Company acquired certain patents relating to Qsymia from Janssen Pharmaceuticals, approximately $3.1 million of which was recorded as an intangible asset. The patents are being amortized over their estimated useful life of 5.5 years using the straight-line method.

Other non-current assets primarily consist of real estate deposits. Amortization of intangible assets was $1.3 million and $1.4 million for the three and six months ended June 30, 2018, respectively. Future expected amortization expenses for intangible assets as of June 30, 2018 are as follows (in thousands):

| | |
|---|---|
| 2018 (remainder) | $ 7,276 |
| 2019 | 14,552 |
| 2020 | 14,280 |
| 2021 | 14,190 |
| 2022 | 14,190 |
| Thereafter | 76,858 |
| Total | $ 141,346 |

## 9. ACCRUED AND OTHER LIABILITIES

Accrued and other liabilities consist of the following (in thousands):

| | Balance as of | |
|---|---|---|
| | June 30, 2018 | December 31, 2017 |
| Accrued employee compensation and benefits | $ 2,432 | $ 3,642 |
| Reserve for product returns (see Note 2) | 7,650 | 7,854 |
| Product-related accruals (see Note 2) | 5,489 | 5,751 |
| Accrued interest on debt (see Note 13) | 729 | 410 |
| Accrued manufacturing costs | 6,720 | 1,238 |
| Other accrued liabilities | 3,859 | 2,580 |
| Total | $ 26,879 | $ 21,475 |

The amounts included in other accrued liabilities consist of obligations primarily related to sales, marketing, research, clinical development, corporate activities, the STENDRA license and royalties.

## 10. NON-CURRENT ACCRUED AND OTHER LIABILITIES

Non-current accrued and other liabilities at June 30, 2018 and December 31, 2017 were primarily comprised of deferred rent and security deposits.

## 11. DEFERRED REVENUE

Deferred revenue relates to a prepayment for future royalties on sales of SPEDRA. In the three and six months ended June 30, 2018, the Company recorded $0.3 million and $0.6 million, respectively, of revenues which had been deferred as of December 31, 2017.

## 12. LICENSE, COMMERCIALIZATION AND SUPPLY AGREEMENTS

*MTPC*

In January 2001, the Company entered into an exclusive development, license and clinical trial and commercial supply agreement with Tanabe Seiyaku Co., Ltd., now Mitsubishi Tanabe Pharma Corporation, or MTPC, for the development and commercialization of avanafil. Under the terms of the agreement, MTPC agreed to grant an exclusive license to the Company for products containing avanafil outside of Japan, North Korea, South Korea, China, Taiwan, Singapore, Indonesia, Malaysia, Thailand, Vietnam and the Philippines. The Company agreed to grant MTPC an exclusive, royalty free license within those countries for oral products that we develop containing avanafil. The MTPC agreement contains a number of milestone payments to be made by us based on various triggering events. The term of the MTPC agreement is based on a country by country and on a product by product basis. In August 2012, the Company entered into an amendment to the agreement with MTPC that permitted the Company to manufacture the API and tablets for STENDRA by itself or through third parties. In 2015, the Company transferred the manufacturing of the API and tablets for STENDRA to Sanofi. The Company maintains royalty obligations to MTPC which have been passed through to our commercialization partners.

*Menarini*

In July 2013, the Company entered into a license and commercialization agreement, or the Menarini License Agreement, and a supply agreement, or the Menarini Supply Agreement, with the Menarini Group through its subsidiary Berlin Chemie AG, or Menarini. Under the terms of the Menarini License Agreement, Menarini received an exclusive license to commercialize and promote SPEDRA for the treatment of ED in over 40 countries,

including the EU, plus Australia and New Zealand. Additionally, the Company transferred to Menarini ownership of the marketing authorization for SPEDRA in the EU for the treatment of ED, which was granted by the EC in June 2013. Under the Menarini License Agreement, the Company has and is entitled to receive milestone payments based on certain net sales targets, plus royalties on SPEDRA sales. Under the terms of the Menarini Supply Agreement, the Company will supply Menarini with SPEDRA drug product until December 31, 2018. Menarini also has the right to manufacture SPEDRA independently, provided that it continues to satisfy certain minimum purchase obligations to the Company. Following the expiration of the Menarini Supply Agreement, Menarini will be responsible for its own supply of SPEDRA. Either party may terminate the Menarini Supply Agreement for the other party's uncured material breach or bankruptcy, or upon the termination of the Menarini License Agreement.

*Sanofi*

In December 2013, the Company entered into a license and commercialization agreement, or the Sanofi License Agreement, with Sanofi. Under the terms of the Sanofi License Agreement, Sanofi received an exclusive license to commercialize and promote avanafil for therapeutic use in humans in Africa, the Middle East—Turkey and Commonwealth of Independent States, including Russia, or the Sanofi Territory. In July 2013, the Company entered into a Commercial Supply Agreement with Sanofi Chimie to manufacture and supply the API for avanafil on an exclusive basis in the United States and other territories and on a semi-exclusive basis in Europe, including the EU, Latin America and other territories. In November 2013, the Company entered into a Manufacturing and Supply Agreement with Sanofi Winthrop Industrie to manufacture and supply the avanafil tablets on an exclusive basis in the United States and other territories and on a semi exclusive basis in Europe, including the EU, Latin America and other territories. The Company has minimum annual purchase commitments under these agreements for at least the initial five-year term.

On March 23, 2017, the Company and Sanofi entered into the Termination, Rights Reversion and Transition Services Agreement, or the Transition Agreement, effective February 28, 2017. Under the Transition Agreement, effective upon the thirtieth (30th) day following February 28, 2017, the Sanofi License Agreement terminated for all countries in the Sanofi Territory. In addition, under the Transition Agreement, Sanofi provides the Company with certain transition services in support of ongoing regulatory approval efforts while the Company seeks to obtain a new commercial partner or partners for the Sanofi Territory. The Company pays certain transition service fees to Sanofi as part of the Transition Agreement.

*Metuchen*

On September 30, 2016, the Company entered into a license and commercialization agreement, or the Metuchen License Agreement, and a commercial supply agreement, or the Metuchen Supply Agreement, with Metuchen Pharmaceuticals LLC, or Metuchen. Under the terms of the Metuchen License Agreement, Metuchen received an exclusive license to develop, commercialize and promote STENDRA in the United States, Canada, South America and India, or the Metuchen Territory, effective October 1, 2016. The Company and Metuchen have agreed not to develop, commercialize, or in-license any other product that operates as a PDE-5 inhibitor in the Metuchen Territory for a limited time period, subject to certain exceptions. The Metuchen License Agreement will terminate upon the expiration of the last-to-expire payment obligations under the Metuchen License Agreement; upon expiration of the term of the Metuchen License Agreement, the exclusive license granted under the Metuchen License Agreement shall become fully paid-up, royalty-free, perpetual and irrevocable as to the Company but not certain trademark royalties due to MTPC.

Metuchen will obtain STENDRA exclusively from the Company for a mutually agreed term pursuant to the Metuchen Supply Agreement. Metuchen may elect to transfer the control of the supply chain for STENDRA for the Metuchen Territory to itself or its designee by assigning to Metuchen the Company's agreements with the contract manufacturer. For 2016 and each subsequent calendar year during the term of the Metuchen Supply Agreement, if Metuchen fails to purchase an agreed minimum purchase amount of STENDRA from the Company, it will reimburse the Company for the shortfall as it relates to the Company's out of pocket costs to acquire certain raw materials needed to manufacture STENDRA. Upon the termination of the Metuchen Supply Agreement (other than by Metuchen for the Company's uncured material breach or upon completion of the transfer of the control of the supply chain), Metuchen's agreed minimum purchase amount of STENDRA from the Company shall accelerate for the entire then current initial term or renewal term, as applicable. The initial term under the Metuchen Supply Agreement will be for a period of five years, with automatic renewal for successive two-year periods unless either

party provides a termination notice to the other party at least two years in advance of the expiration of the then current term.

*Alvogen*

In September 2017, the Company entered into a license and commercialization agreement, or the Alvogen License Agreement, and a commercial supply agreement, or the Alvogen Supply Agreement, with Alvogen Malta Operations (ROW) Ltd, or Alvogen. Under the terms of the Alvogen License Agreement, Alvogen will be solely responsible for obtaining and maintaining regulatory approvals for all sales and marketing activities for Qsymia in South Korea. The Company received an upfront payment of $2.5 million in September 2017, which was recorded in license and milestone revenue in the third quarter of 2017, and is eligible to receive additional payments upon Alvogen achieving marketing authorization, commercial launch and reaching a sales milestone. Additionally, the Company will receive a royalty on Alvogen's Qsymia net sales in South Korea. Under the Alvogen Supply Agreement, the Company will supply product to Alvogen.

*PANCREAZE*

In June 2018, the Company closed on an Asset Purchase Agreement, or the PANCREAZE Purchase Agreement, with Janssen Pharmaceuticals, Inc., or Janssen, pursuant to which the Company acquired the rights to PANCREAZE and PANCREASE MT in the U.S. and Canada for a purchase price of $135,000,000 in cash. As part of the PANCREAZE Purchase Agreement, the Company also acquired certain existing inventory from Janssen. Related to the acquisition, the Company also acquired all of the outstanding shares of Willow Biopharma Inc., or Willow. Willow had no significant assets at the time of acquisition. The Company issued fully-exercisable warrants to the former owners of Willow for the purchase of 3,570,000 shares of the Company's common stock at an exercise price of $0.37 per share and agreed to assume certain of Willow's liabilities. The amounts paid to the former owners were accounted for as a fee for the acquisition of PANCREAZE. As all the PANCREAZE assets acquired were a part of one product line, the PANCREAZE Purchase Agreement was accounted for as an asset acquisition, with an intangible asset of $141.9 million for the PANCREAZE license recorded on the balance sheet, which was comprised of the purchase price of $135.0 million, the fair value of the warrants issued of $0.8 million, the value of liabilities assumed of $0.4 million, the value of the Willow liabilities assumed of $1.5 million and accruals for estimated destruction of future unsalable inventory of $6.3 million, less the net value of PANCREAZE inventory acquired of $2.1 million. The fair value of the warrants issued was estimated using the Black-Scholes option pricing model, using a term of 7.0 years, an estimated volatility of 61.6%, a risk-free interest rate of 2.91% and an expected dividend yield of 0%. The intangible asset is being amortized over an expected useful life of 10 years, which corresponds with the expiration of certain significant patent rights related to PANCREAZE. In connection with the PANCREAZE Purchase Agreement, the Company and Janssen also entered into transition services agreements pursuant to which Janssen and a Canadian affiliate of Janssen will provide certain transition services to the Company in the U.S. and Canada as the Company transitions to full control over the PANCREAZE supply chain. The Company and Johnson & Johnson Health Care Systems Inc., a New Jersey corporation and an affiliate of Janssen, also entered into a Long-Term Collaboration Agreement pursuant to which they will cooperate in the reporting and certification of pricing and sales data and the payment of rebates and discounts under certain governmental programs.

## 13. LONG-TERM DEBT AND COMMITMENTS

The Company's indebtedness consists of the following (in thousands):

| | Balance as of | |
|---|---|---|
| | June 30, 2018 | December 31, 2017 |
| Senior secured notes due 2018 | $ — | $ 6,187 |
| Unamortized discount and debt issuance costs | — | (7) |
| Senior secured notes due 2018, net | — | 6,180 |
| | | |
| Convertible senior notes due 2020 | 190,000 | 250,000 |
| Unamortized discount and debt issuance costs | (838) | (20,497) |
| Convertible senior notes due 2020, net | 189,162 | 229,503 |
| | | |
| Senior secured notes due 2024 | 110,000 | — |
| Unamortized premium and debt issuance costs, net | (3,664) | — |
| Senior secured notes due 2024, net | 106,336 | — |
| | | |
| Total debt | 295,498 | 235,683 |
| Less current portion | — | 5,147 |
| Total long-term debt | $ 295,498 | $ 230,536 |

*Senior Secured Notes Due 2024*

In June 2018, the Company entered into an indenture, or the Indenture, with U.S. Bank National Association as trustee and collateral agent regarding the purchase agreement entered into with affiliates of Athyrium Capital Management (collectively, the "Purchasers") for the issuance and sale of (i) $110,000,000 of 10.375% senior secured notes due 2024, or the Notes, (ii) up to an additional $10,000,000 of 10.375% senior secured notes due 2024 to be issued subsequently at the Company's option within 12 months of the Notes issue date, subject to certain conditions, and (iii) a warrant for 3,300,000 shares issued concurrently with the issuance of the Notes. The Notes were issued at a purchase price equal to 99% of the principal amount. The Notes contain customary representations, warranties, covenants, conditions and indemnities.

The Company used the net proceeds from the issuance of the Notes to pay (i) certain fees, costs and expenses relating to the issuance and sale of the Notes, (ii) to finance a portion of the PANCREAZE Asset Acquisition, (iii) to repurchase $60.0 million of the Company's outstanding Convertible Notes due 2020 from the Purchasers or their affiliates for a purchase price of $51.0 million (plus accrued but unpaid interest to the repurchase date) and (iv) for general corporate purposes. The fair value of the warrant issued was estimated using the Black-Scholes option pricing model, using a term of 6.0 years, an estimated volatility of 62.7%, a risk-free interest rate of 2.83% and an expected dividend yield of 0%. The Indenture has an effective interest rate of 11.3% and includes customary covenants and events of default, including covenants that, among other things, restrict the incurrence of future indebtedness, the granting of liens, the making of investments, distributions or dividends, and the Company's ability to merge, consolidate or sell assets, in each case subject to certain exceptions. In addition, the Indenture includes certain financial maintenance covenants related to minimum cash balances and minimum quarterly net revenues related to PANCREAZE.

Future estimated payments on all of the Company's indebtedness as of June 30, 2018 are as follows (in thousands):

| | |
|---|---|
| 2018 (remainder) | $ 10,710 |
| 2019 | 19,963 |
| 2020 | 206,163 |
| 2021 | 36,131 |
| 2022 | 41,299 |
| Thereafter | 55,400 |
| | $ 369,666 |

*Cardiovascular Outcomes Trial*

As a condition of FDA granting approval to commercialize Qsymia in the U.S., the Company agreed to complete certain post-marketing requirements. One requirement was to perform a cardiovascular outcomes trial, or CVOT, on Qsymia. The cost of a CVOT is estimated to be between $180 million and $220 million incurred over a period of approximately five years. The Company is working with FDA to significantly reduce or remove the requirements of the CVOT. To date, the Company has not incurred expenses related to the CVOT.

## 14. NET INCOME (LOSS) PER SHARE

The Company computes basic net income (loss) per share applicable to common stockholders based on the weighted average number of common shares outstanding during the applicable period. Diluted net income per share is based on the weighted average number of common and common equivalent shares, which represent shares that may be issued in the future upon the exercise of outstanding stock options or upon a net share settlement of the Company's convertible notes. Common share equivalents are excluded from the computation in periods in which they have an anti-dilutive effect. Stock options for which the price exceeds the average market price over the period have an anti-dilutive effect on net income per share and, accordingly, are excluded from the calculation. The triggering conversion conditions that allow holders of the convertible notes to convert have not been met. If such conditions are met and the note holders opt to convert, the Company may choose to pay in cash, common stock, or a combination thereof; however, if this occurs, the Company has the intent and ability to net share settle this debt security; thus the Company uses the treasury stock method for earnings per share purposes. Due to the effect of the capped call instrument purchased in relation to the convertible notes, there would be no net shares issued until the market value of the Company's stock exceeds $20 per share, and thus no impact on diluted net income per share. Further, when there is a net loss, potentially dilutive common equivalent shares are not included in the calculation of net loss per share since their inclusion would be anti-dilutive.

As the Company recognized a net loss for each of the three-month periods ended June 30, 2018 and 2017, all potential common equivalent shares were excluded for these periods as they were anti-dilutive. Awards and options which were not included in the computation of diluted net loss per share because the effect would be anti-dilutive were 14,902,000 and 13,992,000, respectively, for the three months ended June 30, 2018 and 2017 and 19,261,000 and 13,301,000, respectively, for the six months ended June 30, 2018 and 2017.

## 15. INCOME TAXES

For the three and six months ended June 30, 2018, the Company recorded a provision for income taxes of $4,000 and $16,000, respectively. For the three and six months ended June 30, 2017, the Company recorded a provision of $1,000 and a benefit of $11,000, respectively. The benefit and provision for income taxes for each of the periods was primarily comprised of state taxes during the period.

The Company periodically evaluates the realizability of its net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on the Company's ability to generate sufficient future taxable income during periods prior to the expiration of tax attributes to fully utilize these assets. The Company weighed both positive and negative evidence and determined that there is a continued need for a full valuation allowance on its deferred tax assets in the United States as of June 30, 2018. Should the Company determine that it would be able to realize its remaining deferred tax assets in the foreseeable future, an adjustment to its remaining deferred tax assets would cause a material increase to income in the period such determination is made.

As of June 30, 2018, the Company's unrecognized tax benefits were related to federal and California research and development credits which result in an unrecognized tax benefit balance of $133,000. The Company does not expect to have any other significant changes to unrecognized tax benefits through the end of the fiscal year. Because of the Company's history of tax losses, certain tax years remain open to tax audit. The Company's policy is to recognize interest and penalties related to uncertain tax positions (if any) as a component of the income tax provision.

## 16. LEGAL MATTERS

The Company is not aware of any asserted or unasserted claims against it where it believes that an unfavorable resolution would have an adverse material impact on the operations or financial position of the Company.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other parts of this Quarterly Report on Form 10-Q contain "forward looking" statements that involve risks and uncertainties. These statements typically may be identified by the use of forward-looking words or phrases such as "may," "believe," "expect," "forecast," "intend," "anticipate," "predict," "should," "plan," "likely," "opportunity," "estimated," and "potential," the negative use of these words or other similar words. All forward-looking statements included in this document are based on our current expectations, and we assume no obligation to update any such forward-looking statements. The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for such forward-looking statements. In order to comply with the terms of the safe harbor, we note that a variety of factors could cause actual results and experiences to differ materially from the anticipated results or other expectations expressed in such forward-looking statements. The risks and uncertainties that may affect the operations, performance, development, and results of our business include but are not limited to:

*Risks and uncertainties related to Qsymia® (phentermine and topiramate extended release):*

- the timing of initiation and completion of the post-approval clinical studies required as part of the approval of Qsymia by the U.S. Food and Drug Administration, or FDA;
- the response from FDA to any data and/or information relating to post-approval clinical studies required for Qsymia;
- our ability to work with FDA to significantly reduce or remove the requirements of the clinical post-approval cardiovascular outcomes trial, or CVOT;
- the impact of the indicated uses and contraindications contained in the Qsymia label and the Risk Evaluation and Mitigation Strategy, or REMS, requirements;
- our ability to sell through the Qsymia retail pharmacy network;
- whether the Qsymia retail pharmacy network will simplify and reduce the prescribing burden for physicians, improve access and reduce waiting times for patients seeking to initiate therapy with Qsymia;
- that we may be required to provide further analysis of previously submitted clinical trial data;
- our dialog with the European Medicines Agency, or EMA, relating to the U.S.-based CVOT for Qsymia, and the resubmission of an application for the grant of a marketing authorization to the EMA, the timing of such resubmission, if any, the results of any required CVOT, the assessment by the EMA of the application for marketing authorization, and their agreement with the data from any required CVOT;
- our, or our current or potential partners', ability to successfully seek and gain approval for Qsymia in territories outside the U.S.;
- our, or our current or potential partners', ability to successfully commercialize Qsymia including risks and uncertainties related to expansion to retail distribution, the broadening of payor reimbursement, the expansion of Qsymia's primary care presence, and the outcomes of our discussions with pharmaceutical companies and our strategic and franchise-specific pathways for Qsymia;
- our ability to ensure that the entire supply chain for Qsymia efficiently and consistently delivers Qsymia to our customers and partners;
- our ability to accurately forecast Qsymia demand;
- the impact of promotional programs for Qsymia on our net product revenue and net income (loss) in future periods;

*Risks and uncertainties related to PANCREAZE (pancrelipase):*

- our ability to maintain the relationship with the sole manufacturer for PANCREAZE;
- our ability to accurately forecast PANCREAZE demand;
- our ability to maintain a satisfactory level of PANCREAZE inventory;
- risks and uncertainties related to the timing, strategy, tactics and success of the marketing and sales of PANCREAZE;

- our ability to successfully maintain market share against potential competitors that may develop alternative formulations of the drug; and
- the ability of our partners to maintain regulatory approvals to manufacture and adequately supply our products to meet demand;

*Risks and uncertainties related to STENDRA® (avanafil) or SPEDRA™ (avanafil):*

- our ability to manage the supply chain for STENDRA/SPEDRA for our current or potential collaborators;
- risks and uncertainties related to the timing, strategy, tactics and success of the launches and commercialization of STENDRA/SPEDRA by our current or potential collaborators;
- our ability to successfully complete on acceptable terms and on a timely basis, avanafil partnering discussions for territories under our license with Mitsubishi Tanabe Pharma Corporation in which we do not have a commercial collaboration;
- Sanofi Chimie's ability to manufacture avanafil active pharmaceutical ingredient and Sanofi Winthrop Industrie's ability to manufacture avanafil tablets;
- the ability of our partners to maintain regulatory approvals to manufacture and adequately supply our products to meet demand;

*Risks and uncertainties related to our business:*

- our history of losses and variable quarterly results;
- our ability to effectively manage expenses;
- risks related to our ability to protect our intellectual property and litigation in which we are involved or may become involved;
- uncertainties of government or third-party payor reimbursement;
- our reliance on sole-source suppliers, third parties and our collaborative partners;
- our ability to successfully develop or acquire a proprietary formulation of tacrolimus;
- our ability to identify and acquire cash flow generating assets and opportunities;
- risks related to the failure to obtain or retain federal or state-controlled substances registrations and noncompliance with Drug Enforcement Administration, or DEA, or state controlled substances regulations;
- risks related to the failure to obtain FDA or foreign authority clearances or approvals and noncompliance with FDA or foreign authority regulations;
- our ability to develop a proprietary formulation and to demonstrate through clinical testing the quality, safety, and efficacy of our current and future investigational drug candidates;
- the timing of initiation and completion of clinical trials and submissions to U.S. and foreign authorities;
- compliance with post-marketing regulatory standards, post-marketing obligations or pharmacovigilance rules is not maintained;
- the volatility and liquidity of the financial markets;
- our liquidity and capital resources;
- our expected future revenues, operations and expenditures;
- our ability to execute on our business strategy to enhance long-term stockholder value;
- our ability to address or potentially reduce our outstanding balance of the $190 million of convertible notes due in 2020;
- our ability to successfully integrate recent changes to our Board of Directors and the senior management team; and
- other factors that are described from time to time in our periodic filings with the Securities and Exchange Commission, or the SEC, including those set forth in this filing as "Item 1A. Risk Factors."

When we refer to "we," "our," "us," the "Company" or "VIVUS" in this document, we mean the current Delaware corporation, or VIVUS, Inc., and its California predecessor, as well as all of our consolidated subsidiaries.

All percentage amounts and ratios were calculated using the underlying data in thousands. Operating results for the three and six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the full fiscal year or any future period.

You should read the following management's discussion and analysis of our financial condition and results of operations in conjunction with our audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC on March 14, 2018 and as amended by the Form 10-K/A filed with the SEC on April 26, 2018, and other disclosures (including the disclosures under "Part II. Item 1A. Risk Factors") included in this Quarterly Report on Form 10-Q. Our unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and are presented in U.S. dollars.

## OVERVIEW

VIVUS is a specialty pharmaceutical company with three approved therapies and one product candidate in active clinical development. Qsymia® (phentermine and topiramate extended release) is approved by FDA for chronic weight management. STENDRA® (avanafil) is approved by FDA for erectile dysfunction, or ED, and by the EC under the trade name SPEDRA, for the treatment of ED in the EU. In June 2018, we acquired the U.S. and Canadian commercial rights for PANCREAZE® (pancrelipase), which is indicated for the treatment of exocrine pancreatic insufficiency, or EPI, due to cystic fibrosis or other conditions. VI-0106 (tacrolimus) is in active clinical development and is being studied in patients with pulmonary arterial hypertension, or PAH.

### *Business Strategy*

Early in 2018, we announced that we would focus our strategy on building a portfolio of cash flow generating assets to leverage our expertise in commercializing specialty pharma assets. In June 2018, we completed the first acquisition under this strategy as we acquired all product rights for PANCREAZE® (pancrelipase) in the United States and PANCREASE® MT in Canada for $135 million in cash from Janssen Pharmaceuticals. PANCREAZE is a prescription medicine used to treat people who cannot digest food normally because their pancreas does not make enough enzymes due to cystic fibrosis or other conditions. We believe we can support PANCREAZE in the U.S. market by leveraging our existing U.S. field sales force and internal commercial infrastructure. We expect to build a small commercial presence in Canada to support PANCREASE MT, the trade name for pancrelipase in Canada.

Another key strategy for 2018 was the recruitment and hiring of a permanent full-time CEO. In April 2018, we announced the acquisition of Willow Biopharma Inc., or Willow. With this acquisition, we announced the addition of three new members to our senior leadership team. John Amos has been named our new Chief Executive Officer and a member of the VIVUS Board of Directors. Kenneth Suh continued as President and Chief Executive Officer of Willow until being named President of VIVUS in August 2018. M. Scott Oehrlein has been named to the newly created position of Chief Operations Officer of VIVUS. These three individuals have a strong track record of building successful cash-flow positive businesses through product acquisition. In combination with the current members of the senior leadership team, we believe that we are well positioned to continue to successfully execute on our 2018 business plan.

In April 2018, we entered into a note purchase agreement, or the Note Purchase Agreement, with affiliates of Athyrium Capital Management for the issuance and sale of up to $110 million of 10.375% senior secured notes due 2024 to be issued substantially concurrently with the consummation of the PANCREAZE acquisition. The Note Purchase Agreement also allows up to an additional $10 million of 10.375% senior secured notes due 2024 to be issued at our option within 12 months of the initial issue date, subject to certain conditions. Notes in the amount of $110 million were issued in June 2018. Concurrent with the issuance of the initial notes, we issued warrants to purchase 3.3 million shares of our common stock to the note holders. Additionally, concurrent with the issuance of the senior secured notes, we repurchased Convertible Notes due 2020 held by Athyrium, with a face value of $60 million, at a discount to par plus accrued interest. We continue our evaluation of alternatives for addressing our remaining $190 million of convertible notes due in May 2020.

***Commercial Products***

***Qsymia***

FDA approved Qsymia in July 2012 as an adjunct to a reduced calorie diet and increased physical activity for chronic weight management in adult obese or overweight patients in the presence of at least one weight related comorbidity, such as hypertension, type 2 diabetes mellitus or high cholesterol, or dyslipidemia. Qsymia incorporates a proprietary formulation combining low doses of the active ingredients from two previously approved drugs, phentermine and topiramate. Although the exact mechanism of action is unknown, Qsymia is believed to suppress appetite and increase satiety, or the feeling of being full, the two main mechanisms that impact eating behavior.

We commercialize Qsymia in the U.S. through a small specialty sales force who promote Qsymia to physicians. Our sales efforts are focused on maintaining a commercial presence with high volume prescribers of anti-obesity products. Our marketing efforts have focused on rolling out unique programs to encourage targeted prescribers to gain more experience with Qsymia with their obese or overweight patient population. We continue to invest in digital media in order to amplify our messaging to information-seeking consumers. The digital messaging encourages those consumers most likely to take action to speak with their physicians about obesity treatment options. We believe our enhanced digital strategies deliver clear and compelling communications to potential patients. We utilize a patient savings plan to further drive Qsymia brand preference at the point of prescription and to encourage long-term use of the brand.

In September 2017, we entered into a license and commercialization agreement, or the Alvogen License Agreement, and a commercial supply agreement, or the Alvogen Supply Agreement, with Alvogen Malta Operations (ROW) Ltd, or Alvogen. Under the terms of the Alvogen License Agreement, Alvogen will be solely responsible for obtaining and maintaining regulatory approvals for all sales and marketing activities for Qsymia in South Korea. We received an upfront payment of $2.5 million in September 2017 and are eligible to receive additional payments upon Alvogen achieving marketing authorization, commercial launch and reaching a sales milestone. Additionally, we will receive a royalty on Alvogen’s Qsymia net sales in South Korea. Under the Alvogen Supply Agreement, we will supply product to Alvogen.

***PANCREAZE***

Since its approval, PANCREAZE has been commercialized by Janssen. In June 2018, we acquired the commercial rights to PANCREAZE and PANCREASE MT in the U.S. and Canada. In connection with the acquisition of PANCREAZE, we and Janssen also entered into transition services agreements pursuant to which Janssen and a Canadian affiliate of Janssen will provide certain transition services to us in the U.S. and Canada as the Company transitions to full control over the PANCREAZE supply chain. Once that transition occurs, we intend to commercialize PANCREAZE in the U.S. and Canada by leveraging our existing U.S. field sales force and internal commercial infrastructure.

Approved in 2010, PANCREAZE is a pancreatic enzyme preparation consisting of pancrelipase, an extract derived from porcine pancreatic glands, as well as other enzyme classes, including porcine-derived lipases, proteases and amylases. PANCREAZE is specifically indicated for the treatment of exocrine pancreatic insufficiency, or EPI. EPI is a condition that results from a deficiency in the production and/or secretion of pancreatic enzymes. It is associated with cystic fibrosis and chronic pancreatitis, and affects approximately 85 percent of cystic fibrosis patients. There is no cure for EPI and pancreatic enzyme replacement therapy is the primary treatment for the condition.

***STENDRA/SPEDRA***

STENDRA is an oral phosphodiesterase type 5, or PDE5, inhibitor that we have licensed from Mitsubishi Tanabe Pharma Corporation, or MTPC. FDA approved STENDRA in April 2012 for the treatment of ED in the United States. In June 2013, the EC adopted a decision granting marketing authorization for SPEDRA, the approved trade name for avanafil in the EU, for the treatment of ED in the EU.

The Menarini Group, through its subsidiary Berlin Chemie AG, or Menarini, is our exclusive licensee for the commercialization and promotion of SPEDRA for the treatment of ED in over 40 countries, including the EU, Australia and New Zealand. In addition, Menarini licensed rights directly from MTPC to commercialize avanafil in

certain Asian territories. We receive royalties from Menarini based on SPEDRA net sales and are entitled to receive future milestone payments based on certain net sales targets. Menarini will also reimburse us for payments made to cover various obligations to MTPC during the term of the Menarini License Agreement. Menarini obtains SPEDRA exclusively from us.

Metuchen Pharmaceuticals LLC, or Metuchen, is our exclusive licensee for the development, commercialization and promotion of STENDRA in the United States, Canada, South America and India. Metuchen reimburses us for payments made to cover royalty and milestone obligations to MTPC, but otherwise owes us no future royalties. Metuchen obtains STENDRA exclusively from us.

We are currently in discussions with potential collaboration partners to develop, market and sell STENDRA for territories in which we do not currently have a commercial collaboration, including Africa, the Middle East, Turkey, the CIS, including Russia, Mexico and Central America.

***Product Development Pipeline and Life Cycle Management***

***VI-0106 - Pulmonary Arterial Hypertension***

PAH is a chronic, life-threatening disease characterized by elevated blood pressure in the pulmonary arteries, which are the arteries between the heart and lungs, due to pathologic proliferation of epithelial and vascular smooth muscle cells in the lining of these blood vessels and excess vasoconstriction. Pulmonary blood pressure is normally between 8 and 20 mmHg at rest as measured by right heart catheterization. In patients with PAH, the pressure in the pulmonary artery is greater than 25 mmHg at rest or 30 mmHg during physical activity. These high pressures make it difficult for the heart to pump blood through the lungs to be oxygenated.

The current medical therapies for PAH involve endothelin receptor antagonists, PDE5 inhibitors, prostacyclin analogues, selective prostaglandin I2 receptor agonists, and soluble guanate cyclase stimulators, which aim to reduce symptoms and improve quality of life. All currently approved products treat the symptoms of PAH, but do not address the underlying disease. We believe that tacrolimus can be used to enhance reduced bone morphogenetic protein receptor type 2, or BMPR2, signaling that is prevalent in PAH patients and may therefore address a fundamental cause of PAH.

The prevalence of PAH varies among specific populations, but it is estimated at between 15 and 50 cases per million adults. PAH usually develops between the ages of 20 and 60 but can occur at any age, with a mean age of diagnosis around 45 years. Idiopathic PAH is the most common type, constituting approximately 40% of the total diagnosed PAH cases, and occurs two to four times more frequently in females.

On January 6, 2017, we acquired the exclusive, worldwide rights for the development and commercialization of BMPR2 activators for the treatment of PAH and related vascular diseases from Selten Pharma, Inc., or Selten. Selten assigned to us its license to a group of patents owned by the Board of Trustees of the Leland Stanford Junior University, or Stanford, which cover uses of tacrolimus and ascomycin to treat PAH. We paid Selten an upfront payment of $1.0 million, and we will pay additional milestone payments based on global development status and future sales milestones, as well as tiered royalty payments on future sales of these compounds. The total potential milestone payments are $39.0 million to Selten. We have assumed full responsibility for the development and commercialization of the licensed compounds for the treatment of PAH and related vascular diseases.

In October 2017, we held a pre-IND meeting with FDA for VI-0106, our proprietary formulation of tacrolimus for the treatment of PAH. FDA addressed our questions related to preclinical, nonclinical and clinical data and the planned design of clinical trials of tacrolimus in class III and IV PAH patients, and clarified the requirements needed to file an IND to initiate a clinical trial in this indication. As discussed with FDA, we currently intend to design and conduct clinical trials that could qualify for Fast Track and/or Breakthrough Therapy designation.

Tacrolimus for the treatment of PAH has received Orphan Drug Designation from FDA in the United States and the European Medicines Agency in the EU. We are focusing on the development of a proprietary oral formulation of tacrolimus to be used in a clinical development program and for commercial use. We anticipate filing

an IND with FDA and completing the development of our proprietary formulation of tacrolimus in 2018. We are currently seeking alternatives for financing the development of tacrolimus.

***Qsymia for Additional Indications***

We are currently considering further development of Qsymia for the treatment of various diseases, including obstructive sleep apnea and nonalcoholic steatohepatitis, or NASH. We expect no future development until we have concluded our discussions with FDA regarding our CVOT for Qsymia.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The discussion and analysis of our financial condition and results of operations are based upon our unaudited condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an ongoing basis, we evaluate our estimates, including those related to available-for-sale securities, research and development expenses, income taxes, inventories, revenues, including revenues from multiple-element arrangements, contingencies and litigation and share-based compensation. We base our estimates on historical experience, information received from third parties and on various market specific and other relevant assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates under different assumptions or conditions.

Our significant accounting policies are more fully described in Note 1 to our audited consolidated financial statements and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Estimates” contained in our Annual Report on Form 10-K, or our Annual Report, as filed with the SEC on March 14, 2018. There has been one significant change in our critical accounting policies during the six months ended June 30, 2018, as outlined below:

*Revenue Recognition*

For all revenue transactions, we evaluate our contracts with our customers to determine revenue recognition using the following five-step model:

1) We identify the contract(s) with a customer
2) We identify the performance obligations in the contract
3) We determine the transaction price
4) We allocate the transaction price to the identified performance obligations
5) We recognize revenue when (or as) the entity satisfies a performance obligation

*Product Revenue:*

Product revenue is recognized at the time of shipment at which time we have satisfied our performance obligation. Product revenue is recognized net of consideration paid to our customers, wholesalers and certified pharmacies. Such consideration is for services rendered by the wholesalers and pharmacies in accordance with the wholesalers and certified pharmacy services network agreements, and includes a fixed rate per prescription shipped and monthly program management and data fees. These services are not deemed sufficiently separable from the customers’ purchase of the product; therefore, they are recorded as a reduction of revenue at the time of revenue recognition.

Other product revenue allowances include a reserve for estimated product returns, certain prompt pay discounts and allowances offered to our customers, program rebates and chargebacks. These product revenue allowances are recognized as a reduction of revenue at the date at which the related revenue is recognized. We also offer discount programs to patients. Calculating certain of these items involves estimates and judgments based on sales or invoice data, contractual terms, utilization rates, new information regarding changes in these programs’ regulations and guidelines that would impact the amount of the actual rebates or chargebacks. We review the adequacy of product revenue allowances on a quarterly basis. Amounts accrued for product revenue allowances are adjusted when trends or significant events indicate that adjustment is appropriate and to reflect actual experience. See Note 9 for product reserve balances.

*Change in Accounting Estimate in 2017*

We ship units of Qsymia through a distribution network that includes certified retail pharmacies. We began shipping Qsymia in September 2012 and grant rights to our customers to return unsold product from six months prior to and up to 12 months subsequent to product expiration. This has resulted in a potential return period of from 24 to 36 months depending on the ship date of the product. As we had no previous experience in selling Qsymia and given the lengthy return period, we were not initially able to reliably estimate expected returns of Qsymia at the time of shipment, which was required by the accounting literature at the time, and therefore recognized revenue when units were dispensed to patients through prescriptions, at which point the product was not subject to return, or when the expiration period had ended.

Beginning in the first quarter of 2017, with 48 months of returns experience, we believed that we had sufficient data and experience from selling Qsymia to reliably estimate expected returns. Therefore, beginning in the first quarter of 2017, under the then relevant accounting literature, we began recognizing revenue from the sales of Qsymia upon shipment and recording a reserve for expected returns at the time of shipment.

In accordance with this change in accounting estimate, in the first quarter of 2017 we recognized a one-time adjustment relating to products that had been previously shipped, consisting of $17.9 million of gross revenues, adjusted for an expected returns reserve of $5.7 million and estimated gross-to-net charges of $4.9 million, for a net impact of $7.3 million in revenues. We also recorded increased cost of goods sold of $0.6 million and marketing expense of $0.7 million associated with the change in accounting estimate. The increase in net product revenue resulted in a decrease in net loss of $6.0 million or $0.06 per share in the first six months of 2017.

*Supply Revenue:*

We produce STENDRA or SPEDRA through a contract manufacturing partner and then sell it to our commercialization partners. We are the primary responsible party in the commercial supply arrangements and bear significant risk in the fulfillment of the obligations, including risks associated with manufacturing, regulatory compliance and quality assurance, as well as inventory, financial and credit loss. As such, we recognize supply revenue on a gross basis as the principal party in the arrangements. We recognize supply revenue at the time of shipment and, in the unusual case where the product does not meet contractually-specified product dating criteria at the time of shipment to the partner, we record a reserve for estimated product returns. There are no such reserves as of June 30, 2018.

*License and Milestone Revenue*

License and milestone revenues related to arrangements, usually license and/or supply agreements, entered into by us are recognized by following the five-step process outlined above. The allocation and timing of recognition of such revenue will be determined by that process and the amounts recognized and the timing of that recognition may not exactly follow the wording of the agreement as the amount allocated following the accounting analysis of the agreement may differ and the timing of recognition of a significant performance obligation may predate the contractual date.

*Royalty Revenue*

We rely on data provided by our collaboration partners in determining our contractually-based royalty revenue. Such data includes accounting estimates and reports for various discounts and allowances, including product returns. We record royalty revenues based on the best data available and make any adjustments to such revenues as such information becomes available.

## RESULTS OF OPERATIONS

*Revenues*

| (in thousands, except for percentages) | Three Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) | Six Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) |
|---|---|---|---|---|---|---|
| Qsymia—Net product revenue | $ 11,134 | $ 8,518 | 31 % | $ 20,766 | $ 26,138 | (21)% |
| PANCREAZE - Net product revenue | 2,116 | — | N/A | 2,116 | — | N/A |
| License and milestone revenue | — | — | N/A | — | 5,000 | (100)% |
| Supply revenue | 1,042 | 2,119 | (51)% | 2,725 | 5,931 | (54)% |
| Royalty revenue | 668 | 590 | 13 % | 1,253 | 1,170 | 7 % |
| Total revenue | $ 14,960 | $ 11,227 | 33 % | $ 26,860 | $ 38,239 | (30)% |

*Net product revenue*

PANCREAZE net product revenue for the three and six months ended June 30, 2018 includes 22 days of revenue. Qsymia net product revenue for the six months ended June 30, 2017 includes a one-time adjustment of $7.3 million related to shipments, which had previously been deferred due to our change to the “sell-in” revenue recognition methodology. Shipments and prescriptions for Qsymia revenue consisted of the following:

| (in thousands, except for percentages) | Three Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) | Six Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) |
|---|---|---|---|---|---|---|
| Qsymia units shipped to wholesalers | 94 | 83 | 13 % | 176 | 173 | 2 % |
| Qsymia prescriptions dispensed | 96 | 105 | (9)% | 173 | 207 | (16)% |

Net product revenue for PANCREAZE for the three and six months ended June 30, 2018 related to the shipment of 7,000 units. We anticipate a continuation of the volatility in the timing of Qsymia sales. Overall, we expect Qsymia net product revenue in 2018 to decrease from 2017 levels due to market conditions.

*License and milestone revenue*

License and milestone revenue for the six months ended June 30, 2017 consisted of a one-time $5.0 million payment received for a license to certain clinical and non-clinical data related to phentermine. License and milestone revenues are dependent on the timing of entering into new collaborations and the timing of our collaborators meeting certain milestone events. As a result, our license and milestone revenue will fluctuate materially between periods.

*Supply revenue*

The decrease in supply revenue in 2018 as compared to 2017 is due to the timing of orders from our commercialization partners. We supply STENDRA/SPEDRA to our collaborations partners on a cost-plus basis. The variations in supply revenue are a result of the timing of orders placed by our partners and may or may not reflect end user demand for STENDRA/SPEDRA. The timing of purchases by our commercialization partners will be affected by, among other items, their minimum purchase commitments, end user demand, and distributor inventory levels. As a result, supply revenue has and will continue to fluctuate materially between reporting periods.

*Royalty revenue*

We record royalty revenue related to Canadian sales of PANCREASE MT and sales of STENDRA/SPEDRA based on reports provided by our partners. Once we take over operations for Canadian sales for PANCREASE MT, including ownership of the Canadian inventory, we expect that net sales will be recorded as net product revenue with costs recorded as cost of goods sold. We expect royalty revenue in 2018 to remain relatively constant from 2017 levels.

*Cost of goods sold*

| | Three Months Ended June 30, | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2018 | | | | | | 2017 | | | | | |
| (In thousands, except percentages) | Qsymia | PANCREAZE | STENDRA/ SPEDRA | Total | | | Qsymia | STENDRA/ SPEDRA | Total | | | |
| Net product revenue | $ 11,134 | $ 2,116 | $ — | $ 13,250 | | | $ 8,518 | $ — | $ 8,518 | | | |
| Supply revenue | — | — | 1,042 | 1,042 | | | — | 2,119 | 2,119 | | | |
| Total product and supply revenue | 11,134 | 100% | $ 2,116 | 100% | $ 1,042 | 100% | $ 14,292 | 100% | $ 8,518 | 100% | $ 2,119 | 100% | $ 10,637 | 100% |
| Cost of goods sold (excluding amortization) | 1,652 | 15% | $ 567 | 27% | $ 1,067 | 102% | $ 3,286 | 23% | $ 1,400 | 16% | $ 1,989 | 94% | $ 3,389 | 32% |
| Amortization of intangible assets | 90 | 1% | 1,183 | 56% | — | 0% | 1,273 | 9% | 181 | 2% | — | 0% | $ 181 | 2% |
| Total cost of goods sold | 1,742 | 16% | $ 1,750 | 83% | $ 1,067 | 102% | $ 4,559 | 32% | $ 1,581 | 19% | $ 1,989 | 94% | $ 3,570 | 34% |
| | $ 9,392 | 84% | $ 366 | 17% | $ (25) | -2% | $ 9,733 | 68% | $ 6,937 | 81% | $ 130 | 6% | $ 7,067 | 66% |

| | Six Months Ended June 30, | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2018 | | | | | | 2017 | | | | | |
| | Qsymia | PANCREAZE | STENDRA/ SPEDRA | Total | | | Qsymia | STENDRA/ SPEDRA | Total | | | |
| Net product revenue | $ 20,766 | $ 2,116 | $ — | $ 22,882 | | | $ 26,138 | $ — | $ 26,138 | | | |
| Supply revenue | — | — | 2,725 | 2,725 | | | — | 5,931 | 5,931 | | | |
| Total product and supply revenue | $ 20,766 | 100% | $ 2,116 | 100% | $ 2,725 | 100% | $ 25,607 | 100% | $ 26,138 | 100% | $ 5,931 | 100% | $ 32,069 | 100% |
| Cost of goods sold (excluding amortization) | $ 2,695 | 13% | $ 568 | 27% | $ 2,653 | 97% | $ 5,916 | 23% | $ 3,884 | 15% | $ 5,491 | 93% | $ 9,375 | 29% |
| Amortization of intangible assets | $ 181 | 1% | $ 1,183 | 56% | $ — | 0% | $ 1,364 | 5% | $ 362 | 1% | $ — | 0% | $ 362 | 1% |
| Total cost of goods sold | $ 2,876 | 14% | $ 1,751 | 83% | $ 2,653 | 97% | $ 7,280 | 28% | $ 4,246 | 16% | $ 5,491 | 93% | $ 9,737 | 30% |
| | $ 17,890 | 86% | $ 365 | 17% | $ 72 | 3% | $ 18,327 | 72% | $ 21,892 | 84% | $ 440 | 7% | $ 22,332 | 70% |

Cost of goods sold for Qsymia includes the inventory costs of API, third party contract manufacturing and packaging and distribution costs, royalties, cargo insurance, freight, shipping, handling and storage costs, and overhead costs of the employees involved with production. Cost of goods sold for PANCREAZE includes third party contract manufacturing costs, amortization of the PANCREAZE license, service fees, royalties, insurance, and overhead costs. Cost of goods sold for STENDRA/SPEDRA shipped to our commercialization partners includes the inventory costs of API and tableting. Fluctuations in the cost of goods sold as a percentage of net product and supply revenue over the periods was primary due to the sales mix among Qsymia, STENDRA/SPEDRA and PANCREAZE.

*Selling, general and administrative expense*

| (In thousands, except percentages) | Three Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) | Six Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) |
|---|---|---|---|---|---|---|
| Selling and marketing | $ 3,521 | $ 5,398 | (35)% | $ 7,800 | $ 10,858 | (28)% |
| General and administrative | 8,190 | 6,232 | 31 % | 13,979 | 12,203 | 15 % |
| Total selling, general and administrative expenses | $ 11,711 | $ 11,630 | 1 % | $ 21,779 | $ 23,061 | (6)% |

The decrease in selling and marketing expenses for the three and six months ended June 30, 2018, compared to the same periods in 2018, was due primarily to lower employee costs as a result of the reduction of the size of our sales force in 2017, partially offset by increased spending for marketing programs. Selling and marketing expenses are expected to stay flat in the remainder of 2018 as compared to the first quarter of 2018.

The increase in general and administrative expenses in the three and six months ended June 30, 2018 compared to the same periods in 2017 was primarily due to approximately $2.0 million in one-time expenses related to the PANCREAZE acquisition and the addition of our new executive officers. General and administrative expenses could fluctuate significantly on a quarterly basis due to the timing of activities within our business strategy review.

*Research and development expense*

| Drug Indication/Description | Three Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) | Six Months Ended June 30, 2018 | 2017 | Increase/ (Decrease) |
|---|---|---|---|---|---|---|
| (In thousands, except percentages) | | | | | | |
| Qsymia | $ 308 | $ — | N/A | $ 328 | $ — | N/A |
| STENDRA | 38 | 99 | (62)% | 86 | 101 | (15)% |
| PANCREAZE | 96 | — | N/A | 96 | — | N/A |
| VI-0106 | 805 | 200 | 303 % | 1,366 | 1,385 | (1)% |
| Share-based compensation | 76 | 87 | (13)% | 157 | 172 | (9)% |
| Overhead costs* | 719 | 628 | 14 % | 1,412 | 1,536 | (8)% |
| Total research and development expenses | $ 2,042 | $ 1,014 | 101 % | $ 3,445 | $ 3,194 | 8 % |

*Overhead costs include compensation and related expenses, consulting, legal and other professional services fees relating to research and development activities, which we do not allocate to specific projects.

The increase in total research and development expenses in the three and six months ended June 30, 2018 as compared to the same periods in 2017 was primarily due to increased spending for the development of VI-0106, partially offset in the six-month period as the spending in 2017 included the license fees paid to Selten. We expect our research and development expenses to increase over the second half of 2018 as we continue our efforts related to our post-marketing requirements for Qsymia, specifically an adolescent safety and efficacy trial, and increase development activities for VI-0106 for the treatment of PAH.

*Interest expense and other expense, net*

Interest expense and other expense, net for the three and six months ended June 30, 2018 was $9.2 million and $17.6 million, respectively, compared to $8.4 million and $16.7 million for the three and six months ended June 30, 2017, respectively. The increase in 2018 is due to the impact of the additional debt issued in June 2018. Interest expense and other expense, net consists primarily of interest expense and the amortization of issuance costs from our convertible notes and senior secured notes and the amortization of the debt discount on the convertible notes. Other expense and income were not significant. We expect interest and other expense (income) for the remainder of 2018 to increase from the levels in the first half due to the interest expense related to the additional debt issued in June 2018.

*Provision for (benefit from) income taxes*

For the three and six months ended June 30, 2018, we recorded a provision for income taxes of $4,000 and $16,000, respectively, compared to $1,000 and a benefit of $11,000 for the three and six months ended June 30, 2018, respectively. The provision and benefit for income taxes for both of the periods is primarily comprised of state taxes during the period.

We periodically evaluate the realizability of our net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on our ability to generate sufficient future taxable income during periods prior to the expiration of tax attributes to fully utilize these assets. We weighed both positive and negative evidence and determined that there is a continued need for a full valuation allowance on our deferred tax assets in the U.S. as of June 30, 2018.

## LIQUIDITY AND CAPITAL RESOURCES

*Cash.* Cash, cash equivalents and available-for-sale securities totaled $123.5 million at June 30, 2018, as compared to $226.3 million at December 31, 2017. The decrease was primarily due to net cash used for the acquisition of the PANCREAZE license, operating activities and debt repayments during the period, partially offset by cash received from the issuance of the new debt.

We invest our excess cash balances in money market, U.S. government securities and corporate debt securities in accordance with our investment policy. Our investment policy has the primary investment objectives of preservation of principal; however, there may be times when certain of the securities in our portfolio will fall below the credit ratings required in the policy. If those securities are downgraded or impaired, we would experience realized or unrealized losses in the value of our portfolio, which would have an adverse effect on our results of operations, liquidity and financial condition. From time to time, the Company may also invest its cash to retire or

purchase its outstanding debt in open market purchases, privately negotiated transactions or otherwise. Investment securities are exposed to various risks, such as interest rate, market and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is possible that changes in these risk factors in the near term could have an adverse material impact on our results of operations or stockholders' equity.

*Accounts Receivable.* We extend credit to our customers for product sales resulting in accounts receivable. Customer accounts are monitored for past due amounts. Past due accounts receivable, determined to be uncollectible, are written off against the allowance for doubtful accounts. Allowances for doubtful accounts are estimated based upon past due amounts, historical losses and existing economic factors, and are adjusted periodically. Historically, we have had no significant uncollectable accounts receivable. We offer cash discounts to our customers, generally 2% of the sales price as an incentive for prompt payment.

Accounts receivable (net of allowance for cash discounts) at June 30, 2018, was $11.1 million, as compared to $12.2 million at December 31, 2017. Currently, we do not have any significant concerns related to accounts receivable or collections.

*Summary Cash Flows*

| | Six Months Ended June 30, | |
|---|---|---|
| | 2018 | 2017 |
| | (in thousands) | |
| Cash provided by (used for): | | |
| Operating activities | $ (18,131) | $ (11,288) |
| Investing activities | (41,968) | 9,392 |
| Financing activities | 50,888 | (6,481) |

*Operating Activities.* For the six months ended June 30, cash used for operating activities resulted from our net loss as adjusted for non-cash items, including the decrease in deferred revenue, in addition to an increase in inventories and a decrease in accounts payable. For the six months ended June 30, 2017, cash used for operating activities resulted from our net loss as adjusted for non-cash items, including the decrease in deferred revenue. This was partially offset by decreases in accounts receivable and prepaid expenses and increases in accrued liabilities.

*Investing Activities.* Cash used for investing activities for the six months ended June 30, 2018 resulted from the acquisition of the PANCREAZE license, partially offset by net proceeds from sales and maturities of our investment securities. Cash provided by investing activities for the six months ended June 30, 2017 primarily related to the purchases and maturities of investment securities.

*Financing Activities.* Cash provided by financing activities for the six months ended June 30, 2018 resulted from the net proceeds of $108.0 million from the issuance of our Senior Secured Notes due 2024, partially offset by repayments of $51.0 million of our Convertible Notes and $6.2 million of our Senior Secured Notes due 2018. Cash used for financing activities for the six months ended June 30, 2017 primarily related to our repayments of $6.5 million under the Senior Secured Notes due 2018.

We anticipate that our existing capital resources combined with anticipated future cash flows will be sufficient to support our operating needs at least for the next twelve months. However, we anticipate that we may require additional funding to evaluate commercial opportunities, which could come in the form of an asset acquisition, such as our acquisition of PANCREAZE, a license, a co-development agreement, a merger or acquisition or other form, create a pathway for centralized approval of the marketing authorization application for Qsiva in the EU, conduct post-approval clinical studies for Qsymia, conduct non-clinical and clinical research and development work to support regulatory submissions and applications for our current and future investigational drug candidates, finance the costs involved in filing and prosecuting patent applications and enforcing or defending our patent claims, if any, to fund operating expenses and manufacture quantities of our investigational drug candidates and to make payments under our existing license agreements and supply agreements.

If we require additional capital, we may seek any required additional funding through collaborations, public and private equity or debt financings, capital lease transactions or other available financing sources. Additional financing may not be available on acceptable terms, or at all. If additional funds are raised by issuing equity securities, substantial dilution to existing stockholders may result. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our commercialization or development programs or obtain funds through collaborations with others that are on unfavorable terms or that may require us to relinquish

rights to certain of our technologies, product candidates or products that we would otherwise seek to develop on our own.

***Off-Balance Sheet Arrangements***

We have not entered into any off-balance sheet financing arrangements and have not established any special purpose entities. We have not guaranteed any debt or commitments of other entities or entered into any options on non-financial assets.

***Commitments and Contingencies***

We indemnify our officers and directors for certain events or occurrences pursuant to indemnification agreements, subject to certain limits. We may be subject to contingencies that may arise from matters such as product liability claims, legal proceedings, stockholder suits and tax matters and as such, we are unable to estimate the potential exposure related to these indemnification agreements. We have not recognized any liabilities relating to these agreements as of June 30, 2018.

***Contractual Obligations***

During the six months ended June 30, 2018, there were no material changes to our contractual obligations described under Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended December 31, 2017, filed with the SEC on March 14, 2018, and as amended by the Form 10-K/A filed on April 26, 2018 with the SEC, other than the fulfillment of existing obligations in the ordinary course of business and minimum future purchase requirements related to PANCREAZE.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

**Market and Interest Rate Risk**

In the normal course of business, our financial position is subject to a variety of risks, including market risk associated with interest rate movements and foreign currency exchange risk. Our cash, cash equivalents and available-for-sale securities as of June 30, 2018, consisted primarily of money market funds, U.S. Treasury securities and corporate debt securities. Our cash is invested in accordance with an investment policy approved by our Board of Directors that specifies the categories (money market funds, U.S. Treasury securities and debt securities of U.S. government agencies, corporate bonds, asset-backed securities, and other securities), allocations, and ratings of securities we may consider for investment. Currently, we have focused on investing in U.S. Treasuries until market conditions improve.

Our market risk associated with interest rate movements is affected by changes in the general level of U.S. interest rates, particularly because the majority of our investments are in short-term marketable debt securities. The primary objective of our investment activities is to preserve principal. Some of the securities that we invest in may be subject to market risk. This means that a change in prevailing interest rates may cause the value of the investment to fluctuate. For example, if we purchase a security that was issued with a fixed interest rate and the prevailing interest rate later rises, the value of our investment may decline. A hypothetical 100 basis point increase in interest rates would reduce the fair value of our available-for-sale securities at June 30, 2018, by approximately $0.3 million. In general, money market funds are not subject to market risk because the interest paid on such funds fluctuates with the prevailing interest rate.

A portion of our operations consist of revenues from outside of the United States, some of which are denominated in Euros, and, as such, we have foreign currency exchange exposure for these revenues and associated accounts receivable. Future fluctuations in the Euro exchange rate may impact our revenues and cash flows.

## ITEM 4. CONTROLS AND PROCEDURES

(a.) Evaluation of disclosure controls and procedures. We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized and reported within the timelines

specified in the rules and forms of the SEC and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(b), our management carried out an evaluation, under the supervision and with the participation of our principal executive officer and our principal financial officer, of the effectiveness of the design and operation of VIVUS's disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on the evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective.

(b.) Changes in internal controls. There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II: OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

The Company is not aware of any asserted or unasserted claims against it where it believes that an unfavorable resolution would have an adverse material impact on the operations or financial position of the Company.

### ITEM 1A. RISK FACTORS

Set forth below and elsewhere in this Quarterly Report on Form 10-Q and in other documents we file with the SEC, are risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this Quarterly Report on Form 10-Q. These are not the only risks and uncertainties facing VIVUS. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

**Risks Relating to our Business**

***Our success will depend on our ability and that of our current or future collaborators to effectively and profitably commercialize Qsymia®, PANCREAZE and STENDRA/SPEDRA.***

Our success will depend on our ability and that of our current or future collaborators to effectively and profitably commercialize Qsymia, PANCREAZE and STENDRA/SPEDRA, which will include our ability to:

- expand the use of Qsymia through targeted patient and physician education;
- obtain marketing authorization by the EC for Qsiva™ in the EU;
- manage our alliances with MTPC, Menarini and Metuchen to help ensure the commercial success of avanafil;
- manage costs;
- improve third-party payor coverage, lower out-of-pocket costs to patients with discount programs, and obtain coverage for obesity under Medicare Part D;
- create market demand for Qsymia through patient and physician education, marketing and sales activities;
- achieve market acceptance and generate product sales;
- comply with the post-marketing requirements established by FDA, including Qsymia's Risk Evaluation and Mitigation Strategy, or REMS, any future changes to the REMS, and any other requirements established by FDA in the future;
- efficiently conduct the post-marketing studies required by FDA;
- comply with other healthcare regulatory requirements;
- comply with state and federal controlled substances requirements;
- maintain and defend our patents, if challenged;
- ensure that the active pharmaceutical ingredients, or APIs, for Qsymia and STENDRA/SPEDRA and the finished products are manufactured in sufficient quantities and in compliance with requirements of FDA and DEA and similar foreign regulatory agencies and with an acceptable quality and pricing level in order to meet commercial demand;
- ensure that the entire supply chain for Qsymia and STENDRA/SPEDRA, from APIs to finished products, efficiently and consistently delivers Qsymia and STENDRA/SPEDRA to customers;
- effectively and efficiently manage our sales force and commercial team for the promotion of Qsymia and PANCREAZE;

- effectively increase the level of revenue for PANCREAZE;
- successfully assume the commercial responsibilities for PANCREAZE;
- maintain a good relationship with the manufacturer of PANCREAZE; and
- ensure a sufficient level of PANCREAZE inventory.

If we are unable to successfully commercialize Qsymia, PANCREAZE and STENDRA/SPEDRA, our ability to generate product sales will be severely limited, which will have a material adverse impact on our business, financial condition, and results of operations.

***We have a new management team which may cause disruption in our business, which disruption could have a materially adverse effect on our results of operations.***

In 2018, former executives of Willow Biopharma Inc. joined our management team, including John Amos who has joined us as our new Chief Executive Officer, M. Scott Oehrlein as our new Chief Operations Officer and Kenneth Suh as our new President. If we are unable to successfully retain and integrate the new management team, our business could be harmed.

***We may not be able to successfully develop, launch and commercialize tacrolimus or any other potential future development programs.***

We may not be able to effectively develop and profitably launch and commercialize tacrolimus or any other potential future development programs which we may undertake, which will include our ability to:

- successfully develop a proprietary formulation of tacrolimus as a precursor to the clinical development process;
- effectively conduct phase 2 and phase 3 clinical testing on tacrolimus, which could be delayed by slow patient enrollment, long treatment time required to demonstrate effectiveness, disruption of operations at clinical trial sites, adverse medical events or side effects in treated patients, failure of patients taking the placebo to continue to participate in the clinical trials, and insufficient clinical trial data to support effectiveness of tacrolimus;
- obtain regulatory approval and market authorization for tacrolimus in the U.S., EU and other territories;
- develop, validate and maintain a commercially viable manufacturing process that is compliant with cGMP;
- establish and effectively manage a supply chain for tacrolimus and future development programs to ensure that the API and the finished products are manufactured in sufficient quantities and in compliance with regulatory requirements and with acceptable quality and pricing in order to meet commercial demand;
- effectively determine and manage the appropriate commercialization strategy;
- manage costs;
- achieve market acceptance by patients, the medical community and third-party payors and generate product sales;
- effectively compete with other therapies;
- maintain a continued acceptable safety profile for tacrolimus following approval;
- comply with healthcare regulatory requirements; and
- maintain and defend our patents, if challenged.

If we are unable to successfully develop, launch and commercialize tacrolimus, our ability to generate product sales will be severely limited, which will have a material adverse impact on our business, financial condition, and results of operations.

***Changes to our strategic business plan may cause uncertainty regarding the future of our business, and may adversely impact employee hiring and retention, our stock price, and our revenue, operating results, and financial condition.***

In 2016, we initiated a business strategy review with an outside advisor. These changes, and the potential for additional changes to our management, organizational structure and strategic business plan, may cause speculation and uncertainty regarding our future business strategy and direction. These changes may cause or result in:

- disruption of our business or distraction of our employees and management;
- difficulty in recruiting, hiring, motivating and retaining talented and skilled personnel;
- stock price volatility; and
- difficulty in negotiating, maintaining or consummating business or strategic relationships or transactions.

If we are unable to mitigate these or other potential risks, our revenue, operating results and financial condition may be adversely impacted.

***We depend on our collaboration partners to gain or maintain approval, market, and sell Qsymia and STENDRA/SPEDRA in their respective licensed territories.***

We rely on our collaboration partners, including Alvogen, MTPC, Menarini and Metuchen, to successfully commercialize Qsymia and STENDRA/SPEDRA in their respective territories, including obtaining any necessary approvals and we cannot assure you that they will be successful. Our dependence on our collaborative arrangements for the commercialization of Qsymia and STENDRA/SPEDRA, including our license agreements with Alvogen, MTPC, Menarini and Metuchen, subject us to a number of risks, including the following:

- we may not be able to control the commercialization of our drug products in the relevant territories, including the amount, timing and quality of resources that our collaborators may devote to our drug products;
- our collaborators may experience financial, regulatory or operational difficulties, which may impair their ability to commercialize our drug products;
- our collaborators may be required under the laws of the relevant territories to disclose our confidential information or may fail to protect our confidential information;
- as a requirement of the collaborative arrangement, we may be required to relinquish important rights with respect to our drug products, such as marketing and distribution rights;
- business combinations or significant changes in a collaborator’s business strategy may adversely affect a collaborator’s willingness or ability to satisfactorily complete its commercialization or other obligations under any collaborative arrangement;
- legal disputes or disagreements may occur with one or more of our collaborators;
- a collaborator could independently move forward with a competing investigational drug candidate developed either independently or in collaboration with others, including with one of our competitors; and
- a collaborator could terminate the collaborative arrangement, which could negatively impact the continued commercialization of our drug products. For example, in September 2016, Auxilium terminated its agreement with us to commercialize STENDRA in the U.S. and Canada and, in March

2017, Sanofi terminated its agreement with us to commercialize STENDRA/SPEDRA in Africa, the Middle East, Turkey, and the CIS, including Russia.

In addition, under our license agreement with MTPC, we are obligated to ensure that Menarini, Metuchen, and any future sublicensees comply with the terms and conditions of our license agreement with MTPC, and MTPC has the right to terminate our license rights to avanafil upon any uncured material breach. Consequently, failure by Menarini, Metuchen, or any future sublicensees to comply with these terms and conditions could result in the termination of our license rights to avanafil on a worldwide basis, which would delay, impair, or preclude our ability to commercialize avanafil.

If any of our collaboration partners fail to successfully commercialize Qsymia or STENDRA/SPEDRA, our business may be negatively affected and we may receive limited or no revenues under our agreements with them.

***There have been substantial changes to the Internal Revenue Code, some of which could have an adverse effect on our business.***

The Tax Cuts and Jobs Act made substantial changes to the Internal Revenue Code, effective January 1, 2018, some of which could have an adverse effect on our business. In addition to reducing the top corporate income tax rate, changes that could impact our business in the future include (i) eliminating the ability to utilize net operating losses, or NOLs, to reduce income in prior tax years and limiting the utilization of NOLs generated after December 31, 2017 to 80% of future taxable income, which could affect the timing of our ability to utilize NOLs, and (ii) limiting the amount of business interest expenses that can be deducted to 30% of earnings before interest, taxes, depreciation and amortization.

***We currently rely on reports from our commercialization partners in determining our royalty revenues, and these reports may be subject to adjustment or restatement, which may materially affect our financial results.***

We have royalty and milestone-bearing license and commercialization agreements for STENDRA/SPEDRA with Menarini and, prior to October 1, 2016, with Auxilium. Also, on an interim basis, we have agreements with affiliates of Janssen for the commercialization of PANCREASE MT in Canada. In determining our royalty revenue from such agreements, we rely on our collaboration partners to provide accounting estimates and reports for various discounts and allowances, including product returns. As a result of fluctuations in inventory, allowances and buying patterns, actual sales and product returns of STENDRA/SPEDRA in particular reporting periods may be affected, resulting in the need for our commercialization partners to adjust or restate their accounting estimates set forth in the reports provided to us. For example, in April 2015, we were informed by Endo, upon their purchase of Auxilium, that Endo had revised its accounting estimate for STENDRA return reserve related to sales made in 2014. Under the terms of our license and commercialization agreement, adjustments to the return reserve can be deducted from reported net revenue. As a result, in the year ended December 31, 2015, we recorded an adjustment of $1.2 million to reduce our royalty revenue on net sales of STENDRA. The reduction in royalty revenue resulted in an increase to net loss of $1.2 million, or $0.01 per share, for the year ended December 31, 2015. Such adjustments or restatements may materially and negatively affect our financial position and results of operations. Beginning October 1, 2016, we ceased earning royalty revenue from U.S. sales as a result of the termination of our license and commercialization agreement with Auxilium. Our new license agreement with Metuchen is royalty-free as to us.

***If we are unable to enter into agreements with collaborators for the territories that are not covered by our existing commercialization agreements, our ability to commercialize STENDRA/SPEDRA in these territories may be impaired.***

We intend to enter into collaborative arrangements or a strategic alliance with one or more pharmaceutical partners or others to commercialize STENDRA/SPEDRA in territories that are not covered by our current commercial collaboration agreements, such as Africa, the Middle East, Turkey, the CIS, Mexico and Central America. We may be unable to enter into agreements with third parties for STENDRA/SPEDRA for these territories on favorable terms or at all, which could delay, impair, or preclude our ability to commercialize STENDRA/SPEDRA in these territories.

***Failure to obtain regulatory approval in foreign jurisdictions will prevent us from marketing our products abroad.***

In order to market products in many foreign jurisdictions, we, or our partners, must obtain separate regulatory approvals. Approval by FDA in the U.S. does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries. For example, while our drug STENDRA/SPEDRA has been approved in both the U.S. and the EU, our drug Qsymia has been approved in the U.S. but Qsiva (the intended trade name for Qsymia in the EU) was denied a marketing authorization by the EC due to concerns over the potential cardiovascular and central nervous system effects associated with long-term use, teratogenic potential and use by patients for whom Qsiva would not have been indicated. We intend to seek approval, either directly or through our collaboration partners, for Qsymia and STENDRA in other territories outside the U.S. and the EU. However, we have had limited interactions with foreign regulatory authorities, and the approval procedures vary among countries and can involve additional testing. Foreign regulatory approvals may not be obtained, by us or our collaboration partners responsible for obtaining approval, on a timely basis, or at all, for any of our products. The failure to receive regulatory approvals in a foreign country would prevent us from marketing and commercializing our products in that country, which could have a material adverse effect on our business, financial condition and results of operations.

***We, together with Alvogen, Menarini, Metuchen and any potential future collaborators in certain territories, intend to market Qsymia, PANCREAZE and STENDRA/SPEDRA outside the U.S., which will subject us to risks related to conducting business internationally.***

We, through Alvogen, Menarini, Metuchen and any potential future collaborators in certain territories, intend to manufacture, market, and distribute Qsymia and STENDRA/SPEDRA outside the U.S. Also, on an interim basis, we have agreements with affiliates of Janssen for the commercialization of PANCREASE MT in Canada. We expect that we will be subject to additional risks related to conducting business internationally, including:

- different regulatory requirements for drug approvals in foreign countries;
- differing U.S. and foreign drug import and export rules;
- reduced protection for intellectual property rights in some foreign countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- different reimbursement systems;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incidental to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the U.S.;
- production shortages resulting from events affecting raw material supply or manufacturing capabilities abroad;
- potential liability resulting from development work conducted by these distributors; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters.

***We have significant inventories on hand, and, in 2015, we recorded inventory impairment and commitment fees totaling $29.5 million, primarily to write off excess inventory related to Qsymia.***

We maintain significant inventories and evaluate these inventories on a periodic basis for potential excess and obsolescence. During the year ended December 31, 2015, we recognized total charges of $29.5 million, primarily for Qsymia inventories on hand in excess of projected demand. The inventory impairment charges were based on our analysis of the then-current Qsymia inventory on hand and remaining shelf life, in relation to our projected demand for the product. The current FDA-approved commercial product shelf life for Qsymia is 36 months. STENDRA is approved in the U.S. and SPEDRA is approved in the EU for 48 months of commercial product shelf life.

Our write-down for excess and obsolete inventory is subjective and requires forecasting of the future market demand for our products. Forecasting demand for Qsymia, a drug in the obesity market in which there had been no new FDA-approved medications in over a decade prior to 2012, and for which reimbursement from third-party payors had previously been non-existent, has been difficult. Forecasting demand for STENDRA/SPEDRA, a drug that is new to a crowded and competitive market and has limited sales history, is also difficult. We will continue to evaluate our inventories on a periodic basis. The value of our inventories could be impacted if actual sales differ significantly from our estimates of future demand or if any significant unanticipated changes in future product demand or market conditions occur. Any of these events, or a combination thereof, could result in additional inventory write-downs in future periods, which could be material.

***Our failure to manage and maintain our distribution network for Qsymia or compliance with certain requirements, including requirements of the Qsymia REMS program, could compromise the commercialization of this product.***

We rely on Cardinal Health 105, Inc., or Cardinal Health, a third-party distribution and supply-chain management company, to warehouse Qsymia and distribute it to the certified home delivery pharmacies and wholesalers that then distribute Qsymia directly to patients and certified retail pharmacies. Cardinal Health provides billing, collection and returns services. Cardinal Health is our exclusive supplier of distribution logistics services, and accordingly we depend on Cardinal Health to satisfactorily perform its obligations under our agreement with them, including compliance with relevant state and federal laws.

Pursuant to the REMS program applicable to Qsymia, our distribution network is through a small number of certified home delivery pharmacies and wholesalers and through a broader network of certified retail pharmacies. We have contracted through a third-party vendor to certify the retail pharmacies and collect required data to support the Qsymia REMS program. In addition to providing services to support the distribution and use of Qsymia, each of the certified pharmacies has agreed to comply with the REMS program requirements and, through our third-party data collection vendor, will provide us with the necessary patient and prescribing healthcare provider, or HCP, data. In addition, we have contracted with third-party data warehouses to store this patient and HCP data and report it to us. We rely on this third-party data in order to recognize revenue and comply with the REMS requirements for Qsymia, such as data analysis. This distribution and data collection network requires significant coordination with our sales and marketing, finance, regulatory and medical affairs teams, in light of the REMS requirements applicable to Qsymia.

We rely on the certified pharmacies to implement a number of safety procedures and report certain information to our third-party REMS data collection vendor. Failure to maintain our contracts with Cardinal Health, our third-party REMS data collection vendor, or with the third-party data warehouses, or the inability or failure of any of them to adequately perform under our contracts with them, could negatively impact the distribution of Qsymia, or adversely affect our ability to comply with the REMS applicable to Qsymia. Failure to comply with a requirement of an approved REMS can result in, among other things, civil penalties, imposition of additional burdensome REMS requirements, suspension or revocation of regulatory approval and criminal prosecution. Failure to coordinate financial systems could also negatively impact our ability to accurately report and forecast product revenue. If we are unable to effectively manage the distribution and data collection process, sales of Qsymia could be severely compromised and our business, financial condition and results of operations would be harmed.

***If we are unable to maintain or enter into agreements with suppliers or our suppliers fail to supply us with the APIs for our products or finished products or if we rely on single-source suppliers, we may experience delays in commercializing our products.***

We purchase all supplies related to PANCREAZE from a single manufacturer. We currently do not have supply agreements for topiramate or phentermine, which are the APIs used in Qsymia. We cannot guarantee that we will be successful in maintaining or entering into supply agreements on reasonable terms or at all or that we or our suppliers will be able to obtain or maintain the necessary regulatory approvals or state and federal controlled substances registrations for current or potential future suppliers in a timely manner or at all.

We anticipate that we will continue to rely on single-source suppliers for PANCREAZE, phentermine and topiramate for the foreseeable future. Any production shortfall on the part of our suppliers that impairs the supply of phentermine, topiramate or PANCREAZE could have a material adverse effect on our business, financial condition and results of operations. If we are unable to obtain a sufficient quantity of these compounds, there could be a substantial delay in successfully developing a second source supplier. An inability to continue to source product from any of these suppliers, which could be due to regulatory actions or requirements affecting the supplier, adverse financial or other strategic developments experienced by a supplier, labor disputes or shortages, unexpected demands or quality issues, could adversely affect our ability to satisfy demand for Qsymia or PANCREAZE, which could adversely affect our product sales and operating results materially, which could significantly harm our business.

We currently do not have any manufacturing facilities and intend to continue to rely on third parties for the supply of the API and tablets, as well as for the supply of starting materials. However, we cannot be certain that we or our suppliers will be able to obtain or maintain the necessary regulatory approvals or registrations for these suppliers in a timely manner or at all.

Sanofi Chimie manufactures and supplies the API for avanafil on an exclusive basis in the United States and other territories and on a semi-exclusive basis in Europe, including the EU, Latin America and other territories. Sanofi Winthrop Industrie manufactures and supplies the avanafil tablets on an exclusive basis in the United States and other territories and on a semi-exclusive basis in Europe, including the EU, Latin America and other territories. We have entered into supply agreements with Menarini and Metuchen under which we are obligated to supply them with avanafil tablets. If we are unable to maintain a reliable supply of avanafil API or tablets from Sanofi Chimie and/or Sanofi Winthrop Industrie, we may be unable to satisfy our obligations under these supply agreements in a timely manner or at all, and we may, as a result, be in breach of one or both of these agreements.

***We have in-licensed all or a portion of the rights to Qsymia, PANCREAZE and STENDRA from third parties. If we default on any of our material obligations under those licenses, we could lose rights to these drugs.***

We have in-licensed and otherwise contracted for rights to Qsymia, PANCREAZE and STENDRA, and we may enter into similar licenses in the future. Under the relevant agreements, we are subject to commercialization, development, supply, sublicensing, royalty, insurance and other obligations. If we fail to comply with any of these requirements, or otherwise breach these license agreements, the licensor may have the right to terminate the license in whole or to terminate the exclusive nature of the license. Loss of any of these licenses or the exclusive rights provided therein could harm our financial condition and operating results.

In particular, we license the rights to avanafil from MTPC, and we have certain obligations to MTPC in connection with that license. We licensed the rights to PANCREAZE from Janssen. We license the rights to Qsymia from Dr. Najarian. We believe we are in compliance with the material terms of our license agreements with MTPC, Janssen and Dr. Najarian. However, there can be no assurance that this compliance will continue or that the licensors will not have a differing interpretation of the material terms of the agreements. If the license agreements were terminated early or if the terms of the licenses were contested for any reason, it would have a material adverse impact on our ability to commercialize products subject to these agreements, our ability to raise funds to finance our operations, our stock price and our overall financial condition. The monetary and disruption costs of any disputes involving our agreements could be significant despite rulings in our favor.

***Our ability to gain and increase market acceptance and generate revenues will be subject to a variety of risks, many of which are out of our control.***

Qsymia, PANCREAZE and STENDRA/SPEDRA may not gain or increase market acceptance among physicians, patients, healthcare payors or the medical community. We believe that the degree of market acceptance and our ability to generate revenues from such drugs will depend on a number of factors, including:

- our ability to expand the use of Qsymia through targeted patient and physician education;
- our ability to find the right partner for expanded Qsymia commercial promotion to a broader primary care physician audience;
- our ability to obtain marketing authorization by the EC for Qsiva in the EU;
- contraindications for Qsymia and STENDRA/SPEDRA;
- our ability to increase market acceptance for and use of PANCREAZE;
- competition and timing of market introduction of competitive drugs;
- quality, safety and efficacy in the approved setting;
- prevalence and severity of any side effects, including those of the components of our drugs;
- emergence of previously unknown side effects, including those of the generic components of our drugs;
- results of any post-approval studies;
- potential or perceived advantages or disadvantages over alternative treatments, including generics;
- the relative convenience and ease of administration and dosing schedule;
- the convenience and ease of purchasing the drug, as perceived by potential patients;
- strength of sales, marketing and distribution support;
- price, both in absolute terms and relative to alternative treatments;
- the effectiveness of our or our current or any future collaborators' sales and marketing strategies;
- the effect of current and future healthcare laws;
- availability of coverage and reimbursement from government and other third-party payors;
- the level of mandatory discounts required under federal and state healthcare programs and the volume of sales subject to those discounts;
- recommendations for prescribing physicians to complete certain educational programs for prescribing drugs;
- the willingness of patients to pay out-of-pocket in the absence of government or third-party coverage; and
- product labeling, product insert, or new REMS or post-market safety study or trial requirements of FDA or other regulatory authorities.

Our drugs may fail to achieve market acceptance or generate significant revenue to achieve sustainable profitability. In addition, our efforts to educate the medical community and third-party payors on the safety and benefits of our drugs may require significant resources and may not be successful.

***We are required to complete post-approval studies and trials mandated by FDA for Qsymia, and such studies and trials are expected to be costly and time consuming. If the results of these studies and trials reveal unacceptable safety risks, Qsymia may be required to be withdrawn from the market.***

Upon receiving approval to market Qsymia, FDA required that we perform additional studies of Qsymia including a cardiovascular outcome trial, or CVOT. We estimate the cost of a CVOT as currently designed to be between $180 million and $220 million incurred over a period of approximately five years. We have held several meetings with FDA to discuss alternative strategies for obtaining cardiovascular, or CV, outcomes data that would be substantially more feasible and that ensure timely collection of data to better inform on the CV safety of Qsymia. In September 2013, we submitted a request to the EMA for Scientific Advice, a procedure similar to the U.S. Special Protocol Assessment process, regarding use of a pre-specified interim analysis from the CVOT to assess the long-term treatment effect of Qsymia on the incidence of major adverse cardiovascular events in overweight and obese subjects with confirmed cardiovascular disease. Our request was to allow this interim analysis to support the resubmission of an application for a marketing authorization for Qsiva for treatment of obesity in accordance with the EU centralized marketing authorization procedure. We received feedback in 2014 from the EMA and the various competent authorities of the EU Member States. We worked with cardiovascular and epidemiology experts in exploring alternate solutions to demonstrate the long-term cardiovascular safety of Qsymia. After reviewing a summary of Phase 3 data relevant to CV risk and post-marketing safety data, the cardiology experts noted that they believe there was an absence of an overt CV risk signal and indicated that they did not believe a randomized placebo-controlled CVOT would provide additional information regarding the CV risk of Qsymia. The epidemiology experts maintained that a well-conducted retrospective observational study could provide data to further inform on potential CV risk. We worked with the expert group to develop a protocol and conduct a retrospective observational study. We have submitted information from this study to FDA in support of a currently pending supplemental New Drug Application (sNDA) seeking changes to the Qsymia label. Although we and consulted experts believe there is no overt signal for CV risk to justify the CVOT, we are committed to working with FDA to reach a resolution. There is no assurance, however, that FDA will accept any measures short of those specified in the CVOT to satisfy this requirement.

As for the EU, even if FDA were to determine that a CVOT is no longer necessary, there would be no assurance that the EMA would reach the same conclusion. There can be no assurance that we will be successful in obtaining FDA or EMA agreement that we have demonstrated the long-term cardiovascular safety of Qsymia. Furthermore, there can be no assurance that FDA or EMA will not request or require us to provide additional information or undertake additional preclinical studies and clinical trials or retrospective observational studies.

In addition to these studies, FDA may also require us to perform other lengthy post-approval studies or trials, for which we would have to expend significant additional resources, which could have an adverse effect on our operating results, financial condition and stock price. Failure to comply with the applicable regulatory requirements, including the completion of post-marketing studies and trials, can result in, among other things, civil monetary penalties, suspensions of regulatory approvals, operating restrictions and criminal prosecution. The restriction, suspension or revocation of regulatory approvals or any other failure to comply with regulatory requirements could have a material adverse effect on our business, financial condition, results of operations and stock price. We have not complied with all the regulatory timelines for the required post-marketing trials and studies, and this may be considered a violation of the statute if FDA does not find good cause.

***We may not be able to remain listed on The Nasdaq Stock Market.***

On October 4, 2017, we received a letter from The Nasdaq Stock Market, or Nasdaq, indicating that, based upon the closing bid price of our common stock for the preceding 30 consecutive business days, we no longer meet the continued listing requirement of maintaining a minimum bid price of $1 per share, as set forth in Nasdaq Listing Rule 5450(a)(1). On April 3, 2018, we received a letter from Nasdaq indicating that we did not regain compliance within the compliance period. On May 17, 2018, we received a letter from Nasdaq informing us that the Nasdaq Hearings Panel had granted our request for continued listing subject to the condition that, on or before October 1, 2018, we must have effected a reverse stock split and evidenced a closing bid price of $1.00 or more for a minimum of ten prior consecutive trading days. If we do not succeed in doing so, Nasdaq could delist our common stock. If Nasdaq delists our common stock, the delisting could adversely affect the market liquidity of our common stock and the price of our common stock.

***We depend upon consultants and outside contractors extensively in important roles within our company.***

We outsource many key functions of our business and therefore rely on a substantial number of consultants, and we will need to be able to effectively manage these consultants to ensure that they successfully carry out their contractual obligations and meet expected deadlines. However, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials or other development activities may be extended, delayed or terminated, and we may not be able to complete our post-approval clinical trials for Qsymia and STENDRA, obtain regulatory approval for our future investigational drug candidates, successfully commercialize our approved drugs or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on commercially reasonable terms, or at all.

***Qsymia is a combination of two active ingredient drug products approved individually by FDA that are commercially available and marketed by other companies, although the specific dose strengths differ. As a result, Qsymia may be subject to substitution by prescribing physicians, or by pharmacists, with individual drugs contained in the Qsymia formulation, which would adversely affect our business.***

Although Qsymia is a once-a-day, proprietary extended-release formulation, both of the approved APIs (phentermine and topiramate) that are combined to produce Qsymia are commercially available as drug products at prices that together are lower than the price at which we sell Qsymia. In addition, the distribution and sale of these drug products is not limited under a REMS program, as is the case with Qsymia. Further, the individual drugs contained in the Qsymia formulation are available in retail pharmacies. We cannot be sure that physicians will view Qsymia as sufficiently superior to a treatment regimen of Qsymia's individual APIs to justify the significantly higher cost for Qsymia, and they may prescribe the individual generic drugs already approved and marketed by other companies instead of our combination drug. Although our U.S. and European patents contain composition, product formulation and method-of-use claims that we believe protect Qsymia, these patents may be ineffective or impractical to prevent physicians from prescribing, or pharmacists from dispensing, the individual generic constituents marketed by other companies instead of our combination drug. Phentermine and topiramate are currently available in generic form, although the doses used in Qsymia are currently not available. In the third quarter of 2013, Supernus Pharmaceuticals, Inc. launched Trokendi XR™ and in the second quarter of 2014, Upsher-Smith Laboratories, Inc. launched Qudexy™. Both products provide an extended-release formulation of the generic drug topiramate that is indicated for certain types of seizures and migraines. Topiramate is not approved for obesity treatment, and phentermine is only approved for short-term treatment of obesity. However, because the price of Qsymia is significantly higher than the prices of the individual components as marketed by other companies, physicians may have a greater incentive to write prescriptions for the individual components outside of their approved indication, instead of for our combination drug, and this may limit how we price or market Qsymia. Similar concerns could also limit the reimbursement amounts private health insurers or government agencies in the U.S. are prepared to pay for Qsymia, which could also limit market and patient acceptance of our drug and could negatively impact our revenues.

In many regions and countries where we may plan to market Qsymia, the pricing of reimbursed prescription drugs is controlled by the government or regulatory agencies. The government or regulatory agencies in these countries could determine that the pricing for Qsymia should be based on prices for its APIs when sold separately, rather than allowing us to market Qsymia at a premium as a new drug, which could limit our pricing of Qsymia and negatively impact our revenues.

Once an applicant receives authorization to market a medicinal product in an EU Member State, through any application route, the applicant is required to engage in pricing discussions and negotiations with a separate pricing authority in that country. The legislators, policymakers and healthcare insurance funds in the EU Member States continue to propose and implement cost-containing measures to keep healthcare costs down, due in part to the attention being paid to healthcare cost containment and other austerity measures in the EU. Certain of these changes could impose limitations on the prices pharmaceutical companies are able to charge for their products. The amounts of reimbursement available from governmental agencies or third-party payors for these products may increase the tax obligations on pharmaceutical companies such as ours, or may facilitate the introduction of generic competition with respect to our products. Furthermore, an increasing number of EU Member States and other foreign countries use prices for medicinal products established in other countries as "reference prices" to help determine the price of the product in their own territory. Consequently, a downward trend in the price of medicinal products in some

countries could contribute to similar downward trends elsewhere. In addition, the ongoing budgetary difficulties faced by a number of EU Member States, including Greece and Spain, have led and may continue to lead to substantial delays in payment and payment partially with government bonds rather than cash for medicinal products, which could negatively impact our revenues and profitability. Moreover, in order to obtain reimbursement of our medicinal products in some countries, including some EU Member States, we may be required to conduct clinical trials that compare the cost-effectiveness of our products to other available therapies. There can be no assurance that our medicinal products will obtain favorable reimbursement status in any country.

***If we become subject to product liability claims, we may be required to pay damages that exceed our insurance coverage.***

Qsymia and STENDRA/SPEDRA, like all pharmaceutical products, are subject to heightened risk for product liability claims due to inherent potential side effects. For example, because topiramate, a component of Qsymia, may increase the risk of congenital malformation in infants exposed to topiramate during the first trimester of pregnancy and also may increase the risk of suicidal thoughts and behavior, such risks may be associated with Qsymia as well. Other potential risks involving Qsymia may include, but are not limited to, an increase in resting heart rate, acute angle closure glaucoma, cognitive and psychiatric adverse events, metabolic acidosis, an increase in serum creatinine, hypoglycemia in patients with type 2 diabetes, kidney stone formation, decreased sweating and hypokalemia, or lower-than-normal amount of potassium in the blood.

Although we have obtained product liability insurance coverage for Qsymia, we may be unable to maintain this product liability coverage for Qsymia or any other of our approved drugs in amounts or scope sufficient to provide us with adequate coverage against all potential risks. A product liability claim in excess of, or excluded from, our insurance coverage would have to be paid out of cash reserves and could have a material adverse effect upon our business, financial condition and results of operations. Product liability insurance is expensive even with large self-insured retentions or deductibles, difficult to maintain, and current or increased coverage may not be available on acceptable terms, if at all.

In addition, we develop, test, and manufacture through third parties, approved drugs and future investigational drug candidates that are used by humans. We face an inherent risk of product liability exposure related to the testing of our approved drugs and investigational drug candidates in clinical trials. An individual may bring a liability claim against us if one of our approved drugs or future investigational drug candidates causes, or merely appears to have caused, an injury.

If we cannot successfully defend ourselves against a product liability claim, whether involving Qsymia, STENDRA/SPEDRA or a future investigational drug candidate or product, we may incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- injury to our reputation;
- withdrawal of clinical trial patients;
- costs of defending the claim and/or related litigation;
- cost of any potential adverse verdict;
- substantial monetary awards to patients or other claimants; and
- the inability to commercialize our drugs.

Damages awarded in a product liability action could be substantial and could have a negative impact on our financial condition. Whether or not we were ultimately successful in product liability litigation, such litigation would consume substantial amounts of our financial and managerial resources, and might result in adverse publicity, all of which would impair our business. In addition, product liability claims could result in an FDA investigation of the safety or efficacy of our product, our third-party manufacturing processes and facilities, or our marketing programs. An FDA investigation could also potentially lead to a recall of our products or more serious enforcement actions, limitations on the indications for which they may be used, or suspension or withdrawal of approval.

***The markets in which we operate are highly competitive and we may be unable to compete successfully against new entrants or established companies.***

Competition in the pharmaceutical and medical products industries is intense and is characterized by costly and extensive research efforts and rapid technological progress. We are aware of several pharmaceutical companies also actively engaged in the development of therapies for the treatment of obesity and erectile dysfunction. Many of these companies have substantially greater research and development capabilities as well as substantially greater marketing, financial and human resources than we do. Some of the drugs that may compete with Qsymia may not have a REMS requirement and the accompanying complexities such a requirement presents. Our competitors may develop technologies and products that are more effective than those we are currently marketing or researching and developing. Such developments could render Qsymia and STENDRA less competitive or possibly obsolete.

Qsymia for the treatment of chronic weight management competes with several approved anti-obesity drugs including, Belviq® (lorcaserin), Arena Pharmaceutical's approved anti-obesity compound marketed by Eisai Inc., Eisai Co., Ltd.'s U.S. subsidiary; Xenical® (orlistat), marketed by Roche; alli®, the over-the-counter version of orlistat, marketed by GlaxoSmithKline; Contrave® (naltrexone/bupropion), Orexigen Therapeutics, Inc.'s anti-obesity compound; and Saxenda® (liraglutide), an anti-obesity compound marketed by Novo Nordisk A/S. Agents that have been approved for type 2 diabetes that have demonstrated weight loss in clinical studies may also compete with Qsymia. These include Farxiga™ (dapagliflozin) from AstraZeneca and Bristol-Myers Squibb, an SGLT2 inhibitor; Jardiance® (empagliflozin) from Boehringer Ingelheim, an SGLT2 inhibitor; Victoza® (liraglutide) from Novo Nordisk A/S, a GLP-1 receptor agonist; Invokana® (canaglifozin) from Johnson & Johnson's Janssen Pharmaceuticals, an SGLT2 inhibitor and Glyxambi® (empagliflozin/linagliptin) from Boehringer Ingelheim and Eli Lilly, an SGLT2 inhibitor and DPP-4 inhibitor combination product. Also, EnteroMedics® Inc. markets the Maestro Rechargeable System for certain obese adults, the first weight loss treatment device that targets the nerve pathway between the brain and the stomach that controls feelings of hunger and fullness.

There are also several other investigational drug candidates in Phase 2 clinical trials for the treatment of obesity. There are also a number of generic pharmaceutical drugs that are prescribed for obesity, predominantly phentermine. Phentermine is sold at much lower prices than we charge for Qsymia. The availability of branded prescription drugs, generic drugs and over-the-counter drugs could limit the demand for, and the price we are able to charge for, Qsymia.

We also may face competition from the off-label use of the generic components in our drugs. In particular, it is possible that patients will seek to acquire phentermine and topiramate, the generic components of Qsymia. Neither of these generic components has a REMS program and both are available at retail pharmacies. Although the dose strength of these generic components has not been approved by FDA for use in the treatment of obesity, the off-label use of the generic components in the U.S. or the importation of the generic components from foreign markets could adversely affect the commercial potential for our drugs and adversely affect our overall business, financial condition and results of operations.

There are also surgical approaches to treat severe obesity that are becoming increasingly accepted. Two of the most well established surgical procedures are gastric bypass surgery and adjustable gastric banding, or lap bands. In February 2011, FDA approved the use of a lap band in patients with a BMI of 30 (reduced from 35) with comorbidities. The lowering of the BMI requirement will make more obese patients eligible for these types of bariatric procedures. In addition, other potential approaches that utilize various implantable devices or surgical tools are in development. Some of these approaches are in late-stage development and may be approved for marketing.

Qsymia may also face challenges and competition from newly developed generic products. Under the U.S. Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act, newly approved drugs and indications may benefit from a statutory period of non-patent marketing exclusivity. The Hatch-Waxman Act stimulates competition by providing incentives to generic pharmaceutical manufacturers to introduce non-infringing forms of patented pharmaceutical products and to challenge patents on branded pharmaceutical products. We received two notifications under paragraph IV of the Hatch-Waxman Act challenging certain of our Qsymia patents, and we filed suit against both challengers. In June 2017, the Company entered into a settlement agreement with Actavis Laboratories FL, Inc., Actavis, Inc., and Actavis PLC, collectively referred to as Actavis, and in August 2017, the Company entered into a settlement agreement with Dr. Reddy's Laboratories, S.A. and Dr. Reddy's Laboratories, Inc., collectively referred to as DRL. The settlement agreement with Actavis will permit Actavis to begin selling a generic version of Qsymia on December 1, 2024, or earlier under certain circumstances. The settlement with DRL will permit DRL to begin selling a generic version of Qsymia on June 1, 2025, or earlier

under certain circumstances. It is possible that one or more additional companies may file an Abbreviated New Drug Application, or ANDA, and could receive FDA approval to market a generic version of Qsymia before the entry dates specified in our settlement agreements with Actavis and DRL. If a generic version of Qsymia is launched, this will harm our business. Generic manufacturers pursuing ANDA approval are not required to conduct costly and time-consuming clinical trials to establish the safety and efficacy of their products; rather, they are permitted to rely on FDA's finding that the innovator's product is safe and effective. Additionally, generic drug companies generally do not expend significant sums on sales and marketing activities, instead relying on physicians or payors to substitute the generic form of a drug for the branded form. Thus, generic manufacturers can sell their products at prices much lower than those charged by the innovative pharmaceutical or biotechnology companies who have incurred substantial expenses associated with the research and development of the drug product and who must spend significant sums marketing a new drug.

The FDCA provides that an ANDA holder and an innovator drug with a REMS with Elements to Assure Safe use, like Qsymia, must use a single shared REMS system to assure safe use unless FDA waives this requirement and permits the ANDA holder to implement a separate but comparable REMS. We cannot predict the outcome or impact on our business of any future action that we may take with regard to sharing our REMS program or if FDA grants a waiver allowing the generic competitor to market a generic drug with a separate but comparable REMS.

PANCREAZE for the treatment of pancreatic insufficiency competes with Creon®, marketed by AbbVie, Inc., Ultresa™, marketed by Aptalis Phama US, Inc., Pertzye®, marketed by Digestive Care, Inc., and Zenpep®, marketed by Allergan Inc.

STENDRA for the treatment of ED competes with PDE5 inhibitors in the form of oral medications including Viagra® (sildenafil citrate), marketed by Pfizer, Inc.; Cialis® (tadalafil), marketed by Eli Lilly and Company; Levitra® (vardenafil), co marketed by GlaxoSmithKline plc and Schering Plough Corporation in the U.S.; and STAXYN® (vardenafil in an oral disintegrating tablet, or ODT), co-promoted by GlaxoSmithKline plc and Merck & Co., Inc.

New developments, including the development of other drug technologies and methods of preventing the incidence of disease, occur in the pharmaceutical and medical technology industries at a rapid pace. These developments may render our drugs and future investigational drug candidates obsolete or noncompetitive. Compared to us, many of our potential competitors have substantially greater:

- research and development resources, including personnel and technology;
- regulatory experience;
- investigational drug candidate development and clinical trial experience;
- experience and expertise in exploitation of intellectual property rights; and
- access to strategic partners and capital resources.

As a result of these factors, our competitors may obtain regulatory approval of their products more rapidly than we or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our future investigational drug candidates. Our competitors may also develop drugs or surgical approaches that are more effective, more useful and less costly than ours and may also be more successful in manufacturing and marketing their products. In addition, our competitors may be more effective in commercializing their products. We currently outsource our manufacturing and therefore rely on third parties for that competitive expertise. There can be no assurance that we will be able to develop or contract for these capabilities on acceptable economic terms, or at all.

***We may participate in new partnerships and other strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.***

From time to time, we consider strategic transactions, such as out-licensing or in-licensing of compounds or technologies, acquisitions of companies and asset purchases. On September 30, 2016, we entered into a license and commercialization agreement and a commercial supply agreement with Metuchen. Under the terms of the agreements, Metuchen received an exclusive license to develop, commercialize and promote STENDRA in the

United States, Canada, South America and India, or the Territory, effective October 1, 2016. Additionally, on January 6, 2017, we entered into a Patent Assignment Agreement with Selten, whereby we received exclusive, worldwide rights for the development and commercialization of tacrolimus for the treatment of PAH and related vascular diseases. Also, on June 8, 2018, we closed on the PANCREAZE Purchase Agreement with Janssen, pursuant to which we acquired the rights to PANCREAZE and PANCREASE MT in the U.S. and Canada. Further potential transactions we may consider include a variety of different business arrangements, including strategic partnerships, joint ventures, spin-offs, restructurings, divestitures, business combinations and investments. In addition, another entity may pursue us as an acquisition target. Any such transactions may require us to incur non-recurring or other charges, may increase our near- and long-term expenditures and may pose significant integration challenges, require additional expertise or disrupt our management or business, any of which could harm our operations and financial results.

As part of an effort to enter into significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or evaluating all such risks and, as a result, might not realize the expected benefits of the transaction. If we fail to realize the expected benefits from any transaction we may consummate, whether as a result of unidentified risks, integration difficulties, regulatory setbacks or other events, our business, results of operations and financial condition could be adversely affected.

***Our failure to successfully identify, acquire, develop and market additional investigational drug candidates or approved drugs would impair our ability to grow.***

As part of our growth strategy, we may acquire, in-license, develop and/or market additional products and investigational drug candidates. Most recently, on June 8, 2018, we closed on the PANCREAZE Purchase Agreement with Janssen, pursuant to which the Company acquired the rights to PANCREAZE and PANCREASE MT in the U.S. and Canada. Also, on January 6, 2017, we entered into a Patent Assignment Agreement with Selten, whereby we received exclusive, worldwide rights for the development and commercialization of tacrolimus for the treatment of PAH and related vascular diseases. Because our internal research capabilities are limited, we may be dependent upon pharmaceutical and biotechnology companies, academic scientists and other researchers to sell or license products or technology to us. The success of this strategy depends partly upon our ability to identify, select and acquire promising pharmaceutical investigational drug candidates and products.

The process of proposing, negotiating and implementing a license or acquisition of an investigational drug candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of investigational drug candidates and approved products. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We may not be able to acquire the rights to additional investigational drug candidates on terms that we find acceptable, or at all.

In addition, future acquisitions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management’s time and attention to develop acquired products or technologies;
- incurrence of substantial debt or dilutive issuances of securities to pay for acquisitions;
- higher than expected acquisition, integration and maintenance costs;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and

- inability to retain key employees of any acquired businesses.

Further, any investigational drug candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and obtaining approval by FDA and applicable foreign regulatory authorities. All investigational drug candidates are prone to certain failures that are relatively common in the field of drug development, including the possibility that an investigational drug candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot be certain that any drugs that we develop or approved products that we may acquire will be commercialized profitably or achieve market acceptance.

***If we fail to retain our key personnel and hire, train and retain qualified employees, we may not be able to compete effectively, which could result in reduced revenues or delays in the development of our investigational drug candidates or commercialization of our approved drugs.***

Our success is highly dependent upon the skills of a limited number of key management personnel. To reach our business objectives, we will need to retain and hire qualified personnel in the areas of manufacturing, commercial operations, research and development, regulatory and legal affairs, business development, clinical trial design, execution and analysis, and pre-clinical testing. There can be no assurance that we will be able to retain or hire such personnel, as we must compete with other companies, academic institutions, government entities and other agencies. The loss of any of our key personnel or the failure to attract or retain necessary new employees could have an adverse effect on our research programs, investigational drug candidate development, approved drug commercialization efforts and business operations.

***We rely on third parties and collaborative partners to manufacture sufficient quantities of compounds within product specifications as required by regulatory agencies for use in our pre-clinical and clinical trials and commercial operations and an interruption to this service may harm our business.***

We do not have the ability to manufacture the materials we use in our pre-clinical and clinical trials and commercial operations. Rather, we rely on various third parties to manufacture these materials and there may be long lead times to obtain materials. There can be no assurance that we will be able to identify, contract with, qualify and obtain prior regulatory approval for additional sources of clinical materials. If interruptions in this supply occur for any reason, including a decision by the third parties to discontinue manufacturing, technical difficulties, labor disputes, natural or other disasters, or a failure of the third parties to follow regulations, we may not be able to obtain regulatory approvals for our investigational drug candidates and may not be able to successfully commercialize these investigational drug candidates or our approved drugs.

Our third-party manufacturers and collaborative partners may encounter delays and problems in manufacturing our approved drugs or investigational drug candidates for a variety of reasons, including accidents during operation, failure of equipment, delays in receiving materials, natural or other disasters, political or governmental changes, or other factors inherent in operating complex manufacturing facilities. Supply-chain management is difficult. Commercially available starting materials, reagents, excipients, and other materials may become scarce, more expensive to procure, or not meet quality standards, and we may not be able to obtain favorable terms in agreements with subcontractors. Our third-party manufacturers may not be able to operate manufacturing facilities in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. If our third-party manufacturers, cease or interrupt production or if our third-party manufacturers and other service providers fail to supply materials, products or services to us for any reason, such interruption could delay progress on our programs, or interrupt the commercial supply, with the potential for additional costs and lost revenues. If this were to occur, we may also need to seek alternative means to fulfill our manufacturing needs.

For example, Catalent Pharma Solutions, LLC, or Catalent, is our sole source of clinical and commercial supplies for Qsymia. While Catalent has significant experience in commercial scale manufacturing, there is no assurance that Catalent will be successful in continuing to supply Qsymia at current levels or increasing the scale of the Qsymia manufacturing process, should the market demand for Qsymia expand beyond the level supportable by the current validated manufacturing process. Such a failure by Catalent to meet current demand or to further scale up the commercial manufacturing process for Qsymia could have a material adverse impact on our ability to realize

commercial success with Qsymia in the U.S. market, and have a material adverse impact on our plan, market price of our common stock and financial condition.

For avanafil, Sanofi Chimie manufactures and supplies the API for avanafil on an exclusive basis in the United States and other territories and on a semi-exclusive basis in Europe, including the EU, Latin America and other territories. Sanofi Winthrop Industrie manufactures and supplies the avanafil tablets for STENDRA and SPEDRA on an exclusive basis in the United States and other territories and on a semi-exclusive basis in Europe, including the EU, Latin America and other territories. Sanofi is responsible for all aspects of manufacture, including obtaining the starting materials for the production of API. If Sanofi is unable to manufacture the API or tablets in sufficient quantities to meet projected demand, future sales could be adversely affected, which in turn could have a detrimental impact on our financial results, our license, commercialization, and supply agreements with our collaboration partners, and our ability to enter into a collaboration agreement for the commercialization in other territories.

Any failure of current or future manufacturing sites, including those of Sanofi Chimie and Sanofi Winthrop Industrie, to receive or maintain approval from FDA or foreign authorities, obtain and maintain ongoing FDA or foreign regulatory compliance, or manufacture avanafil API or tablets in expected quantities could have a detrimental impact on our ability to commercialize STENDRA under our agreements with Menarini and Metuchen and our ability to enter into a collaboration agreement for the commercialization of STENDRA in our other territories not covered by our agreements with Menarini and Metuchen.

***We rely on third parties to maintain appropriate levels of confidentiality of the data compiled during clinical, pre-clinical and retrospective observational studies and trials.***

We seek to maintain the confidential nature of our confidential information through contractual provisions in our agreements with third parties, including our agreements with clinical research organizations, or CROs, that manage our clinical studies for our investigational drug candidates. These CROs may fail to comply with their obligations of confidentiality or may be required as a matter of law to disclose our confidential information. As the success of our clinical studies depends in large part on our confidential information remaining confidential prior to, during and after a clinical study, any disclosure or breach affecting that information could have a material adverse effect on the outcome of a clinical study, our business, financial condition and results of operations.

The collection and use of personal health data and other personal data in the EU is governed by the provisions of the Data Protection Directive as implemented into national laws by the EU Member States. This Directive imposes restrictions on the processing (e.g., collection, use, disclosure) of personal data, including a number of requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals prior to processing their personal data, notification of data processing obligations to the competent national data protection authorities and the security and confidentiality of the personal data. The Data Protection Directive also imposes strict restrictions on the transfer of personal data out of the EU to the United States. Failure to comply with the requirements of the Data Protection Directive and the related national data protection laws of the EU Member States may result in fines and other administrative penalties. The General Data Protection Regulation, or GDPR, an EU-wide regulation that will be fully enforceable by May 25, 2018, will introduce new data protection requirements in the EU and substantial fines for violations of the data protection rules. The GDPR will increase our responsibility and liability in relation to EU personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with the new EU data protection rules. This may be onerous and increase our cost of doing business.

***If we fail to comply with applicable healthcare and privacy and data security laws and regulations, we could face substantial penalties, liability and adverse publicity and our business, operations and financial condition could be adversely affected.***

Our arrangements with third-party payors, patients and customers expose us to broadly applicable federal and state healthcare laws and regulations pertaining to fraud and abuse. In addition, our operations expose us to privacy and data security laws and regulations. The restrictions under applicable federal and state healthcare laws

and regulations, and privacy and data security laws and regulations, that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly or willingly offering, paying, soliciting or receiving remuneration, directly or indirectly, in cash or in kind, to induce or reward the purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any healthcare items or service for which payment may be made, in whole or in part, by federal healthcare programs such as Medicare and Medicaid. This statute has been interpreted to apply to arrangements between pharmaceutical companies on one hand and prescribers, purchasers and formulary managers on the other. Liability under the Anti-Kickback Statute may be established without proving actual knowledge of the statute or specific intent to violate it. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act. Although there are a number of statutory exemptions and regulatory safe harbors to the federal Anti-Kickback Statute protecting certain common business arrangements and activities from prosecution or regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that do not fit squarely within an exemption or safe harbor may be subject to scrutiny. We seek to comply with the exemptions and safe harbors whenever possible, but our practices may not in all cases meet all of the criteria for safe harbor protection from anti-kickback liability;
- the federal civil False Claims Act, which imposes civil penalties against individuals and entities for, among other things, knowingly presenting, or causing to be presented, a false or fraudulent claim for payment of government funds or knowingly making, using, or causing to be made or used, a false record or statement material to an obligation to pay money to the government or knowingly concealing, or knowingly and improperly avoiding, decreasing, or concealing an obligation to pay money to the federal government. Many pharmaceutical and other healthcare companies have been investigated and have reached substantial financial settlements with the federal government under the civil False Claims Act for a variety of alleged improper marketing activities, including providing free product to customers with the expectation that the customers would bill federal programs for the product; providing consulting fees, grants, free travel, and other benefits to physicians to induce them to prescribe the company's products; and inflating prices reported to private price publication services, which are used to set drug payment rates under government healthcare programs. In addition, in recent years the government has pursued civil False Claims Act cases against a number of pharmaceutical companies for causing false claims to be submitted as a result of the marketing of their products for unapproved, and thus non-reimbursable, uses. More recently, federal enforcement agencies are and have been investigating certain pharmaceutical companies' product and patient assistance programs, including manufacturer reimbursement support services, relationships with specialty pharmacies, and grants to independent charitable foundations. Pharmaceutical and other healthcare companies also are subject to other federal false claim laws, including, among others, federal criminal healthcare fraud and false statement statutes that extend to non-government health benefit programs;
- The federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- numerous U.S. federal and state laws and regulations, including state data breach notification laws, state health information privacy laws and federal and state consumer protection laws, govern the collection, use, disclosure and protection of personal information. Other countries also have, or are developing, laws governing the collection, use, disclosure and protection of personal information. In addition, most healthcare providers who prescribe our products and from whom we obtain patient health information are subject to privacy and security requirements under the Health Insurance Portability and Accountability Act of 1996 and by the Health Information Technology for Economic and Clinical Health Act, or HITECH, which are collectively referred to as HIPAA. We are not a HIPAA-covered entity and we do not operate as a business associate to any covered entities. Therefore, the HIPAA privacy and security requirements do not apply to us (other than potentially with respect to providing certain employee benefits). However, we could be subject to criminal penalties if

we knowingly obtain individually identifiable health information from a covered entity in a manner that is not authorized or permitted by HIPAA or for aiding and abetting and/or conspiring to commit a violation of HIPAA. We are unable to predict whether our actions could be subject to prosecution in the event of an impermissible disclosure of health information to us. The legislative and regulatory landscape for privacy and data security continues to evolve, and there has been an increasing amount of focus on privacy and data security issues with the potential to affect our business. These privacy and data security laws and regulations could increase our cost of doing business, and failure to comply with these laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business;

- analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to items or services reimbursed under Medicaid and other state programs or, in several states, apply regardless of the payor. Some state laws also require pharmaceutical companies to report expenses relating to the marketing and promotion of pharmaceutical products and to report gifts and payments to certain health care providers in the states. Other states prohibit providing meals to prescribers or other marketing-related activities. Some states restrict the ability of manufacturers to offer co-pay support to patients for certain prescription drugs. Other states and cities require identification or licensing of state representatives. In addition, California, Connecticut, Nevada, and Massachusetts require pharmaceutical companies to implement compliance programs or marketing codes of conduct. Foreign governments often have similar regulations, which we also will be subject to in those countries where we market and sell products;

- the federal Physician Payment Sunshine Act, being implemented as the Open Payments Program, requires certain pharmaceutical manufacturers to engage in extensive tracking of payments and other transfers of value to physicians and teaching hospitals, and to submit such data to Centers for Medicare and Medicaid Services within the U.S. Department of Health and Human Services, or CMS, which will then make all of this data publicly available on the CMS website. Pharmaceutical manufacturers with products for which payment is available under Medicare, Medicaid or the State Children's Health Insurance Program must submit a report to CMS on or before the 90th day of each calendar year disclosing reportable payments made in the previous calendar year; and

- the federal Foreign Corrupt Practices Act of 1977 and other similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from providing money or anything of value to officials of foreign governments, foreign political parties, or international organizations with the intent to obtain or retain business or seek a business advantage. Recently, there has been a substantial increase in anti-bribery law enforcement activity by U.S. regulators, with more frequent and aggressive investigations and enforcement proceedings by both the Department of Justice and the SEC. A determination that our operations or activities are not, or were not, in compliance with United States or foreign laws or regulations could result in the imposition of substantial fines, interruptions of business, loss of supplier, vendor or other third-party relationships, termination of necessary licenses and permits, and other legal or equitable sanctions. Other internal or government investigations or legal or regulatory proceedings, including lawsuits brought by private litigants, may also follow as a consequence.

If our operations are found to be in violation of any of the laws and regulations described above or any other governmental regulations that apply to us, we may be subject to significant civil, criminal and administrative penalties, imprisonment, damages, fines, exclusion from government-funded healthcare programs, like Medicare and Medicaid, and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations, or associated adverse publicity, could adversely affect our ability to operate our business and our financial results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws and regulations, the risks cannot be entirely eliminated. Any action against us for violation of these laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy data, security and fraud laws and regulations may prove costly.

In the EU, the advertising and promotion of our products will also be subject to EU Member States' laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices, as well as other EU Member State legislation governing statutory health insurance, bribery and anti-corruption. Failure to comply with these rules can result in enforcement action by the EU Member State authorities, which may include any of the following: fines, imprisonment, orders forfeiting products or prohibiting or suspending their supply to the market, or requiring the manufacturer to issue public warnings, or to conduct a product recall.

***Significant disruptions of information technology systems or security breaches could adversely affect our business.***

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit large amounts of confidential information (including but not limited to trade secrets or other intellectual property, proprietary business information and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third party vendors who may or could have access to our confidential information. The size and complexity of our information technology systems, and those of third party vendors with whom we contract, and the large amounts of confidential information stored on those systems, make such systems potentially vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third party vendors, and/or business partners, or from cyber-attacks by malicious third parties. Cyber-attacks are increasing in their frequency, sophistication, and intensity, and have become increasingly difficult to detect. Cyber-attacks could include the deployment of harmful malware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information.

Significant disruptions of our information technology systems or security breaches could adversely affect our business operations and/or result in the loss, misappropriation and/or unauthorized access, use or disclosure of, or the prevention of access to, confidential information (including but not limited to trade secrets or other intellectual property, proprietary business information and personal information), and could result in financial, legal, business and reputational harm to us. For example, any such event that leads to unauthorized access, use or disclosure of personal information, including personal information regarding patients or employees, could harm our reputation, require us to comply with federal and/or state breach notification laws and foreign law equivalents, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information. Security breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures to protect our information technology systems and infrastructure, there can be no assurance that such measures will prevent service interruptions or security breaches that could adversely affect our business.

***Marketing activities for our approved drugs are subject to continued governmental regulation.***

FDA, and third-country authorities, including the competent authorities of the EU Member States, have the authority to impose significant restrictions, including REMS requirements, on approved products through regulations on advertising, promotional and distribution activities. After approval, if products are marketed in contradiction with FDA laws and regulations, FDA may issue warning letters that require specific remedial measures to be taken, as well as an immediate cessation of the impermissible conduct, resulting in adverse publicity. FDA may also require that all future promotional materials receive prior agency review and approval before use. Certain states have also adopted regulations and reporting requirements surrounding the promotion of pharmaceuticals. Qsymia and STENDRA are subject to these regulations. Failure to comply with state requirements may affect our ability to promote or sell pharmaceutical drugs in certain states. This, in turn, could have a material adverse impact on our financial results and financial condition and could subject us to significant liability, including civil and administrative remedies as well as criminal sanctions.

***We are subject to ongoing regulatory obligations and restrictions, which may result in significant expense and limit our ability to commercialize our drugs.***

We are required to comply with extensive regulations for drug manufacturing, labeling, packaging, adverse event reporting, storage, distribution, advertising, promotion and record keeping in connection with the marketing of Qsymia and STENDRA. Regulatory approvals may also be subject to significant limitations on the indicated uses or marketing of the investigational drug candidates or to whom and how we may distribute our products. Even after FDA approval is obtained, FDA may still impose significant restrictions on a drug's indicated uses or marketing or impose ongoing requirements for REMS or potentially costly post-approval studies. For example, the labeling approved for Qsymia includes restrictions on use, including recommendations for pregnancy testing, level of obesity and duration of treatment. We are subject to ongoing regulatory obligations and restrictions that may result in significant expense and limit our ability to commercialize Qsymia. FDA has also required the distribution of a Medication Guide to Qsymia patients outlining the increased risk of teratogenicity with fetal exposure and the possibility of suicidal thinking or behavior. In addition, FDA has required a REMS that may act to limit access to the drug, reduce our revenues and/or increase our costs. FDA may modify the Qsymia REMS in the future to be more or less restrictive.

In addition, Qsymia is a controlled substance and subject to DEA and state regulations relating to manufacturing, storage, record keeping, reporting, distribution and prescription procedures and requirements related to necessary DEA registrations and state licenses. The DEA periodically inspects facilities for compliance with its rules and regulations. Failure to comply with current and future regulations of the DEA, relevant state authorities or any comparable international requirements could lead to a variety of sanctions, including revocation or denial of renewal of DEA registrations, fines, injunctions, or civil or criminal penalties, and could result in, among other things, additional operating costs to us or delays in distribution of Qsymia and could have an adverse effect on our business and financial condition.

Even if we maintain FDA approval, or receive a marketing authorization from the EC, and other regulatory approvals, if we or others identify adverse side effects after any of our products are on the market, or if manufacturing problems occur, regulatory approval or EU marketing authorization may be varied, suspended or withdrawn and reformulation of our products, additional clinical trials, changes in labeling and additional marketing applications may be required, any of which could harm our business and cause our stock price to decline.

***We and our contract manufacturers are subject to significant regulation with respect to manufacturing of our products.***

All of those involved in the preparation of a therapeutic drug for clinical trials or commercial sale, including our existing supply contract manufacturers, and clinical trial investigators, are subject to extensive regulation. Components of a finished drug product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with current Good Manufacturing Practices, or cGMP. These regulations govern quality control of the manufacturing processes and documentation policies and procedures, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Our facilities and quality systems and the facilities and quality systems of our third-party contractors must be inspected routinely for compliance. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulation occurs independent of such an inspection or audit, we or FDA may require remedial measures that may be costly and/or time consuming for us or a third party to implement and that may include the issuance of a warning letter, temporary or permanent suspension of a clinical trial or commercial sales, recalls, market withdrawals, seizures, or the temporary or permanent closure of a facility. Any such remedial measures would be imposed upon us or third parties with whom we contract until satisfactory cGMP compliance is achieved. FDA could also impose civil penalties. We must also comply with similar regulatory requirements of foreign regulatory agencies.

We obtain the necessary raw materials and components for the manufacture of Qsymia and STENDRA as well as certain services, such as analytical testing packaging and labeling, from third parties. In particular, we rely on Catalent to supply Qsymia capsules and Packaging Coordinators, Inc., or PCI, for Qsymia packaging services. We rely on Sanofi Chimie and Sanofi Winthrop to supply avanafil API and tablets. We and these suppliers and service providers are required to follow cGMP requirements and are subject to routine and unannounced inspections by FDA and by state and foreign regulatory agencies for compliance with cGMP requirements and other applicable

regulations. Upon inspection of these facilities, FDA or foreign regulatory agencies may find the manufacturing process or facilities are not in compliance with cGMP requirements and other regulations. Because manufacturing processes are highly complex and are subject to a lengthy regulatory approval process, alternative qualified supply may not be available on a timely basis or at all.

Difficulties, problems or delays in our suppliers and service providers' manufacturing and supply of raw materials, components and services could delay our clinical trials, increase our costs, damage our reputation and cause us to lose revenue or market share if we are unable to timely meet market demands.

***If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate program or other governmental pricing programs, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.***

We participate in the Medicaid Drug Rebate program, established by the Omnibus Budget Reconciliation Act of 1990 and amended by the Veterans Health Care Act of 1992 as well as subsequent legislation. Under the Medicaid Drug Rebate program, we are required to pay a rebate to each state Medicaid program for our covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program as a condition of having federal funds being made available to the states for our drugs under Medicaid and Medicare Part B. Those rebates are based on pricing data reported by us on a monthly and quarterly basis to CMS, the federal agency that administers the Medicaid Drug Rebate program. These data include the average manufacturer price and, in the case of innovator products, the best price for each drug, which, in general, represents the lowest price available from the manufacturer to any entity in the U.S. in any pricing structure, calculated to include all sales and associated rebates, discounts and other price concessions. Our failure to comply with these price reporting and rebate payment options could negatively impact our financial results.

The Affordable Care Act made significant changes to the Medicaid Drug Rebate program. Effective in March 2010, rebate liability expanded from fee-for-service Medicaid utilization to include the utilization of Medicaid managed care organizations as well. With regard to the amount of the rebates owed, the Affordable Care Act increased the minimum Medicaid rebate from 15.1% to 23.1% of the average manufacturer price for most innovator products and from 11% to 13% for non-innovator products; changed the calculation of the rebate for certain innovator products that qualify as line extensions of existing drugs; and capped the total rebate amount for innovator drugs at 100% of the average manufacturer price. In addition, the Affordable Care Act and subsequent legislation changed the definition of average manufacturer price. Finally, the Affordable Care Act requires pharmaceutical manufacturers of branded prescription drugs to pay a branded prescription drug fee to the federal government beginning in 2011. Each individual pharmaceutical manufacturer pays a prorated share of the branded prescription drug fee of $4.1 billion in 2018, based on the dollar value of its branded prescription drug sales to certain federal programs identified in the law.

CMS issued final regulations that became effective on April 1, 2016 to implement the changes to the Medicaid Drug Rebate program under the Affordable Care Act. Moreover, certain legislative changes to and regulatory changes under the Affordable Care Act have occurred in the 115th United States Congress and under the Trump Administration. For example, the Tax Cuts and Jobs Act enacted on December 22, 2017, eliminated the individual mandate, beginning in 2019. Additional legislative changes to and regulatory changes under the Affordable Care Act remain possible. We expect that the Affordable Care Act, as currently enacted or as it may be amended in the future, and other healthcare reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and on our ability to maintain or increase sales of our existing products or to successfully commercialize our product candidates, if approved. The issuance of regulations and coverage expansion by various governmental agencies relating to the Medicaid Drug Rebate program has and will continue to increase our costs and the complexity of compliance, has been and will be time consuming, and could have a material adverse effect on our results of operations.

Federal law requires that any company that participates in the Medicaid Drug Rebate program also participate in the Public Health Service's 340B drug pricing program in order for federal funds to be available for the manufacturer's drugs under Medicaid and Medicare Part B. The 340B drug pricing program requires participating manufacturers to agree to charge statutorily defined covered entities no more than the 340B "ceiling price" for the manufacturer's covered outpatient drugs. These 340B covered entities include a variety of community

health clinics and other entities that receive health services grants from the Public Health Service, as well as hospitals that serve a disproportionate share of low-income patients. The 340B ceiling price is calculated using a statutory formula, which is based on the average manufacturer price and rebate amount for the covered outpatient drug as calculated under the Medicaid Drug Rebate program. Changes to the definition of average manufacturer price and the Medicaid rebate amount under the Affordable Care Act and CMS's issuance of final regulations implementing those changes also could affect our 340B ceiling price calculations and negatively impact our results of operations.

The Affordable Care Act expanded the 340B program to include additional entity types: certain free-standing cancer hospitals, critical access hospitals, rural referral centers and sole community hospitals, each as defined by the Affordable Care Act, but exempts "orphan drugs" from the ceiling price requirements for these covered entities. The Affordable Care Act also obligates the Secretary of the U.S. Department of Health and Human Services, or HHS, to update the agreement that manufacturers must sign to participate in the 340B program to obligate a manufacturer to offer the 340B price to covered entities if the manufacturer makes the drug available to any other purchaser at any price and to report to the government the ceiling prices for its drugs. The Health Resources and Services Administration, or HRSA, the agency that administers the 340B program, recently updated the agreement with participating manufacturers. The Affordable Care Act also obligates the Secretary of HHS to create regulations and processes to improve the integrity of the 340B program. On January 5, 2017, HRSA issued a final regulation regarding the calculation of 340B ceiling price and the imposition of civil monetary penalties on manufacturers that knowingly and intentionally overcharge covered entities. The effective date of the regulation has been delayed until July 1, 2018. Implementation of this final rule and the issuance of any other final regulations and guidance could affect our obligations under the 340B program in ways we cannot anticipate. In addition, legislation may be introduced that, if passed, would further expand the 340B program to additional covered entities or would require participating manufacturers to agree to provide 340B discounted pricing on drugs used in an inpatient setting.

Pricing and rebate calculations vary among products and programs. The calculations are complex and are often subject to interpretation by us, governmental or regulatory agencies and the courts. The Medicaid rebate amount is computed each quarter based on our submission to CMS of our current average manufacturer prices and best prices for the quarter. If we become aware that our reporting for a prior quarter was incorrect, or has changed as a result of recalculation of the pricing data, we are obligated to resubmit the corrected data for a period not to exceed 12 quarters from the quarter in which the data originally were due. Such restatements and recalculations increase our costs for complying with the laws and regulations governing the Medicaid Drug Rebate program. Any corrections to our rebate calculations could result in an overage or underage in our rebate liability for past quarters, depending on the nature of the correction. Price recalculations also may affect the ceiling price at which we are required to offer our products to certain covered entities, such as safety-net providers, under the 340B drug discount program.

We are liable for errors associated with our submission of pricing data. In addition to retroactive rebates and the potential for 340B program refunds, if we are found to have knowingly submitted false average manufacturer price or best price information to the government, we may be liable for civil monetary penalties in the amount of $181,071 per item of false information. Our failure to submit monthly/quarterly average manufacturer price and best price data on a timely basis could result in a civil monetary penalty of $18,107 per day for each day the information is late beyond the due date. Such failure also could be grounds for CMS to terminate our Medicaid drug rebate agreement, pursuant to which we participate in the Medicaid program. In the event that CMS terminates our rebate agreement, no federal payments would be available under Medicaid or Medicare Part B for our covered outpatient drugs.

In September 2010, CMS and the Office of the Inspector General indicated that they intend to pursue more aggressively companies that fail to report these data to the government in a timely manner. Governmental agencies may also make changes in program interpretations, requirements or conditions of participation, some of which may have implications for amounts previously estimated or paid. We cannot assure you that our submissions will not be found by CMS to be incomplete or incorrect.

If we misstate Non-FAMPs or FCPs, we must restate these figures. Additionally, pursuant to the VHCA, knowing provision of false information in connection with a Non-FAMP filing can subject us to penalties of $181,071 for each item of false information. If we overcharge the government in connection with our FSS contract or the Tricare Retail Pharmacy Program, whether due to a misstated FCP or otherwise, we are required to refund the difference to the government. Failure to make necessary disclosures and/or to identify contract overcharges can

result in allegations against us under the False Claims Act and other laws and regulations. Unexpected refunds to the government, and responding to a government investigation or enforcement action, would be expensive and time-consuming, and could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

***Changes in reimbursement procedures by government and other third-party payors, including changes in healthcare law and implementing regulations, may limit our ability to market and sell our approved drugs, or any future drugs, if approved, may limit our product revenues and delay profitability, and may impact our business in ways that we cannot currently predict. These changes could have a material adverse effect on our business and financial condition.***

In the U.S. and abroad, sales of pharmaceutical drugs are dependent, in part, on the availability of reimbursement to the consumer from third-party payors, such as government and private insurance plans. Third-party payors are increasingly challenging the prices charged for medical products and services. Some third-party payor benefit packages restrict reimbursement, charge co-pays to patients, or do not provide coverage for specific drugs or drug classes.

In addition, certain healthcare providers are moving towards a managed care system in which such providers contract to provide comprehensive healthcare services, including prescription drugs, for a fixed cost per person. We are unable to predict the reimbursement policies employed by third-party healthcare payors.

Payors also are increasingly considering new metrics as the basis for reimbursement rates, such as average sales price, average manufacturer price and Actual Acquisition Cost. CMS, the federal agency that administers Medicare and the Medicaid Drug Rebate program, surveys and publishes retail community pharmacy acquisition cost information in the form of National Average Drug Acquisition Cost, or NADAC, files to provide state Medicaid agencies with a basis of comparison for their own reimbursement and pricing methodologies and rates. It is difficult to project the impact of these evolving reimbursement mechanics on the willingness of payors to cover our products.

The healthcare industry in the U.S. and abroad is undergoing fundamental changes that are the result of political, economic and regulatory influences. The levels of revenue and profitability of pharmaceutical companies may be affected by the continuing efforts of governmental and third-party payors to contain or reduce healthcare costs through various means. Reforms that have been and may be considered include mandated basic healthcare benefits, controls on healthcare spending through limitations on the increase in private health insurance premiums and the types of drugs eligible for reimbursement and Medicare and Medicaid spending, the creation of large insurance purchasing groups, and fundamental changes to the healthcare delivery system. These proposals include measures that would limit or prohibit payments for some medical treatments or subject the pricing of drugs to government control and regulations changing the rebates we are required to provide. Further, federal budgetary concerns could result in the implementation of significant federal spending cuts, including cuts in Medicare and other health related spending in the near-term. For example, beginning April 1, 2013, Medicare payments for all items and services, including drugs and biologics, were reduced by 2% under the sequestration (i.e., automatic spending reductions) required by the Budget Control Act of 2011, as amended by the American Taxpayer Relief Act of 2012. Subsequent legislation extended the 2% reduction, on average, to 2025. These cuts reduce reimbursement payments related to our products, which could potentially negatively impact our revenue.

In March 2010, the President signed the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, collectively referred to in this report as the Affordable Care Act. The Affordable Care Act substantially changed the way healthcare is financed by both governmental and private insurers, and could have a material adverse effect on our future business, cash flows, financial condition and results of operations, including by operation of the following provisions:

- Effective in March 2010, rebate liability expanded from fee-for-service Medicaid utilization to include the utilization of Medicaid managed care organizations as well. This expanded eligibility affects rebate liability for that utilization.
- With regard to the amount of the rebates owed, the Affordable Care Act increased the minimum Medicaid rebate from 15.1% to 23.1% of the average manufacturer price for most innovator products and from 11% to 13% for non-innovator products; changed the calculation of the rebate for certain

innovator products that qualify as line extensions of existing drugs; and capped the total rebate amount for innovator drugs at 100% of the average manufacturer price.

- Effective in January 2011, pharmaceutical companies must provide a 50% discount on branded prescription drugs dispensed to beneficiaries within the Medicare Part D coverage gap or "donut hole," which is a coverage gap that currently exists in the Medicare Part D prescription drug program. We currently do not have coverage under Medicare Part D for our drugs, but this could change in the future.
- Effective in January 2011, the Affordable Care Act requires pharmaceutical manufacturers of branded prescription drugs to pay a branded prescription drug fee to the federal government. Each individual pharmaceutical manufacturer pays a prorated share of the branded prescription drug fee of $4.1 billion in 2018, based on the dollar value of its branded prescription drug sales to certain federal programs identified in the law.
- Some states have elected to expand their Medicaid programs by raising the income limit to 133% of the federal poverty level. For each state that does not choose to expand its Medicaid program, there may be fewer insured patients overall, which could impact our sales, business and financial condition. We expect any Medicaid expansion to impact the number of adults in Medicaid more than children because many states have already set their eligibility criteria for children at or above the level designated in the Affordable Care Act. An increase in the proportion of patients who receive our drugs and who are covered by Medicaid could adversely affect our net sales.

CMS issued final regulations that became effective on April 1, 2016 to implement the changes to the Medicaid Drug Rebate Program under the Affordable Care Act.

There can be no assurance that future healthcare legislation or other changes in the administration or interpretation of government healthcare or third-party reimbursement programs will not have a material adverse effect on us. Healthcare reform is also under consideration in other countries where we intend to market Qsymia. Moreover, certain legislative changes to and regulatory changes under the Affordable Care Act have occurred in the 115th United States Congress and under the Trump Administration. For example, the Tax Cuts and Jobs Act enacted on December 22, 2017, eliminated the individual mandate, beginning in 2019. Additional legislative changes to and regulatory changes under the Affordable Care Act remain possible. We expect that the Affordable Care Act, as currently enacted or as it may be amended in the future, and other healthcare reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and on our ability to maintain or increase sales of our existing products or to successfully commercialize our product candidates, if approved.

We expect to experience pricing and reimbursement pressures in connection with the sale of Qsymia, STENDRA and our investigational drug candidates, if approved, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative proposals. In addition, we may confront limitations in insurance coverage for Qsymia, STENDRA and our investigational drug candidates. For example, the Medicare program generally does not provide coverage for drugs used to treat erectile dysfunction or drugs used to treat obesity. Similarly, other insurers may determine that such products are not covered under their programs. If we fail to successfully secure and maintain reimbursement coverage for our approved drugs and investigational drug candidates or are significantly delayed in doing so, we will have difficulty achieving market acceptance of our approved drugs and investigational drug candidates and our business will be harmed. Congress has enacted healthcare reform and may enact further reform, which could adversely affect the pharmaceutical industry as a whole, and therefore could have a material adverse effect on our business.

Both of the active pharmaceutical ingredients in Qsymia, phentermine and topiramate, are available as single ingredient generic products and do not have a REMS requirement. The exact doses of the active ingredients in Qsymia are different than those currently available for the generic components. State pharmacy laws prohibit pharmacists from substituting drugs with differing doses and formulations. The safety and efficacy of Qsymia is dependent on the titration, dosing and formulation, which we believe could not be easily duplicated, if at all, with the use of generic substitutes. However, there can be no assurance that we will be able to provide for optimal reimbursement of Qsymia as a treatment for obesity or, if approved, for any other indication, from third-party payors or the U.S. government. Furthermore, there can be no assurance that healthcare providers would not actively seek to provide patients with generic versions of the active ingredients in Qsymia in order to treat obesity at a potential lower cost and outside of the REMS requirements.

An increasing number of EU Member States and other foreign countries use prices for medicinal products established in other countries as "reference prices" to help determine the price of the product in their own territory. Consequently, a downward trend in prices of medicinal products in some countries could contribute to similar downward trends elsewhere. In addition, the ongoing budgetary difficulties faced by a number of EU Member States, including Greece and Spain, have led and may continue to lead to substantial delays in payment and payment partially with government bonds rather than cash for medicinal products, which could negatively impact our revenues and profitability. Moreover, in order to obtain reimbursement of our medicinal products in some countries, including some EU Member States, we may be required to conduct clinical trials that compare the cost effectiveness of our products to other available therapies. There can be no assurance that our medicinal products will obtain favorable reimbursement status in any country.

***Setbacks and consolidation in the pharmaceutical and biotechnology industries, and our, or our collaborators', inability to obtain third-party coverage and adequate reimbursement, could make partnering more difficult and diminish our revenues.***

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to high-profile drugs like Avandia®, Vioxx® and Celebrex®, or investigational drug candidates, as well as competition from generic drugs, litigation, and industry consolidation, may have an adverse effect on us. For example, pharmaceutical companies may be less willing to enter into new collaborations or continue existing collaborations if they are integrating a new operation as a result of a merger or acquisition or if their therapeutic areas of focus change following a merger. Moreover, our and our collaborators' ability to commercialize any of our approved drugs or future investigational drug candidates will depend in part on government regulation and the availability of coverage and adequate reimbursement from third-party payors, including private health insurers and government payors, such as the Medicaid and Medicare programs, increases in government-run, single-payor health insurance plans and compulsory licenses of drugs. Government and third-party payors are increasingly attempting to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. Given the continuing discussion regarding the cost of healthcare, managed care, universal healthcare coverage and other healthcare issues, we cannot predict with certainty what additional healthcare initiatives, if any, will be implemented or the effect any future legislation or regulation will have on our business. These efforts may limit our commercial opportunities by reducing the amount a potential collaborator is willing to pay to license our programs or investigational drug candidates in the future due to a reduction in the potential revenues from drug sales. Adoption of legislation and regulations could limit pricing approvals for, and reimbursement of, drugs. A government or third-party payor decision not to approve pricing for, or provide adequate coverage and reimbursements of, our drugs could limit market acceptance of these drugs.

***Our business and operations would suffer in the event of system failures.***

Despite the implementation of security measures, our internal computer systems and those of our contract sales organization, or CSO, CROs, safety monitoring company and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, accidents, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our investigational drug candidate development programs and drug manufacturing operations. For example, the loss of clinical trial data from completed or ongoing clinical trials for our investigational drug candidates could result in delays in our regulatory approval efforts with FDA, the EC, or the competent authorities of the EU Member States, and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our investigational drug candidates, or commercialization of our approved drugs, could be delayed. If we are unable to restore our information systems in the event of a systems failure, our communications, daily operations and the ability to develop our investigational drug candidates and approved drug commercialization efforts would be severely affected.

***Natural disasters or resource shortages could disrupt our investigational drug candidate development and approved drug commercialization efforts and adversely affect results.***

Our ongoing or planned clinical trials and approved drug commercialization efforts could be delayed or disrupted indefinitely upon the occurrence of a natural disaster. For example, Hurricane Sandy in October 2012, hindered our Qsymia sales efforts. In 2005, our clinical trials in the New Orleans area were interrupted by Hurricane Katrina. In addition, our offices are located in the San Francisco Bay Area near known earthquake fault zones and are therefore vulnerable to damage from earthquakes. In October 1989, a major earthquake in our area caused significant property damage and a number of fatalities. We are also vulnerable to damage from other disasters, such as power loss, fire, floods and similar events. If a significant disaster occurs, our ability to continue our operations could be seriously impaired and we may not have adequate insurance to cover any resulting losses. Any significant unrecoverable losses could seriously impair our operations and financial condition.

**Risks Relating to our Intellectual Property**

***Obtaining intellectual property rights is a complex process, and we may be unable to adequately protect our proprietary technologies.***

We hold various patents and patent applications in the U.S. and abroad targeting obesity and morbidities related to obesity, including sleep apnea and diabetes, and sexual health, among other indications. The procedures for obtaining a patent in the U.S. and in most foreign countries are complex. These procedures require an analysis of the scientific technology related to the invention and many sophisticated legal issues. Consequently, the process for having our pending patent applications issue as patents will be difficult, complex and time consuming. We do not know when, or if, we will obtain additional patents for our technologies, or if the scope of the patents obtained will be sufficient to protect our investigational drug candidates or products, or be considered sufficient by parties reviewing our patent positions pursuant to a potential licensing or financing transaction.

In addition, we cannot make assurances as to how much protection, if any, will be provided by our issued patents. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Others may independently develop similar or alternative technologies or design around our patented technologies or products. For example, we have limited patent coverage for PANCREAZE, which would not protect us should others develop alternative formulations of the drug. These companies would then be able to develop, manufacture and sell products that compete directly with our products. In that case, our revenues and operating results could decline.

Other entities may also challenge the validity or enforceability of our patents and patent applications in litigation or administrative proceedings. The sponsor of a generic application seeking to rely on one of our approved drug products as the reference listed drug must make one of several certifications regarding each listed patent. A “Paragraph III” certification is the sponsor’s statement that it will wait for the patent to expire before obtaining approval for its product. A “Paragraph IV” certification is a challenge to the patent; it is an assertion that the patent does not block approval of the later product, either because the patent is invalid or unenforceable or because the patent, even if valid, is not infringed by the new product. Once FDA accepts for filing a generic application containing a Paragraph IV certification, the applicant must within 20 days provide notice to the reference listed drug, or RLD, NDA holder and patent owner that the application with patent challenge has been submitted, and provide the factual and legal basis for the applicant’s assertion that the patent is invalid or not infringed. If the NDA holder or patent owner file suit against the generic applicant for patent infringement within 45 days of receiving the Paragraph IV notice, FDA is prohibited from approving the generic application for a period of 30 months from the date of receipt of the notice. If the RLD has new chemical entity exclusivity and the notice is given and suit filed during the fifth year of exclusivity, the 30-month stay does not begin until five years after the RLD approval. FDA may approve the proposed product before the expiration of the 30-month stay if a court finds the patent invalid or not infringed or if the court shortens the period because the parties have failed to cooperate in expediting the litigation. If a competitor or a generic pharmaceutical provider successfully challenges our patents, the protection provided by these patents could be reduced or eliminated and our ability to commercialize any approved drugs would be at risk. In addition, if a competitor or generic manufacturer were to receive approval to sell a generic or follow-on version of one of our products, our approved product would become subject to increased competition and our revenues for that product would be adversely affected.

We also may rely on trade secrets and other unpatented confidential information to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We seek to protect our trade secrets and other confidential information by entering into confidentiality agreements with employees, collaborators, vendors (including CROs and our CSO), consultants and, at times, potential investors. Nevertheless, employees, collaborators, vendors, consultants or potential investors may still disclose or misuse our trade secrets and other confidential information, and we may not be able to meaningfully protect our trade secrets. In addition, others may independently develop substantially equivalent information or techniques or otherwise gain access to our trade secrets. Disclosure or misuse of our confidential information would harm our competitive position and could cause our revenues and operating results to decline.

If we believe that others have infringed or misappropriated our proprietary rights, we may need to institute legal action to protect our intellectual property rights. Such legal action may be expensive, and we may not be able to afford the costs of enforcing or defending our intellectual property rights against others.

***We may receive additional notices of ANDA filings for Qsymia submitted by generic drug companies asserting that generic forms of Qsymia would not infringe on our issued patents. As a result of these potential filings, we may commence additional litigation to defend our patent rights, which would result in additional litigation costs and, depending on the outcome of the litigation, might result in competition from lower cost generic or follow-on products earlier than anticipated.***

Qsymia is approved under the provisions of the Federal Food, Drug and Cosmetic Act, or FDCA, which renders it susceptible to potential competition from generic manufacturers via the Hatch-Waxman Act and ANDA process. The ANDA procedure includes provisions allowing generic manufacturers to challenge the innovator's patent protection by submitting "Paragraph IV" certifications to FDA in which the generic manufacturer claims that the innovator's patent is invalid, unenforceable and/or will not be infringed by the manufacture, use, or sale of the generic product. A patent owner who receives a Paragraph IV certification may choose to sue the generic applicant for patent infringement.

We have received certain Paragraph IV certification notices and have entered into settlement agreements with those who have submitted those notices. The settlement agreement with Actavis Laboratories FL, Inc., Actavis, Inc., and Actavis PLC, collectively referred to as Actavis, will permit Actavis to begin selling a generic version of Qsymia on December 1, 2024, or earlier under certain circumstances. The settlement with Dr. Reddy's Laboratories, S.A. and Dr. Reddy's Laboratories, Inc., collectively referred to as DRL, will permit DRL to begin selling a generic version of Qsymia on June 1, 2025, or earlier under certain circumstances. It is possible that one or more additional companies may file an ANDA and could receive FDA approval to market a generic version of Qsymia before the entry dates specified in our settlement agreements with Actavis and DRL, including if it is determined that the generic product does not infringe our patents, or that our patents are invalid or unenforceable. Although we intend to vigorously enforce our intellectual property rights relating to Qsymia, in the event there is a future ANDA filer, there can be no assurance that we will prevail in a future defense of our patent rights. If a generic version of Qsymia is introduced, Qsymia would become subject to increased competition and our revenue would be adversely affected.

***We may be sued for infringing the intellectual property rights of others, which could be costly and result in delays or termination of our future research, development, manufacturing and sales activities.***

Our commercial success also depends, in part, upon our ability to develop future investigational drug candidates, market and sell approved drugs and conduct our other research, development and commercialization activities without infringing or misappropriating the patents and other proprietary rights of others. There are many patents and patent applications owned by others that could be relevant to our business. For example, there are numerous U.S. and foreign issued patents and pending patent applications owned by others that are related to the therapeutic areas in which we have approved drugs or future investigational drug candidates as well as the therapeutic targets to which these drugs and candidates are directed. There are also numerous issued patents and patent applications covering chemical compounds or synthetic processes that may be necessary or useful to use in our research, development, manufacturing or commercialization activities. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our approved drugs, future investigational drug candidates or technologies may infringe. There also may be existing patents, of which we are not aware, that our approved drugs, investigational drug candidates or

technologies may infringe. Further, it is not always clear to industry participants, including us, which patents cover various types of products or methods. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. We cannot assure you that others holding any of these patents or patent applications will not assert infringement claims against us for damages or seek to enjoin our activities. If we are sued for patent infringement, we would need to demonstrate that our products or methods do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid or unenforceable, and we may not be able to do this.

There can be no assurance that approved drugs or future investigational drug candidates do not or will not infringe on the patents or proprietary rights of others. In addition, third parties may already own or may obtain patents in the future and claim that use of our technologies infringes these patents.

If a person or entity files a legal action or administrative action against us, or our collaborators, claiming that our drug discovery, development, manufacturing or commercialization activities infringe a patent owned by the person or entity, we could incur substantial costs and diversion of the time and attention of management and technical personnel in defending ourselves against any such claims. Furthermore, parties making claims against us may be able to obtain injunctive or other equitable relief that could effectively block our ability to further develop, commercialize and sell any current or future approved drugs, and such claims could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, if at all. In that case, we could encounter delays in product introductions while we attempt to develop alternative investigational drug candidates or be required to cease commercializing any affected current or future approved drugs and our operating results would be harmed.

Furthermore, because of the substantial amount of pre-trial document and witness discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the trading price of our common stock.

***We may face additional competition outside of the U.S. as a result of a lack of patent coverage in some territories and differences in patent prosecution and enforcement laws in foreign countries.***

Filing, prosecuting, defending and enforcing patents on all of our drug discovery technologies and all of our approved drugs and potential investigational drug candidates throughout the world would be prohibitively expensive. While we have filed patent applications in many countries outside the U.S., and have obtained some patent coverage for approved drugs in certain foreign countries, we do not currently have widespread patent protection for these drugs outside the U.S. and have no protection in many foreign jurisdictions. Competitors may use our technologies to develop their own drugs in jurisdictions where we have not obtained patent protection. These drugs may compete with our approved drugs or future investigational drug candidates and may not be covered by any of our patent claims or other intellectual property rights.

Even if international patent applications ultimately issue or receive approval, it is likely that the scope of protection provided by such patents will be different from, and possibly less than, the scope provided by our corresponding U.S. patents. The success of our international market opportunity is dependent upon the enforcement of patent rights in various other countries. A number of countries in which we have filed or intend to file patent applications have a history of weak enforcement and/or compulsory licensing of intellectual property rights. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patents and other intellectual property protection, particularly those relating to biotechnology and/or pharmaceuticals, which make it difficult for us to stop the infringement of our patents. Even if we have patents issued in these jurisdictions, there can be no assurance that our patent rights will be sufficient to prevent generic competition or unauthorized use.

Attempting to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

**Risks Relating to our Financial Position and Need for Financing**

***We may require additional capital for our future operating plans and debt servicing requirements, and we may not be able to secure the requisite additional funding on acceptable terms, or at all, which would force us to delay, reduce or eliminate commercialization or development efforts.***

We expect that our existing capital resources combined with future anticipated cash flows will be sufficient to support our operating activities at least through the next twelve months. However, we anticipate that we will be required to obtain additional financing to fund our commercialization efforts, additional clinical studies for approved products, the development of our research and development pipeline and the servicing requirements of our debt. Our future capital requirements will depend upon numerous factors, including:

- our ability to expand the use of Qsymia through targeted patient and physician education;
- our ability to obtain marketing authorization by the EC for Qsiva in the EU;
- our ability to manage costs;
- the cost required to maintain the REMS program for Qsymia;
- the cost, timing and outcome of the post-approval clinical studies FDA has required us to perform as part of the approval for Qsymia;
- our ability, along with our collaboration partners, to successfully commercialize STENDRA/SPEDRA;
- our ability to successfully commercialize STENDRA/SPEDRA through a third party in other territories in which we do not currently have a commercial collaboration;
- the progress and costs of our research and development programs;
- the scope, timing, costs and results of pre-clinical, clinical and retrospective observational studies and trials;
- the cost of access to electronic records and databases that allow for retrospective observational studies;
- patient recruitment and enrollment in future clinical trials;
- the costs involved in seeking regulatory approvals for future drug candidates;
- the costs involved in filing and pursuing patent applications, defending and enforcing patent claims;
- the establishment of collaborations, sublicenses and strategic alliances and the related costs, including milestone payments;
- the cost of manufacturing and commercialization activities and arrangements;
- the level of resources devoted to our future sales and marketing capabilities;
- the cost, timing and outcome of litigation, if any;
- the impact of healthcare reform, if any, imposed by the federal government; and
- the activities of competitors.

Future capital requirements will also depend on the extent to which we acquire or invest in additional businesses, products and technologies. On January 6, 2017, we entered into a Patent Assignment Agreement with Selten whereby we received exclusive, worldwide rights for the development and commercialization of BMPR2 activators for the treatment of PAH and related vascular diseases. We paid Selten an upfront payment of $1.0 million, and we will pay additional milestone payments based on global development status and future sales milestones, as well as tiered royalty payments on future sales of these compounds. The total potential milestone payments are $39.6 million.

To obtain additional capital when needed, we will evaluate alternative financing sources, including, but not limited to, the issuance of equity or debt securities, corporate alliances, joint ventures and licensing agreements. However, there can be no assurance that funding will be available on favorable terms, if at all. We are continually

evaluating our existing portfolio and we may choose to divest, sell or spin-off one or more of our drugs and/or investigational drug candidates at any time. We cannot assure you that our drugs will generate revenues sufficient to enable us to earn a profit. If we are unable to obtain additional capital, management may be required to explore alternatives to reduce cash used by operating activities, including the termination of research and development efforts that may appear to be promising to us, the sale of certain assets and the reduction in overall operating activities. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our development programs or our commercialization efforts.

***Raising additional funds by issuing securities will cause dilution to existing stockholders and raising funds through lending and licensing arrangements may restrict our operations or require us to relinquish proprietary rights.***

To the extent that we raise additional capital by issuing equity securities, our existing stockholders' ownership will be diluted. We have financed our operations, and we expect to continue to finance our operations, primarily by issuing equity and debt securities. Moreover, any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. To raise additional capital, we may choose to issue additional securities at any time and at any price.

As of June 30, 2018, we have $190.0 million in 4.5% Convertible Senior Notes due May 1, 2020, which we refer to as the Convertible Notes. The Convertible Notes are convertible into approximately 16,826,000 shares of our common stock under certain circumstances prior to maturity at a conversion rate of 67.3038 shares per $1,000 principal amount of Convertible Notes, which represents a conversion price of approximately $14.858 per share, subject to adjustment under certain conditions. On October 8, 2015, IEH Biopharma LLC, a subsidiary of Icahn Enterprises L.P., announced that it had received tenders for $170,165,000 of the aggregate principal amount of our Convertible Notes in its previously announced cash tender offer for any and all of the outstanding Convertible Notes. The Convertible Notes are convertible at the option of the holders under certain conditions at any time prior to the close of business on the business day immediately preceding November 1, 2019. Investors in our common stock will be diluted to the extent the Convertible Notes are converted into shares of our common stock, rather than being settled in cash.

In April 2018, we entered into an agreement for a new $120 million senior secured note with Athyrium Capital Management, LP, or Athyrium Notes. $110 million of the Athyrium Notes were drawn down in June 2018, with the remaining $10 million available for drawing upon meeting certain EBITDA thresholds or purchasing our outstanding convertible notes. Payments on the Athyrium Notes bear interest at 10.375% and are interest-only for the first 36 months; thereafter the notes will be repaid in 36 equal monthly payments. Concurrently, we repurchased Convertible Notes held by Athyrium, with a face value of $60 million, for $51 million. We continue our evaluation of alternatives for addressing our remaining $190.0 million of convertible notes due in May 2020.

We may also raise additional capital through the incurrence of debt, and the holders of any debt we may issue would have rights superior to our stockholders' rights in the event we are not successful and are forced to seek the protection of bankruptcy laws.

In addition, debt financing typically contains covenants that restrict operating activities. For example, on March 25, 2013, we entered into the Purchase and Sale Agreement with BioPharma Secured Investments III Holdings Cayman LP, or BioPharma, which provides for the purchase of a debt-like instrument. Under the BioPharma Agreement, we may not (i) incur indebtedness greater than a specified amount, (ii) pay a dividend or other cash distribution on our capital stock, unless we have cash and cash equivalents in excess of a specified amount, (iii) amend or restate our certificate of incorporation or bylaws unless such amendments or restatements do not affect BioPharma's interests under the BioPharma Agreement, (iv) encumber the collateral, or (v) abandon certain patent rights, in each case without the consent of BioPharma. Any future debt financing we enter into may involve similar or more onerous covenants that restrict our operations.

If we raise additional capital through collaboration, licensing or other similar arrangements, it may be necessary to relinquish potentially valuable rights to our drugs or future investigational drug candidates, potential products or proprietary technologies, or grant licenses on terms that are not favorable to us. If adequate funds are not available, our ability to achieve profitability or to respond to competitive pressures would be significantly limited

and we may be required to delay, significantly curtail or eliminate the commercialization of one or more of our approved drugs or the development of one or more of our future investigational drug candidates.

***The investment of our cash balance and our available-for-sale securities are subject to risks that may cause losses and affect the liquidity of these investments.***

At June 30, 2018, we had $123.5 million in cash, cash equivalents and available-for-sale securities. While at June 30, 2018, our excess cash balances were invested in money market, U.S. Treasury securities and corporate debt securities, our investment policy as approved by our Board of Directors, also provides for investments in debt securities of U.S. government agencies, corporate debt securities and asset-backed securities. Our investment policy has the primary investment objectives of preservation of principal. However, there may be times when certain of the securities in our portfolio will fall below the credit ratings required in the policy. These factors could impact the liquidity or valuation of our available-for-sale securities, all of which were invested in U.S. Treasury securities or corporate debt securities as of June 30, 2018. If those securities are downgraded or impaired we would experience losses in the value of our portfolio which would have an adverse effect on our results of operations, liquidity and financial condition. An investment in money market mutual funds is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although money market mutual funds seek to preserve the value of the investment at $1 per share, it is possible to lose money by investing in money market mutual funds.

***Our involvement in securities-related class action and shareholder litigation could divert our resources and management's attention and harm our business.***

The stock markets have from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of pharmaceutical companies. These broad market fluctuations may cause the market price of our common stock to decline. In the past, securities-related class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies often experience significant stock price volatility in connection with their investigational drug candidate development programs, the review of marketing applications by regulatory authorities and the commercial launch of newly approved drugs. We were a defendant in federal and consolidated state shareholder derivative lawsuits. These securities-related class action lawsuits generally alleged that we and our officers misled the investing public regarding the safety and efficacy of Qsymia and the prospects for FDA's approval of the Qsymia NDA as a treatment for obesity. Securities-related class action litigation often is expensive and diverts management's attention and our financial resources, which could adversely affect our business.

For example, on March 27, 2014, Mary Jane and Thomas Jasin, who purport to be purchasers of VIVUS common stock, filed an Amended Complaint in Santa Clara County Superior Court alleging securities fraud against us and three of our former officers and directors. In that complaint, captioned Jasin v. VIVUS, Inc., Case No. 114 cv 261427, plaintiffs asserted claims under California's securities and consumer protection securities statutes. Plaintiffs alleged generally that defendants misrepresented the prospects for our success, including with respect to the launch of Qsymia, while purportedly selling VIVUS stock for personal profit. Plaintiffs alleged losses of "at least" $2.8 million, and sought damages and other relief. On July 18, 2014, the same plaintiffs filed a complaint in the United States District Court for the Northern District of California, captioned Jasin v. VIVUS, Inc., Case No. 5:14 cv 03263. The Jasins' federal complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, based on facts substantially similar to those alleged in their state court action. On September 15, 2014, pursuant to an agreement between the parties, plaintiffs voluntarily dismissed their state court action with prejudice. Defendants moved to dismiss the federal action and moved to dismiss again after plaintiffs amended their complaint to include additional factual allegations and to add seven new claims under California law. The court granted the latter motion on June 18, 2015, dismissing the seven California claims with prejudice and dismissing the two federal claims with leave to amend. Plaintiffs filed a Second Amended Complaint on August 17, 2015. Defendants moved to dismiss that complaint as well. On April 19, 2016, the court granted defendants' motion to dismiss with prejudice and entered judgment in favor of defendants. Plaintiffs filed a notice of appeal to the Ninth Circuit Court of Appeals on May 18, 2016. The Ninth Circuit issued a decision on January 16, 2018, affirming the

district court's dismissal of the action. The deadline for Plaintiffs to seek rehearing in the Ninth Circuit and to file a petition for certiorari in the Supreme Court have now expired and the matter is concluded.

***We have an accumulated deficit of $866.9 million as of June 30, 2018, and we may continue to incur substantial operating losses for the future.***

We have generated a cumulative net loss of $866.9 million for the period from our inception through June 30, 2018, and we anticipate losses in future years due to continued investment in our research and development programs. There can be no assurance that we will be able to achieve or maintain profitability or that we will be successful in the future.

***Our ability to utilize our net operating loss carryforwards and other tax attributes to offset future taxable income may be limited.***

As of December 31, 2017, we had approximately $640.4 million and $276.2 million of net operating loss, or NOL, carryforwards with which to offset our future taxable income for federal and state income tax reporting purposes, respectively. Utilization of our net operating loss and tax credit carryforwards, or tax attributes, may be subject to substantial annual limitations provided by the Internal Revenue Code and similar state provisions to the extent certain ownership changes are deemed to occur. Such an annual limitation could result in the expiration of the tax attributes before utilization. The tax attributes reflected above have not been reduced by any limitations. To the extent it is determined upon completion of the analysis that such limitations do apply, we will adjust the tax attributes accordingly. We face the risk that our ability to use our tax attributes will be substantially restricted if we undergo an "ownership change" as defined in Section 382 of the U.S. Internal Revenue Code, or Section 382. An ownership change under Section 382 would occur if "5-percent shareholders," within the meaning of Section 382, collectively increased their ownership in the Company by more than 50 percentage points over a rolling three-year period. We have not completed a recent study to assess whether any change of control has occurred or whether there have been multiple changes of control since the Company's formation, due to the significant complexity and cost associated with the study. We have completed studies through December 31, 2016 and concluded no adjustments were required. If we have experienced a change of control at any time since our formation, our NOL carryforwards and tax credits may not be available, or their utilization could be subject to an annual limitation under Section 382. A full valuation allowance has been provided against our NOL carryforwards, and if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Accordingly, there would be no impact on the consolidated balance sheet or statement of operations.

***We may have exposure to additional tax liabilities that could negatively impact our income tax provision, net income, and cash flow.***

We are subject to income taxes and other taxes in both the U.S. and the foreign jurisdictions in which we currently operate or have historically operated. The determination of our worldwide provision for income taxes and current and deferred tax assets and liabilities requires judgment and estimation. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are subject to regular review and audit by U.S. tax authorities as well as subject to the prospective and retrospective effects of changing tax regulations and legislation. Although we believe our tax estimates are reasonable, the ultimate tax outcome may materially differ from the tax amounts recorded in our consolidated financial statements and may materially affect our income tax provision, net income, or cash flows in the period or periods for which such determination and settlement is made.

**Risks Relating to an Investment in our Common Stock**

***Our stock price has been and may continue to be volatile.***

The market price of our common stock has been volatile and is likely to continue to be so. The market price of our common stock may fluctuate due to factors including, but not limited to:

- our ability to meet the expectations of investors related to the commercialization of Qsymia, PANCREAZE and STENDRA;
- our ability to find the right partner for expanded Qsymia commercial promotion to a broader primary care physician audience;
- our ability to obtain marketing authorization for our products in foreign jurisdictions, including authorization from the EC for Qsiva in the EU;
- the costs, timing and outcome of post-approval clinical studies which FDA has required us to perform as part of the approval for Qsymia and STENDRA;
- the cost required to maintain the REMS program for Qsymia;
- results within the clinical trial programs for Qsymia and STENDRA or other results or decisions affecting the development of our investigational drug candidates;
- announcements of technological innovations or new products by us or our competitors;
- approval of, or announcements of, other anti-obesity compounds in development;
- publication of generic drug combination weight loss data by outside individuals or companies;
- actual or anticipated fluctuations in our financial results;
- our ability to obtain needed financing;
- sales by insiders or major stockholders;
- economic conditions in the U.S. and abroad;
- the volatility and liquidity of the financial markets;
- comments by or changes in assessments of us or financial estimates by security analysts;
- negative reports by the media or industry analysts on various aspects of our products, our performance and our future operations;
- the status of the CVOT and our related discussions with FDA;
- adverse regulatory actions or decisions;
- any loss of key management;
- deviations in our operating results from the estimates of securities analysts or other analyst comments;
- discussions about us or our stock price by the financial and scientific press and in online investor communities;
- investment activities employed by short sellers of our common stock;
- developments or disputes concerning patents or other proprietary rights;
- reports of prescription data by us or from independent third parties for our products;
- licensing, product, patent or securities litigation; and
- public concern as to the safety or efficacy of our drugs or future investigational drug candidates developed by us.

These factors and fluctuations, as well as political and other market conditions, may adversely affect the market price of our common stock. Additionally, volatility or a lack of positive performance in our stock price may adversely affect our ability to retain or recruit key employees, all of whom have been or will be granted equity awards as an important part of their compensation packages.

***Our operating results are unpredictable and may fluctuate. If our operating results are below the expectations of securities analysts or investors, the trading price of our stock could decline.***

Our operating results will likely fluctuate from fiscal quarter to fiscal quarter, and from year to year, and are difficult to predict. Product sales of Qsymia may never increase or become profitable. In addition, although we have entered into license and commercialization agreements with Menarini to commercialize and promote SPEDRA for the treatment of ED in over 40 countries, including the EU, plus Australia and New Zealand and with Metuchen to commercialize STENDRA in the U.S., Canada, South America and India, we and they may not be successful in commercializing avanafil in these territories. Our operating expenses are largely independent of sales in any particular period. We believe that our quarterly and annual results of operations may be negatively affected by a variety of factors. These factors include, but are not limited to, the level of patient demand for Qsymia and STENDRA, the ability of our distribution partners to process and ship product on a timely basis, the success of our third-party's manufacturing efforts to meet customer demand, fluctuations in foreign exchange rates, investments in sales and marketing efforts to support the sales of Qsymia and STENDRA, investments in the research and development efforts, and expenditures we may incur to acquire additional products.

***Future sales of our common stock may depress our stock price.***

Sales of our stock by our executive officers or directors, or the perception that such sales may occur, could adversely affect the market price of our stock. We have also registered all common stock that we may issue under our employee benefits plans. As a result, these shares can be freely sold in the public market upon issuance, subject to restrictions under the securities laws. Any of our executive officers or directors may adopt trading plans under SEC Rule 10b5-1 to dispose of a portion of their stock. If any of these events cause a large number of our shares to be sold in the public market, the sales could reduce the trading price of our common stock and impede our ability to raise future capital.

***Our charter documents and Delaware law could make an acquisition of our company difficult, even if an acquisition may benefit our stockholders.***

On November 8, 2016, our Board of Directors adopted an amendment and restatement of our Preferred Stock Rights Plan, which was originally adopted on March 26, 2007. As amended and restated, the Preferred Stock Rights Plan is designed to protect stockholder value by mitigating the likelihood of an "ownership change" that would result in significant limitations to our ability to use our NOLs or other tax attributes to offset future income. As amended and restated, the Preferred Stock Rights Plan will continue in effect until November 9, 2019, unless earlier terminated or the rights are earlier exchanged or redeemed by our Board of Directors. We submitted the plan to a vote at the 2017 annual meeting of stockholders, and stockholders ratified the plan at the 2017 annual meeting of stockholders. The Preferred Stock Rights Plan has the effect of causing substantial dilution to a person or group that acquires more than 4.9% of our shares without the approval of our Board of Directors. The existence of the Preferred Stock Rights Plan could limit the price that certain investors might be willing to pay in the future for shares of our common stock and could discourage, delay or prevent a merger or acquisition that a stockholder may consider favorable.

Some provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws could delay or prevent a change in control of our Company. Some of these provisions:

- authorize the issuance of preferred stock by the Board without prior stockholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of common stock;
- prohibit stockholder actions by written consent;

- specify procedures for director nominations by stockholders and submission of other proposals for consideration at stockholder meetings; and
- eliminate cumulative voting in the election of directors.

In addition, we are governed by the provisions of Section 203 of Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us. These and other provisions in our charter documents could reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

**Issuer Purchases of Equity Securities**

| Period | (a) Total number of shares (or units) purchased | (b) Average price paid per share (or unit) | (c) Total number of shares (or units) purchased as part of publicly announced plans or programs | (d) Maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs |
|---|---|---|---|---|
| April 2018 | 876$ | 0.42 | 876 | |
| May 2018 | 935$ | 0.52 | 935 | |
| June 2018 | 876$ | 0.84 | 876 | |
| Total | 2,687$ | 0.59 | 2,687 | 2,628 |

(a) In the second quarter of 2018, restricted stock unit awards held by certain non-employee directors of the Company vested. These restricted stock units were settled by issuing to each non-employee director shares in the amount due to the director upon vesting, less the portion required to satisfy the estimated income tax liability based on the published stock price at the close of market on the settlement date or the next trading day, which the Company issued to the non-employee director in cash.

On April 30, 2018, the Company issued warrants to purchase 3.6 million shares of the Company's common stock to the shareholders of Willow Biopharma Inc., with an exercise price of $0.37 per share. The warrants are immediately exercisable and will expire seven years after the date of issuance. The Company issued the warrants and will issue the underlying common stock pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended.

On June 8, 2018, the Company issued a warrant to purchase 3.3 million shares of the Company's common stock to affiliates of Athyrium Capital Management. The warrant has an exercise price of $0.3951 per share, is immediately exercisable and will expire six years after the issuance date. The Company issued the warrant and will issue the underlying common stock pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended.

## ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

## ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## ITEM 5. OTHER INFORMATION

None.

## ITEM 6. EXHIBITS

VIVUS, INC.
INDEX TO EXHIBITS

| EXHIBIT NUMBER | DESCRIPTION |
|---|---|
| 2.1*† | Asset Purchase Agreement between the Registrant and Janssen Pharmaceuticals, Inc. dated April 30, 2018. |
| 3.1[(1)] | Amended and Restated Certificate of Incorporation of the Registrant. |
| 3.2* | Amended and Restated Bylaws of the Registrant, as further amended. |
| 3.3[(2)] | Amended and Restated Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Registrant. |
| 4.1[(3)] | Specimen Common Stock Certificate of the Registrant. |
| 4.2[(4)] | Amended and Restated Preferred Stock Rights Agreement dated as of November 9, 2016, between the Registrant and Computershare Trust Company, N.A. |
| 4.3[(5)] | Indenture dated as of May 21, 2013, by and between the Registrant and Deutsche Bank Trust Company Americas, as trustee. |
| 4.4[(6)] | Form of 4.50% Convertible Senior Note due May 1, 2020. |
| 4.5[(7)] | Warrant to Purchase Shares of Common Stock issued to Torreya Capital, LLC dated February 23, 2018. |
| 4.6[(8)] | Indenture, dated as of June 8, 2018, among the Registrant, the other guarantors from time to time party thereto and U.S. Bank National Association, as trustee and collateral agent. |
| 4.7[(9)] | Form of 2024 Note (included in Exhibit 4.6). |
| 4.8[(10)] | Form of Athyrium Warrant, dated as of June 8, 2018. |
| 4.9*# | Form of Warrant to be issued by the Registrant to certain shareholders of Willow Biopharma Inc. |
| 10.1[(11)] | Collateral Agreement, dated as of June 8, 2018, among the Registrant, the other guarantors from time to time party thereto and U.S. Bank National Association, as trustee and collateral agent. |
| 10.2[(12)]# | 2018 Inducement Equity Incentive Plan. |
| 10.3* | Purchase Agreement between the Registrant and affiliates of Athyrium Capital Management dated April 30, 2018. |
| 10.4*# | Form of Agreement under the 2018 Inducement Equity Incentive Plan. |
| 10.5*# | Form of Third Amended and Restated Change of Control and Severance Agreement. |
| 31.1* | Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934, as amended. |
| 31.2* | Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934, as amended. |
| 32[+] | Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |

| | |
|---|---|
| 101 | The following materials from the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, formatted in eXtensible Business Reporting Language (XBRL), include: (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Operations, (iii) the Condensed Consolidated Statements of Comprehensive Loss, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) related notes. |

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| | |
|---|---|
| * | Filed herewith. |
| + | Furnished herewith. |
| † | Confidential portions of this exhibit have been redacted and filed separately with the SEC pursuant to a confidential treatment request in accordance with Rule 24b-2 of the Securities Exchange Act of 1934, as amended. |
| # | Indicates management contract or compensatory plan or arrangement. |
| (1) | Incorporated by reference to Exhibit 3.2 filed with the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, filed with the SEC on March 28, 1997. |
| (2) | Incorporated by reference to Exhibit 3.3 filed with the Registrant's Registration Statement on Form 8-A filed with the SEC on March 28, 2007. |
| (3) | Incorporated by reference to Exhibit 4.1 filed with the Registrant's Annual Report on Form 10-K/A for the fiscal year ended December 31, 1996, filed with the SEC on April 16, 1997. |
| (4) | Incorporated by reference to Exhibit 4.1 filed with the Registrant's Current Report on Form 8-K filed with the SEC on November 9, 2016. |
| (5) | Incorporated by reference to Exhibit 4.1 filed with the Registrant's Current Report on Form 8-K filed with the SEC on May 21, 2013. |
| (6) | Incorporated by reference to Exhibit 4.2 filed with the Registrant's Current Report on Form 8-K filed with the SEC on May 21, 2013. |
| (7) | Incorporated by reference to Exhibit 4.5 filed with the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 8, 2018. |
| (8) | Incorporated by reference to Exhibit 4.1 filed with the Registrant's Current Report on Form 8-K filed with the SEC on June 11, 2018. |
| (9) | Incorporated by reference to Exhibit 4.2 filed with the Registrant's Current Report on Form 8-K filed with the SEC on June 11, 2018. |
| (10) | Incorporated by reference to Exhibit 4.3 filed with the Registrant's Current Report on Form 8-K filed with the SEC on June 11, 2018. |
| (11) | Incorporated by reference to Exhibit 10.1 filed with the Registrant's Current Report on Form 8-K filed with the SEC on June 11, 2018. |
| (12) | Incorporated by reference to Exhibit 4.1 filed with the Registrant's Registration Statement on Form S-8 filed with the SEC on June 1, 2018. |

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 7, 2018

VIVUS, Inc.

/s/ John Amos
John Amos
Chief Executive Officer

/s/ Mark K. Oki
Mark K. Oki
Chief Financial Officer and Chief Accounting Officer

**Exhibit 2.1**

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

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# ASSET PURCHASE AGREEMENT

**between**

**Janssen Pharmaceuticals, Inc.**

**and**

**Vivus, Inc.**

**DATED AS OF**

**April 30, 2018**

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# ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement, dated as of April 30, 2018 (the "Effective Date"), is by and between Janssen Pharmaceuticals, Inc., a Pennsylvania corporation ("Seller"), and Vivus, Inc., a Delaware corporation ("Purchaser").

W I T N E S S E T H:

WHEREAS, Seller, directly and indirectly through certain of its Affiliates (as defined below), is in the business of researching, developing, manufacturing or having made, marketing, distributing and selling, as the case may be, products (including pharmaceutical drugs) for use in health care; and

WHEREAS, Seller desires to sell (or to cause to be sold), and Purchaser desires to purchase, certain rights and assets related to the products set forth on Schedule 1.01(a) (the "Products"), and Purchaser is willing to assume certain liabilities related to the Products, to allow Purchaser to market and sell the Products on an exclusive basis in the Territory (as defined below), in each case upon the terms and subject to the conditions set forth herein and in the Transition Agreements.

NOW, THEREFORE, in consideration of the foregoing and the representations, warranties, covenants and agreements contained herein, the Parties hereby agree as follows:

## ARTICLE I.
## DEFINITIONS AND TERMS

Section 1.01 Definitions. As used in this Agreement, the following terms shall have the meanings set forth or as referenced below:

"Accounts Payable" means all invoices, bills, accounts payable or other trade payables due and owed to any third party arising on or prior to the Closing Date out of or in connection with developing, commercializing, manufacturing (or having manufactured), packaging, importing, marketing, distributing and/or selling the Products by Seller and the Divesting Entities and any of their respective Affiliates on or prior to the Closing Date.

"Accounts Receivable" means all accounts receivable, notes receivable and other indebtedness due and owed by any third party to Seller or any of its Affiliates arising or held in connection with the sale of the Products on or prior to the Closing Date.

"Affiliate" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with, such Person at any time during the period for which the determination of affiliation is being made. For purposes of this definition, "control" of a Person means the power, direct or indirect, to direct or cause the direction of the management and policies of such Person whether by contract or otherwise and, in any event and,

without limitation of the previous sentence, any Person owning more than fifty percent (50%) or more of the voting securities of another Person shall be deemed to control that Person.

"Agreement" means this Asset Purchase Agreement, including all Schedules and Exhibits attached hereto, as the same may be amended, modified or supplemented from time to time in accordance with the terms hereof.

"Allergan License" means that certain non-exclusive license agreement effective as of October 1, 2015 by and between Allergan Pharmaceuticals International Ltd. and Seller.

"Ancillary Agreements" has the meaning set forth in Section 6.10.

"Anti-Trust Filings" has the meaning set forth in Section 7.01(f).

"Assumed Liabilities" has the meaning set forth in Section 2.04.

"Bill of Sale and Assignment and Assumption Agreement" has the meaning set forth in Section 6.10.

"Business" means the commercialization of the Products in the Territory, including the development and manufacturing of the Products therefor, and all activities appurtenant thereto, such as importing, marketing, selling and distributing the Products in the Territory.

"Business Books and Records" has the meaning set forth in Section 2.01(d).

"Business Day" means any day other than a Saturday, a Sunday or a day on which banks in New York City, New York are authorized or obligated by law or executive order to close or any other day that Seller or any of the Divesting Entities are closed consistent with the Johnson & Johnson Universal Calendar (for illustrative purposes, a copy of the Johnson & Johnson Universal Calendar for the year 2018 is attached hereto as Exhibit C).

"Canadian Transitional Business License Agreement" has the meaning set forth in Section 6.10.

"Chargeback Claims" has the meaning set forth in Section 6.12(d).

"Claim" has the meaning set forth in Section 8.03.

"Closing" means the consummation of the Transactions pursuant to the terms of Section 3.01(a).

"Closing Date" has the meaning set forth in Section 3.01(a).

"Closing Legal Impediment" has the meaning set forth in Section 7.01(e).

"Commercialization" means, solely for the purposes of Section 6.04, all activities undertaken [*****]; provided, however, "Commercialization" shall exclude any activities relating to the research of a product.

"Commercial Rebates" has the meaning set forth in Section 6.12(c).

"Competing Product" means [*****]. Notwithstanding anything to the contrary herein, a "Competing Product" shall not include any product containing [*****].

"Competition Act" means the *Competition Act*, R.S.C., 1985 C-34, as amended, and the regulations thereunder.

"Competition Laws" means the applicable Laws of any jurisdiction that are designed or intended to prohibit, restrict or regulate actions that may have the purpose or effect of creating a monopoly, lessening competition or restraining trade or that requires one or both Parties to certain mergers, acquisitions and joint ventures to submit notifications to Governmental Authorities charged with enforcing any of the foregoing Laws (commonly known as merger control), including the HSR Act and the Competition Act.

"Confidentiality Agreement" means that certain letter agreement dated February 27, 2018 between Purchaser and Seller.

"Contract" means any written legally binding contract, agreement, lease, sublease, sublicense or any other legally binding commitment or arrangement.

"Copyrights" means all copyrights, copyright registrations and applications therefor and copyrightable works, including: (i) all rights of authorship, use, publication, reproduction, display, distribution, performance, preparation of derivative works and transformation of such copyrightable works; (ii) all copies, compilations and derivative works of such copyrightable works; (iii) all rights of ownership of copyrightable works; and (iv) all rights to register and obtain renewals and extensions of copyright registrations.

"CPR Mediation Procedure" has the meaning set forth in Section 10.11(a)(i).

"CPR Rules" has the meaning set forth in Section 10.11(b)(i).

"Data Room" means the electronic data room available at www.intralinks.com containing documents and materials relating to the Business and the Purchased Assets as of 9:00 a.m. New York time as of the day immediately prior to the Effective Date.

"De Minimis Amount" has the meaning set forth in Section 8.06(a).

"DIN" means Drug Identification Number issued by Health Canada.

"Dispute" has the meaning set forth in Section 10.11.

"Divesting Entities" means, collectively, all Affiliates of Seller that have any right, title or interest in, to or under the Purchased Assets.

"Domain Names" means any (i) domain names registered with an internet domain name registrar and the uniform resource locators associated with any such domain names, (ii) web addresses and (iii) social media accounts.

"Effective Date" has the meaning set forth in the Preamble of this Agreement.

"Excluded Assets" has the meaning set forth in Section 2.03.

"Excluded Product" means any product [*****].

"FDA" means the United States Food and Drug Administration, and any successor agency having substantially the same functions and jurisdiction.

"FIRPTA Certificate" has the meaning set forth in Section 7.01(d).

"Fiscal Year" means a year based on the Johnson & Johnson Universal Calendar (a copy of which for the year 2018 is attached hereto in Exhibit C).

"GAAP" means accounting principles and practices generally accepted in the United States, as in effect during the relevant time period, consistently applied.

"Governmental Authority" means any supranational, national, multinational, federal, provincial, state, county or local judicial (including any arbitration panel), legislative, executive, regulatory or enforcement authority, agency, commission, body, board, bureau or instrumentality with competent jurisdiction, including the FDA, Health Canada, provincial ministry of health, and any comparable agency in any other jurisdiction, or quasi-governmental, self-regulatory organization, commission, body, authority or agency.

"Governmental Authorizations" means all licenses, permits and other authorizations, consents, registrations, grants, exemptions, orders and approvals (including where applicable, pricing and reimbursement approvals) required to research, develop, test, handle, label, package, store, supply, promote, fabricate, manufacture, distribute, wholesale, market, import, export or sell the Products under the applicable Laws of any Governmental Authority.

"Governmental Order" means any order, writ, judgment, injunction, decree, stipulation, determination, award or similar order entered by or with any Governmental Authority (in each case whether preliminary or final).

[*****].

"GST/HST" means any goods and services tax/harmonized sales tax imposed under Part IX of the *Excise Tax Act* (Canada).

"Health Canada" means the Canadian federal government department established pursuant to the *Department of Health Act* (Canada) responsible for the administration of various statutes, including, among others, the *Food and Drugs Act* (Canada) R.S.C. 1985, c. F-27 and the regulations thereunder, each as amended.

"HSR Act" means the U.S. Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

"Indemnified Party" has the meaning set forth in Section 8.03.

"Indemnifying Party" has the meaning set forth in Section 8.03.

"Intellectual Property" means Patent Rights, Trademark Rights, Copyrights, Domain Names, Know How and any other intellectual property or similar proprietary rights in all jurisdictions worldwide, whether registered or unregistered.

"Inventories" means the net book value inventory (i.e., including any accounting reserves or adjustments permitted by GAAP, other than reserves for excess inventory), of all finished Products held for sale or use in the United States by Seller or any of its Affiliates or their distributors in respect of PANCREAZE DR 4200U 100 CAPS. USA, PANCREAZE DR 10500U 100 CAPS. USA, PANCREAZE DR 16800U 100 CAPS. USA, PANCREAZE DR 21000U 100 CAPS. US and PANCREAZE DR 2600U 100 CAPS. USA.

"Judgment" means any judgment, order, writ, injunction, legally binding agreement, stipulation or decree from a Governmental Authority.

"Know How" means any data, inventions, methods, proprietary information, processes, trade secrets, techniques, protocols, materials and technology, whether patentable or not, including discoveries; formulae; chemicals and biological materials; assays; methods; plans; know-how; processes; software; documented ideas, observations and conclusions; test data (including pharmacological, toxicological and clinical information and test data); analytical and quality control data; and marketing, pricing, distribution, costs and sales data and descriptions.

"Knowledge of Seller" or "Knowledge" means the actual knowledge of any of the individuals listed on Schedule 1.01(b), in each case, after due inquiry of such named individual's files and records and of those employees of Seller who are such named individual's direct reports, in each case, which, for the avoidance of doubt, does not require searches of records of or filings with any Governmental Authority, the obtaining of any legal opinion or other report or opinion of outside experts or to conduct any "freedom to operate" analysis.

"Laws" means any supranational, national, multinational, federal, state, provincial, county, foreign or local law, common law, statute, ordinance, rule, regulation, code, Judgment, Governmental Order or other binding directive issued, promulgated or enforced by any Governmental Authority.

"Liabilities" means any and all fines, debts, liabilities, costs, guarantees, commitments, assessments, expenses, claims, losses, damages, tax, deficiencies and obligations, whether monetary or non-monetary, known or unknown, mature or unmatured, accrued or fixed, accrued or not accrued, due or to become due, direct or indirect, and regardless of whether it is accrued or required to be accrued or disclosed pursuant to GAAP, whenever or however arising (including whether arising out of any contract, common law or tort based on negligence or strict liability).

"Licensed IP Rights" means, collectively, all Patent Rights and Know How licensed or sublicensed to Seller under the Transferred IP Licenses.

"Lien" means, with respect to any property or asset, any lien, security interest, mortgage, pledge, assessment, restriction, adverse claim, levy, charge, encumbrance, right of first refusal or first offer or other similar claim of any kind, character or description, whether of record or not, or any contract to give any of the foregoing, in respect of such property or asset.

"Limited License Period" has the meaning set forth in Section 6.13(a).

"Long Term Collaboration Agreement" has the meaning set forth in Section 6.10.

"Losses" means losses, liabilities, damages, deficiencies, costs (including costs of investigation, defense and enforcement of this Agreement), expenses, penalties, assessments, fines, fees, suits, actions, causes of action, judgments, amounts paid in settlement, Taxes and awards incurred or suffered (and, if applicable, reasonable attorneys' and experts' fees and expenses associated therewith).

"Material Adverse Effect" means, with respect to Seller, any change, effect, event, circumstance, occurrence or state of facts that is or could reasonably be expected to become, individually or in the aggregate, materially adverse to the value of the Purchased Assets and Assumed Liabilities or the business, assets, prospects, results of operations or financial condition of the Business, taken as a whole, provided that none of the following changes, effects, events, circumstances, occurrences or states of facts shall be deemed, either alone or in combination, to constitute a Material Adverse Effect, or be taken into account in determining whether there has been or could reasonably be expected to be a Material Adverse Effect: (i) changes or effects in the general business, economic or political conditions or the securities, syndicated loan, credit or financial markets; (ii) changes in applicable Law or GAAP (or any applicable accounting standards in any jurisdiction outside the United States); (iii) changes to Law that generally affect the industries in which the Business operates; (iv) changes or effects that arise out of or are attributable to the commencement, occurrence, continuation or intensification of any war, sabotage, armed hostilities or acts of terrorism; (v) earthquakes, hurricanes or other natural disasters; (vi) failure, in and of itself, to meet projections, estimates, plans or forecasts (provided that the underlying causes of such failure (subject to the other provisions of this definition) shall not be excluded); (vii) changes or effects that arise out of or are attributable to the announcement or pendency of the Transactions, including any reduction in revenues or income, any loss of customers, any disruption

in supplier, distributor or similar relationships solely to the extent resulting therefrom; (viii) the reduction or lack of marketing of, field force support for or other similar functions in relation to the Products; (ix) changes in the number or type of competing products in the market(s) in which the Products are sold (x) currency fluctuations; (xi) changes or effects that arise out of or are attributable to actions or omissions of Purchaser or any of its Affiliates; or (xii) any matter disclosed in the Schedules to this Agreement, except in the case of clauses (i), (ii), (iii), (iv), (v) and (x), to the extent that the Purchased Assets or the Business are materially disproportionately affected thereby as compared to other companies or businesses participating in the industries in which the Business operates.

"Material Distribution Contract" has the meaning set forth in Section 6.01(b)(vii).

"NDC" means National Drug Code in the United States.

"Net Sales" means the gross amounts invoiced by Seller, licensees and Affiliates, for the sale of Products to Third Parties in arm's-length transactions, excluding sales for compassionate use, named patient access and clinical trials, in each case, wherein the excluded sales are made at wholesale costs without profit, less the following deductions, which deductions are determined on a country-by-country and Product-by-Product basis and in accordance with GAAP:

(i) [*****];

(ii) [*****];

(iii) [*****];

(iv) [*****]; and

(v) [*****].

Net Sales shall not include sales by Seller to its Affiliates or licensees, if such sales are not at arm's-length, for resale; rather, in each such instance, Net Sales shall include the amounts invoiced or otherwise received by such Affiliate or licensee for such resale of the Products to Third Parties.

"Non-assigned Asset" has the meaning set forth in Section 2.02.

"Nordmark License" means that certain amended and restated know-how license and supply agreement effective as of November 7, 2017 by and between Nordmark Arzneimittel GmbH & Co. and Seller.

"Outside Date" means the date ninety (90) days following the Effective Date.

"Party" means Seller or Purchaser individually, as the context so requires, and the term "Parties" means, collectively, Seller and Purchaser.

"Patent Rights" means any and all (a) national, regional and international issued patents; (b) pending patent applications and any related patent applications filed in the future claiming priority thereto, including all provisional applications, non-provisional applications, international (PCT) applications, substitutions, continuations, continuations in part, divisions, renewals, and all patents granted thereon or issuing therefrom; (c) all patents of addition, reissues, re-examinations and extensions or restorations by existing or future extension or restoration mechanisms, including supplementary protection certificates or the equivalent thereof; (d) registration patents, inventor's certificates or confirmation patents; and (e) any form of government-issued right substantially similar to any of the foregoing, in each case in any country or patent examining or granting jurisdiction.

"PDUFA" means the U.S. Prescription Drug User Fee Act of 1992, as amended.

"Permitted Liens" means (a) all Liens set forth on Schedule 1.01(f); (b) statutory Liens arising out of operation of Law with respect to a Liability incurred in the ordinary course of business and which is not delinquent; (c) Liens for Taxes not yet due, payable, delinquent or subject to penalties for nonpayment, or which are being contested in good faith; and (d) mechanics', materialmens', carriers', workmens', warehousemens', repairmens', landlords' or other like Liens and security obligations imposed by Law that are incurred in the ordinary course of business and are not delinquent.

"Person" means an individual, a limited liability company, a joint venture, a corporation, a partnership, an association, a trust, a division or an operating group of any of the foregoing or any other entity or organization.

"Products" has the meaning set forth in the Recitals to this Agreement. For the avoidance of doubt, Products shall not include any Excluded Product.

"Protocol" has the meaning set forth in Section 10.11(b)(vi).

"Purchase Price" has the meaning set forth in Section 2.06(a).

"Purchased Assets" has the meaning set forth in Section 2.01.

"Purchaser" has the meaning set forth in the Preamble of this Agreement.

"Purchaser Fundamental Representations" means those representations of Purchaser set forth in Section 5.01 (Organization), Section 5.02 (Authority; Binding Effect) and Section 5.05 (Brokers).

"Purchaser Indemnitees" has the meaning set forth in Section 8.01(a).

"Purchaser Material Adverse Effect" has the meaning set forth in Section 5.01.

"Purchaser's Officer's Certificate" has the meaning set forth in Section 7.02(c).

"Purchaser's Secretary's Certificate" has the meaning set forth in Section 7.02(d).

"Purchaser Transfer Letter to FDA" means the letter(s) from Purchaser to the FDA, duly executed by Purchaser, notifying the FDA of the transfer of the rights to the Transferred Governmental Authorizations to Purchaser in the United States.

"Quality Agreement" has the meaning set forth in Section 6.10.

"Regulatory Information" means (a) any filings, submissions, applications, reports, or correspondence between Seller or any of the Divesting Entities and any Governmental Authority in the Territory that are in the possession or under the control of Seller or any of its Affiliates and concern the Products or relate to the Transferred Governmental Authorizations; and (b) records and data from all clinical and pre-clinical studies and trials conducted or being conducted by or on behalf of Seller or any of the Divesting Entities, which concern the Products, that are in the possession or under the control of Seller or any of its Affiliates, including as are (i) described in the Transferred Governmental Authorizations or (ii) the subject of a post-marketing requirement with any Governmental Authority in the Territory. Notwithstanding the foregoing, "Regulatory Information" excludes [*****].

"Representatives" means, with respect to either Party, such Party's Affiliates and their respective parents, directors, officers, employees, attorneys, accountants, representatives, financial advisors, lenders, consultants, advisors and other agents.

"[*****]" has the meaning set forth in Section 6.04(a).

"Retained Liabilities" has the meaning set forth in Section 2.05.

"SEC" has the meaning set forth in Section 6.06.

"Seller" has the meaning set forth in the Preamble of this Agreement.

"Seller's Officer's Certificate" has the meaning set forth in Section 7.01(c).

"Seller Fundamental Representations" means the representations and warranties of Seller set forth in Section 4.01 (Organization), Section 4.02 (Authority; Binding Effect), Section 4.10 (Brokers) and Section 4.11 (Purchased Assets).

"Seller Indemnitees" has the meaning set forth in Section 8.02(a).

"Seller Names" means the names and logos of Seller, the Divesting Entities and all of its and their Affiliates, in each case as set forth in Schedule 1.01(c).

[*****]

"Seller Transfer Letter to FDA" means the letter(s) from Seller to the FDA, duly executed by Seller (or any Affiliate of Seller, as applicable), notifying the FDA of the transfer of the rights to the Transferred Governmental Authorizations to Purchaser in the United States.

"Seller Transfer Letter to Health Canada" means the letter(s) from Seller to Health Canada, duly executed by Seller (or any Affiliate of Seller, as applicable), authorizing Health Canada to transfer the rights to the appropriate Transferred Governmental Authorizations in Canada to Purchaser.

"Shared Lot" has the meaning set forth in Section 2.10(b).

"Tax Return" means any return, report, declaration, information return, statement or other document filed or required to be filed with any Taxing Authority in connection with the determination, assessment or collection of any Tax or the administration of any Laws relating to any Tax.

"Taxes" means (a) all taxes fees, levies, duties, tariffs, imposts and other charges of any kind, imposed by any Governmental Authority, including income, gross revenue, excise, property, sales or use, value added, GST/HST, profits, license, withholding (with respect to compensation or otherwise), payroll, employment, net worth, capital gains, transfer, stamp, social security, occupation and franchise taxes, imposed by any Taxing Authority, (b) any Liability for the payment of any amounts of the type described in (a) as a result of being a Person required by Law to withhold or collect taxes imposed on another Person, (c) any Liability for the payment of amounts of the type described in (a) or (b) as a result of being a transferee of, or a successor in interest to, any Person or as a result of an express or implied obligation to indemnify any Person and (d) any interest, penalties and additions imposed in connection with or with respect to any of the foregoing amounts.

"Taxing Authority" means any Governmental Authority, exercising any authority to impose, regulate or administer the imposition of Taxes.

"Territory" means the United States and Canada.

"Third Party Claim" has the meaning set forth in Section 8.03.

"Third Party Claim Notice" has the meaning set forth in Section 8.03.

"Trademark Assignment" has the meaning set forth in Section 6.10.

"Trademark Rights" means, collectively, all trademarks, service marks and names, trade and brand names, slogans, logos, symbols, trade dress or other similar source or origin identifiers (whether statutory or common law, whether registered or unregistered), together with all (a) registrations and applications for any of the foregoing, (b) extensions or renewals of any of

the foregoing, (c) goodwill connected or associated with or symbolized by any of the foregoing, (d) rights and privileges arising under applicable Law with respect to any of the foregoing, and (e) rights corresponding to any of the foregoing.

"Transaction Documents" means this Agreement and the Ancillary Agreements.

"Transactions" means, collectively, the transactions contemplated by this Agreement and the Ancillary Agreements, including the purchase and sale of the Purchased Assets and the assumption of the Assumed Liabilities.

"Transfer Taxes" means any federal, state, provincial, county, local, municipal, foreign and other sales, use, transfer, value added, conveyance, documentary transfer, stamp duty, recording or other similar Tax, fee or charge imposed in connection with the Transactions or the recording of any sale, transfer or assignment of property (or any interest therein) effected pursuant to this Agreement, including, for greater certainty, GST/HST.

"Transferred Contracts" has the meaning set forth in Section 2.01(f).

"Transferred Domain Names" means the Domain Names set forth on Schedule 1.01(d).

"Transferred Governmental Authorizations" has the meaning set forth in Section 2.01(c).

"Transferred IP Licenses" means the Allergan License and the Nordmark License.

"Transferred IP Rights" means the Transferred Domain Names and the Transferred Trademark Rights.

"Transferred Trademark Rights" means the Trademark Rights set forth on Schedule 1.01(e), together with all goodwill associated with the foregoing.

"Transition Agreements" has the meaning set forth in Section 6.10.

"U.S. Market Transition Services Agreement" has the meaning set forth in Section 6.10.

"U.S. Transfer Letters" means Purchaser Transfer Letter to FDA and the Seller Transfer Letter to FDA.

"User Fees" means the annual product fee and establishment fee required under PDUFA, and any similar fee required or collected by any other Governmental Authority in the Territory, in each case, in respect of the Products for calendar year 2018.

Section 1.02 Other Definitional Provisions.

(a) The words "hereof", "herein", "hereto" and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(b) The terms defined in the singular have a comparable meaning when used in the plural, and vice versa.

(c) The terms "U.S. Dollars" and "$" mean lawful currency of the United States.

(d) The terms "include," "includes" and "including" mean "including, without limitation."

(e) When a reference is made in this Agreement to an Article, a Section, an Exhibit or a Schedule, such reference shall be to an Article or a Section of, or an Exhibit or a Schedule to, this Agreement unless otherwise indicated.

(f) Unless the context otherwise requires, any reference to Laws herein shall (i) include any rules or regulations promulgated by an applicable Governmental Authority thereunder, and (ii) be construed as referring to such Laws as enacted, repealed, reauthorized, amended, supplemented, or otherwise modified, as in effect from time to time.

(g) Time periods based on a number of days within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends and, if applicable, by extending the period to the next Business Day following if the last day of the period is not a Business Day.

(h) The term "United States" shall refer to the United States of America and its territories, including Puerto Rico, and the term "Canada" shall refer to Canada, including all of its provinces and territories.

## ARTICLE II.
## PURCHASE AND SALE

Section 2.01 Purchase and Sale of Assets. Upon the terms and subject to the conditions set forth herein, at the Closing, Seller shall, and shall cause the Divesting Entities to, sell, convey, assign and transfer to Purchaser, and Purchaser shall purchase, acquire and accept from Seller and the Divesting Entities, free and clear of any and all Liens (other than Permitted Liens), all of Seller's and the Divesting Entities' rights, titles and interests in, to or under all of the assets, properties and rights of every kind and nature set forth below, whether real, personal or mixed, tangible or intangible (including goodwill), and wherever located (collectively, the "Purchased Assets"):

(a) the Inventories;

(b) the Transferred IP Rights;

(c) the Governmental Authorizations set forth on Schedule 2.01(c) (collectively, the "Transferred Governmental Authorizations");

(d) other than the items set forth in Section 2.03(g), all records, files, data and other materials, whether in hard copy or electronic form, to the extent primarily relating to the Purchased Assets and the Business (but excluding records or files not reasonably separable or extractable from documents or databases that do not relate primarily to the Purchased Assets or the Business; provided, that, to the extent practicable, copies of such records or files or the pertinent information contained therein will be provided to Purchaser on a redacted or excerpted basis) and in the possession or under the control of Seller or any of its Affiliates, including, but not limited to: (i) pricing lists for the Products, (ii) subject to Section 6.13, marketing data, marketing plans, and sales and promotional materials, (iii) quality control and vigilance records, and (iv) other business records, to the extent that such other business records are required to be transferred under applicable Law (the foregoing records and documents, collectively the "Business Books and Records"); provided, however, that Seller may retain copies of the Business Books and Records; provided, further that Seller agrees that after the Closing, Purchaser or its Representatives may, at Purchaser's cost and expense, have access to and make copies of any books and records (or redacted portions thereof) that do not constitute Business Books and Records but that relate to the Purchased Assets or the Business, except where providing copies thereof is prohibited by applicable Law or if such items are protected by attorney-client or similar privilege.

(e) the Regulatory Information;

(f) the Transferred IP Licenses and the Contracts set forth on Schedule 2.01(f) (collectively, the "Transferred Contracts");

(g) all purchase orders for finished goods Products in the Territory that are outstanding as of the Closing; and

(h) all claims, counterclaims, defenses, causes of action, rights under express or implied warranties, rights of recovery, rights of set-off, rights of subrogation and all other rights of any kind against any third party, to the extent primarily relating to the Business or any Assumed Liabilities or Purchased Assets.

Section 2.02 Matters Related to Purchased Assets and Commingled Assets.

(a) Notwithstanding anything in this Agreement to the contrary, this Agreement shall not constitute an agreement to assign or transfer any Purchased Asset to the extent that such Purchased Asset is not assignable or transferable without the consent of any

Person, other than Seller, Purchaser or any of their respective Affiliates, to the extent that such consent shall not have been given (each, a "Non-assigned Asset"); provided, however, that, Seller shall use, both prior to and for twelve (12) months after the Closing, reasonable best efforts to obtain, and Purchaser shall use its reasonable best efforts to assist and cooperate with Seller in connection therewith, all necessary consents to the assignment and transfer of each Non-assigned Asset; provided, further, that, none of Seller, Purchaser or any of their respective Affiliates shall be required to pay money to any third party, commence any litigation or offer or grant any accommodation (financial or otherwise) to any third party in connection with such efforts. With respect to any Non-assigned Asset, for a period beginning on the Closing Date and ending on the earlier of (i) the time such requisite consent is obtained and such Non-assigned Asset is transferred and assigned to Purchaser and (ii) the date that is twelve (12) months after the Closing Date, Seller shall, and shall cause the Divesting Entities to, use reasonable best efforts to provide to Purchaser the benefits thereof and shall enforce, at the request of and for the benefit of Purchaser, and at the expense of Purchaser, any rights of Seller or the Divesting Entities arising thereunder against any Person, including the right to seek any available remedies or to elect to terminate in accordance with the terms thereof upon the advice of Purchaser. As a condition to Seller providing Purchaser with benefits of any Non-assigned Asset, Purchaser shall perform, at the direction of Seller or the applicable Divesting Entity, the obligations of Seller or the Divesting Entity thereunder. Upon receipt following the Closing of the consents required to transfer any Non-assigned Asset to Purchaser, Seller shall, or shall cause the applicable Divesting Entity to, transfer and convey such Non-assigned Asset to Purchaser without payment of any additional consideration by Purchaser.

(b) Seller provides no assurances to Purchaser that any consent, authorization, approval or waiver of a third party contemplated by this Section 2.02 will be granted. Subject to compliance by Seller with the provisions of this Section 2.02 and the accuracy of the representations and warranties of Seller contained herein and compliance by Seller of its covenants in this Agreement, the Parties acknowledge and agree that neither Seller nor its Affiliates shall be obligated to actually obtain any such authorization, approval, consent or waiver hereunder and neither (i) the failure to so actually obtain any such authorization, approval, consent or waiver in connection with the consummation of the Transactions in and of itself nor (ii) any default or termination or any lawsuit, action, claim, proceeding or investigation commenced or threatened by or on behalf of any Person to the extent arising out of any such failure to so actually obtain any such authorization, approval, consent or waiver in connection with the consummation of the Transactions in and of itself shall be deemed (A) a breach of any representation, warranty or covenant of Seller contained in this Agreement or (B) to cause any condition to Purchaser's obligations to close the Transactions to be deemed not satisfied, other than the condition set forth in Section 7.01(h).

Section 2.03 Excluded Assets. Purchaser shall not acquire any right, title or interest in, to or under any of the following assets (collectively, the "Excluded Assets"):

(a) any component of working capital (except to the extent constituting a Purchased Asset);

(b) any cash, checks, money orders, marketable securities, short-term instruments and other cash equivalents, funds in time and demand deposits or similar accounts, and any evidence of indebtedness issued or guaranteed by any Governmental Authority;

(c) any Accounts Receivable;

(d) any Contracts of Seller or the Divesting Entities, or rights therein or thereunder, other than the Transferred Contracts;

(e) any licenses, permits, registrations, certificates or other authorizations, consents, clearances or approvals of the Seller and its Affiliates, other than the Transferred Governmental Authorizations;

(f) any losses, loss carryforwards, credits, credit carryforwards and other Tax attributes, all deposits or advance payments with respect to Taxes, and any claims, rights, and interest in and to any refund, credit or reduction of Taxes;

(g) (i) the corporate books and records of Seller and its Affiliates that are not Business Books and Records, (ii) all personnel records, (iii) any attorney work product, attorney-client communications and other items protected by attorney-client or similar privilege, (iv) Tax Returns, Tax information, and Tax records not solely related to the Business or the Purchased Assets, and (v) any documents that were received from third parties in connection with their proposed acquisition of the Purchased Assets or the Products or that were prepared by Seller or any of its Affiliates in connection therewith;

(h) any current and prior insurance policies of Seller and its Affiliates and all rights of any nature with respect thereto, including all insurance recoveries thereunder and rights to assert claims with respect to any such insurance recoveries;

(i) any Intellectual Property of the Seller or its Affiliates, other than the Transferred IP Rights;

(j) any real estate owned or leased by Seller or any of its Affiliates;

(k) any rights, claims and credits of Seller or any of its Affiliates relating to any Excluded Asset or any Retained Liability, including any guarantees, warranties, indemnities and similar rights in favor of Seller or any of its Affiliates relating to any Excluded Asset or any Retained Liability;

(l) any tools, molds and equipment used in the manufacture or packaging of the Products;

(m) any inventories related to the Products, other than the Inventories;

(n) all employees of Seller, any Divesting Entity or any of their Affiliates;

(o) any rights that could be construed to interfere with, hinder or compromise Seller's ability to institute or maintain any claim, action, suit or proceeding against a third party for infringement of patents owned or licensed by Seller or its Affiliates, including patents being licensed or sub-licensed to Purchaser by Seller;

(p) any other assets, properties or rights (including Intellectual Property) of Seller or any of its Affiliates other than the Purchased Assets; and

(q) any Excluded Product.

Section 2.04 Assumption of Certain Obligations. Purchaser agrees, effective at the Closing and from and after the Closing Date, to assume and to timely satisfy and discharge the following Liabilities of Seller and its Affiliates (such Liabilities being collectively referred to hereinafter as the "Assumed Liabilities"):

(a) all Liabilities arising out of or relating to lawsuits and claims, irrespective of the legal theory asserted, to the extent arising from the operation of the Business or the use of the Purchased Assets, in each case, after the Closing by Purchaser or its Affiliates, or on their behalf in accordance with the Transition Agreements;

(b) all Liabilities arising out of or relating to products liability claims relating to the Products (including claims alleging defects in the Products and claims involving the death of or injury to any individual relating to the Products), but only to the extent that such Products were sold or distributed after the Closing by Purchaser or its Affiliates, or on their behalf in accordance with the Transition Agreements;

(c) all Liabilities to third-party customers, third-party suppliers or other third parties for the Products, materials and services, to the extent relating to the Products sold or distributed after the Closing by Purchaser or its Affiliates, or on their behalf in accordance with the Transition Agreements;

(d) all Liabilities arising after the Closing under any Transferred Contract, but only to the extent that such Liabilities do not arise from any breach, default or violation of such Transferred Contract by or on behalf of Seller, its Affiliates, or their subcontractors or licensees on or prior to the Closing;

(e) all Liabilities (including Liabilities for or otherwise related to Taxes) arising out of or relating to the use, ownership, possession, operation, management, business integration, sale or lease of the Purchased Assets after the Closing by Purchaser or its Affiliates;

(f) all Taxes apportioned to Purchaser pursuant to this Agreement; and

(g) all other Liabilities arising after the Closing out of or relating to the return of any Product sold or distributed by Purchaser or its Affiliates, or on their behalf in accordance with the Transition Agreements, after the Closing.

Section 2.05 Retained Liabilities. Seller and its Affiliates retain and will be responsible for timely satisfying and discharging all of the following Liabilities (collectively, the "Retained Liabilities"):

(a) any component of working capital (except to the extent constituting an Assumed Liability);

(b) all Liabilities arising out of or relating to lawsuits and claims, irrespective of the legal theory asserted, regardless of when such lawsuit or claim was commenced or made, arising from the operation of the Business or the use of the Purchased Assets on or prior to the Closing;

(c) all Liabilities arising out of or relating to products liability claims relating to the Products (including claims alleging defects in the Products and claims involving the death of or injury to any individual relating to the Products) sold or distributed on or prior to the Closing;

(d) all Liabilities to third-party customers, third-party suppliers or other third parties for the Products, materials and services, to the extent relating to the Products sold or distributed on or prior to the Closing;

(e) all Liabilities arising out of or relating to the return of the Products sold or distributed on or prior to the Closing;

(f) all Liabilities for any credits or rebates in respect of the Products and all Liabilities arising out of or relating to any recall or post-sale warning in respect of the Products, in each case, sold or distributed on or prior to the Closing, regardless of whether such Liabilities arose prior to or after the Closing;

(g) all Liabilities to the extent related to the Excluded Assets;

(h) all Liabilities arising on or prior to the Closing under any Transferred Contract or arising out of or resulting from any action or omission by Seller (or its Affiliates) on or prior to the Closing under any Transferred Contract;

(i) all Liabilities with respect to any current or former employee of Seller or any Divesting Entity, or any of their Affiliates;

(j) all Taxes apportioned to Seller pursuant to this Agreement;

(k) all Liabilities related to Taxes incurred by Seller or any Divesting Entity arising from the Purchased Assets prior to the Closing, other than Liabilities referred to in Section 2.04(e) and (f); and

(l) all Liabilities related to any Accounts Payable.

Section 2.06 Purchase Price. In consideration of the sale and transfer of the Purchased Assets, Purchaser agrees to pay to Seller at the Closing, on behalf of Seller and each Divesting Entity, an aggregate purchase price of:

(a) one-hundred thirty five million dollars ($135,000,000) (the "Purchase Price"); which Purchase Price is payable at Closing, exclusive of any Transfer Taxes, and to assume, satisfy and discharge when due all Assumed Liabilities.

(b) The Purchase Price shall be paid in immediately available funds by wire transfer, in accordance with written instructions given by Seller to Purchaser not less than two (2) Business Days prior to the Closing Date in cash in U.S. Dollars. The Purchase Price shall be allocated as described in Section 2.07.

Section 2.07 Allocation of Purchase Price. Purchaser and Seller will allocate the purchase price (including the assumed liabilities) for Tax purposes among the Purchased Assets as specified on Schedule 2.07. The Parties covenant and agree (a) to report for Tax purposes the allocation of the purchase price (including assumed liabilities) among the Purchased Assets in a manner entirely consistent with Schedule 2.07, as it may be amended upon any adjustment to the calculation of the purchase price (including any assumed liabilities), (b) that the Parties will cooperate with each other in connection with the preparation, execution and filing of all Tax Returns related to such allocation and will take no position inconsistent with such allocation in the filing of any Tax Return, except upon a final determination by an applicable Taxing Authority and (c) that the Parties will use commercially reasonable efforts to advise each other regarding the existence of any Tax audit, controversy or litigation related to such allocation.

Section 2.08 Transfer Taxes.

(a) All Transfer Taxes payable in connection with the transfer of the Purchased Assets to Purchaser under this Agreement and the Transactions shall be borne and paid [*****].

(b) Purchaser and Seller shall cooperate in making and timely filing all Tax Returns as may be required to comply with the provisions of applicable Transfer Tax Laws.

Section 2.09 Withholding. Purchaser shall be entitled to deduct and withhold any Taxes required to be deducted or withheld from payment of any amounts (or any portion thereof) payable pursuant to this Agreement, including payment of the Purchase Price. To the extent that amounts are so deducted or withheld and paid to the appropriate Taxing Authority, such deducted or withheld amounts shall be treated for all purposes of this Agreement as having been delivered

and paid to Seller or any other recipient of payment in respect of which such deduction or withholding was made.

Section 2.10 Certain Costs.

(a) All governmental filing fees associated with transferring to Purchaser or one of its Affiliates the Transferred IP Rights and the Transferred Governmental Authorizations for the Products conveyed to Purchaser hereunder shall be borne by [*****] when due, including for the avoidance of doubt, such filing fees due in connection with any notification and report form and related material required under Competition Laws; [*****]. For the avoidance of doubt, any amounts constituting Transfer Taxes shall be governed by Section 2.08, and not this Section 2.10.

(b) With respect to the return of Products that were sold or distributed from the same lot (a "Shared Lot") by or on behalf of Seller and its Affiliates on or prior to the Closing, and by or on behalf of Purchaser and its Affiliates after the Closing, the Parties shall each be financially responsible for such returns after the Closing, on a pro rata basis, based on the proportion of the Shared Lot that was sold by or on behalf of Seller or its Affiliates on or prior to the Closing, on the one hand, and the proportion of the Shared Lot, that was sold by or on behalf of Purchaser or its Affiliates after the Closing, on the other hand.

## ARTICLE III.
## CLOSING

Section 3.01 Closing.

(a) The Closing shall take place no later than three (3) Business Days after the satisfaction or waiver of the conditions precedent to Closing specified in ARTICLE VII (other than those conditions that, by their nature, cannot be satisfied until the Closing Date, but subject to their satisfaction or waiver at such time) at the offices of Ropes & Gray LLP, 1211 Avenue of the Americas, New York, NY (including any Persons connected by remote access to the Closing) or at such time and place as the Parties may mutually agree in writing. The date on which the Closing occurs is referred to as the "Closing Date." The Closing shall be deemed to occur and be effective as of 5:00 p.m. New York time on the Closing Date.

(b) At the Closing, Seller shall deliver, or cause to be delivered, to Purchaser the instruments and documents set forth on Exhibit A.

(c) At the Closing, Purchaser shall deliver to Seller (i) the Purchase Price, by wire transfer in accordance with Section 2.06, and (ii) the instruments and documents set forth on Exhibit B.

## ARTICLE IV.
## REPRESENTATIONS AND WARRANTIES OF SELLER

Seller hereby represents and warrants to Purchaser as follows:

Section 4.01 Organization. Seller is a corporation duly organized, validly existing and in good standing under the Laws of the State of Pennsylvania. Each Divesting Entity is duly organized, validly existing and, where applicable, in good standing under the Laws of the jurisdiction of its organization. Seller and each Divesting Entity is authorized to do business under the Laws of all jurisdictions in which it is required to be so authorized, except as would not, individually or in the aggregate, have a Material Adverse Effect.

Section 4.02 Authority; Binding Effect.

(a) Seller and each Divesting Entity has all requisite corporate, limited liability company or other similar organizational power and authority to own or lease and operate its properties and assets and to carry on its business, including the Business, as it is now being conducted and as it is related to the Purchased Assets. Seller has all requisite corporate, limited liability company or other similar organizational power and authority to execute and deliver this Agreement and the Ancillary Agreements, and to carry out, or to cause to be carried out, the Transactions. The execution and delivery by Seller of this Agreement and the Ancillary Agreements, and the performance by Seller and each Divesting Entity of its obligations hereunder and thereunder, have been duly authorized by all requisite corporate action on the part of Seller and such Divesting Entity.

(b) This Agreement has been duly executed and delivered by Seller and, assuming the valid execution and delivery by Purchaser, constitutes a legal, valid and binding obligation of Seller, enforceable against Seller in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

(c) Each of the Ancillary Agreements has been duly authorized by all necessary action on the part of Seller and has been, or will be at the Closing, duly executed and delivered by Seller and, assuming the valid execution and delivery by Purchaser, constitutes or will constitute a legal, valid and binding obligation of Seller, enforceable against Seller in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

Section 4.03 Non-Contravention. The execution, delivery and performance of this Agreement and the other Transaction Documents by Seller, and the consummation of the

Transactions, do not and will not, (a) conflict with or violate any provision of the certificate of incorporation or bylaws of Seller or the comparable organizational documents of any Divesting Entity; (b) subject to obtaining the consents referred to in Schedule 4.03, materially conflict with, or result in the material breach of, constitute a material default under or give rise to a right of termination, cancellation, material modification or acceleration (whether after the giving of notice or the lapse of time or both) of any right or obligation of Seller or any Divesting Entity under, or require notice or consent in order to assign to Purchaser, any Transferred Contract; (c) assuming compliance with the matters set forth in Section 4.04 and Section 5.04, materially violate or result in a material breach of, or constitute a material default under any Law or Governmental Order to which Seller or any Divesting Entity, or any of their assets or properties, is subject; or (d) result in the creation of any material Lien (other than Permitted Liens) upon any of the Purchased Assets.

Section 4.04 Governmental Authorization. Except as set forth on Schedule 4.04 or in connection with the filings required by the Competition Laws, the execution and delivery of this Agreement and the other Transaction Documents by Seller, and the consummation of the Transactions, do not require any material consent or approval of, or any material notice to or other material filing with, any Governmental Authority.

Section 4.05 No Litigation. Except as set forth on Schedule 4.05(a), no notice, notification or subpoena from, or legal or administrative arbitration, litigation, investigation or proceeding by or before any Governmental Authority, in each case relating to the Purchased Assets, the Business or the Assumed Liabilities, is pending against or, to the Knowledge of Seller, threatened against Seller or any Divesting Entity. Except as set forth in Schedule 4.05(b), neither Seller nor any Divesting Entity is a party to any corporate integrity agreement, monitoring agreement, consent decree, settlement order, deferred prosecution agreement, non-prosecution agreement, or similar agreement with or imposed by any Governmental Authority affecting the Products. This Section 4.05 does not relate to Intellectual Property, which is the subject of Section 4.09.

Section 4.06 Compliance with Laws. Except as to matters set forth in Schedule 4.06:

(a) Seller and each Divesting Entity is, and since January 1, 2015 has been, in material compliance with all Laws applicable to the ownership and use of the Purchased Assets or the operation of the Business (including the manufacture, packaging, labeling, testing, importing, distribution, wholesaling, marketing and sale of the Products); and

(b) Seller and each Divesting Entity possesses, and is, and since January 1, 2015 has been, in material compliance with, all Governmental Authorizations necessary for the conduct of the Business (including the manufacture, packaging, labeling, testing, importing, distribution, wholesaling, marketing and sale of the Products in the Territory) and for the ownership and use of the Purchased Assets, each of which is, and has at all times since January 1, 2015 been, valid and in full force and effect. Neither Seller nor

any Divesting Entity is in material default, breach or violation of any such Governmental Authorization, and neither Seller nor any Divesting Entity has received any written notice from a Governmental Authority regarding any material violation of or material failure to comply with any term or requirement of any such Governmental Authorization. To the Knowledge of Seller, no event has occurred that, with or without notice or lapse of time or both, would reasonably be expected to result in the revocation, withdrawal, suspension, cancellation, termination, lapse, material adverse modification or limitation of any such Governmental Authorization.

Section 4.07 Regulatory Matters.

(a) Schedule 4.07(a) sets forth, as of the Effective Date, a list of the Governmental Authorizations since January 1, 2015 granted to Seller or any Divesting Entity by, or pending with, any Governmental Authority in the Territory necessary to, as applicable, research, develop, test, manufacture, handle, label, package, store, supply, promote, distribute, market, import, export or sell the Products, including the Inventory.

(b) Since January 1, 2015, all Products sold under the Governmental Authorizations by or on behalf of Seller or any Divesting Entity have been researched, developed, tested, manufactured, handled, labeled, packaged, stored, supplied, promoted, distributed, marketed, imported, exported and sold in material compliance with applicable Law, including the Federal Food, Drug, and Cosmetic Act and the Canadian Food and Drugs Act, and the specifications and standards contained in such Governmental Authorizations and any other specifications and standards applicable to such Products. The Inventory is in material compliance with applicable Law and the specifications and standards contained in such Governmental Authorizations and any other specifications and standards applicable to such Inventory. Since January 1, 2015, any storage facilities used by or on behalf of Seller or any Divesting Entity to store Product, including the Inventory, materially comply with all applicable Law.

(c) Since January 1, 2015, all manufacturing operations relating to the Products, including the Inventory, conducted by or on behalf of the Seller or any Divesting Entity have been and are being conducted in material compliance with applicable provisions of current good manufacturing practice requirements as set forth in 21 U.S.C. § 351(a)(2)(B) and 21 C.F.R. Parts 210 and 211, as amended from time to time and Division 2, Part C of the Canadian Food and Drug Regulations, as amended from time to time. Except as set forth on Schedule 4.07(c), since January 1, 2015, there has not been, nor, to the Knowledge of Seller, is there currently under consideration by Seller, any Divesting Entity or any Governmental Authority, any material recall, market withdrawal or replacement, field alert, restriction, suspension, or discontinuation of manufacturing, sales or marketing, or withdrawal of a Governmental Authorization in respect of any of the Products.

(d) Except for ordinary course inquiries or as set forth on Schedule 4.07(d), since January 1, 2015, Seller or any Divesting Entity has not received, with respect to the Products, any written notice or communications from the FDA or Health Canada alleging material noncompliance with any applicable Laws or requiring, recommending or threatening to initiate any action to terminate or to suspend the sale of the Products or to place a clinical trial of the Products on hold, and Seller or any Divesting Entity is not subject to any civil, criminal, or administrative action, demand, claim, complaint, hearing, investigation, warning letter, untitled letter, request for information, or other enforcement proceeding by the FDA or Health Canada related to the Products and, to the Knowledge of Seller, no such proceedings have been threatened. To the Knowledge of Seller, there is no act, omission, event or circumstance that would reasonably be expected to give rise to or form the basis for any civil, criminal, or administrative action, demand, claim, complaint, hearing, investigation, warning letter, untitled letter, request for information, or other enforcement proceeding by the FDA or Health Canada with respect to the Products.

(e) To the Knowledge of Seller, since January 1, 2015, neither the Seller, any Divesting Entity nor any of their officers, employees, agents and contractors has made an untrue statement of material fact or fraudulent statement to the FDA or Health Canada, failed to disclose a material fact required to be disclosed to the FDA or Health Canada, or committed an act, made a statement, or failed to make a statement, including with respect to any scientific data or information, that, at the time such disclosure was made or failure to disclose occurred, would reasonably be expected to provide a basis for the FDA to invoke the FDA Application Integrity Policy respecting "Fraud, Untrue Statements of Material Facts, Bribery and Illegal Gratuities," set forth in FDA's Compliance Policy Guide Sec. 120.100 (CPG 7150.09) or any similar policy, or Health Canada to take similar action, in each case as related to the Products.

(f) Since January 1, 2015, all pre-clinical and clinical studies relating to the Products conducted by or on behalf of the Seller or any Divesting Entity have been or are being conducted in material compliance with Health Canada and the FDA's applicable Good Laboratory Practice and Good Clinical Practice requirements, including regulations at 21 C.F.R. Parts 50, 54, 56, 58, and 312, the Animal Welfare Act if applicable, Division 5, Part C of the Canadian Food and Drug Regulations, and all applicable similar and analogous Laws in other jurisdictions, and all applicable Laws relating to protection of human subjects. The Seller has not received any written notice that FDA, Health Canada, any other Governmental Authority or any institutional review board or research ethics board has recommended, initiated, or threatened to initiate any action to suspend or terminate any clinical trial sponsored by the Seller or any Divesting Entity or to otherwise restrict the preclinical research or clinical study of any Products.

Section 4.08 Contracts. Seller has made available to Purchaser true and complete copies of all Transferred Contracts (including all modifications and amendments thereto and material waivers thereunder). Except as disclosed in Schedule 4.08(a) (i) each Transferred Contract is valid and binding on Seller or the Divesting Entity that is a party thereto and, to the

Knowledge of Seller, the other party thereto, and is in full force and effect in accordance with its terms, subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law), and (ii) neither Seller nor any Divesting Entity or, to the Knowledge of Seller, any other party thereto is, or has received written notice alleging that it is, in material breach of, or material default under, any Transferred Contract, and no event has occurred that, with the giving of notice or lapse of time or both, would constitute a material breach or material default, or permit termination, modification or acceleration of any right, thereunder.

Section 4.09 Intellectual Property.

(a) Except as set forth on Schedule 4.09(a):

(i) there is no objection or claim being asserted or (to the Knowledge of Seller) threatened by, and Seller has not received any charge, complaint, claim, demand or notice from, any Person or Governmental Authority with respect to the ownership, use, enforceability, registrability or validity of any the Transferred IP Rights;

(ii) all Transferred IP Rights are subsisting, in good standing, have not expired or been cancelled or abandoned, and to the Knowledge of Seller, valid;

(iii) Seller or one or more of the Divesting Entities is and, at the Closing, Seller or one or more of the Divesting Entities will be, the sole and exclusive owner of all Transferred IP Rights, free and clear of any exclusive licenses and Liens other than Permitted Liens;

(iv) to the Knowledge of Seller, no Person is infringing or misappropriating, or has infringed or misappropriated, any of the Transferred IP Rights;

(v) there are no claims pending or threatened by Seller or any of its Affiliates against any Person, nor has Seller or any of its Affiliates sent any written notice to any Person, regarding or in connection with actual or potential infringement, dilution, misappropriation or other unauthorized use of any Transferred IP Rights in the Territory;

(vi) none of the Transferred IP Rights are subject to any proceeding, order, ruling, decision, injunction or other similar determination or finding by any Governmental Authority, arbitrator or mediator restricting or that could restrict in any manner the use or licensing thereof by or any right of Seller or any of the Divesting Entities in any Transferred IP Right; and

(vii) Seller has not received any written or (to the Knowledge of Seller) other offer of a license or any charge, complaint, claim, demand or notice, in any such case alleging or implying that the design, development, commercialization, manufacture, use, packaging, labeling, display, marketing, distribution or sale or other disposition of any Products or any Transferred IP Rights infringes, misappropriates or violates the Intellectual Property rights of any third party.

(b) Except as set forth on Schedule 4.09(b):

(i) Seller has not received notice and has no Knowledge that any of Licensed IP Rights (other than Know How) have been rendered invalid or unenforceable or are subject to any outstanding order, judgment or decree restricting or that could restrict in any manner the use or licensing thereof by or any right of Seller;

(ii) Seller has not received notice and has no Knowledge that there is any claim, action, suit or proceeding being asserted by any Person, or threats thereof, with respect to the ownership, enforceability, or validity of any of such Licensed IP Rights;

(iii) Seller or one or more of the Divesting Entities is and, at the Closing, Seller or one or more of the Divesting Entities will be, the holder of a valid license under the Licensed IP Rights, free and clear of any exclusive licenses and Liens other than Permitted Liens;

(iv) Seller has not received notice and has no Knowledge that any of the Know How included in Licensed IP Rights is subject to any outstanding order, judgment or decree restricting or that could restrict in any manner the use or licensing thereof by or any right of Seller;

(v) Seller has not received notice and has no Knowledge that there is any claim, action, suit or proceeding being asserted by any Person, or threats thereof, with respect to the ownership of any of such Know How; and

(vi) there are no claims pending or threatened by Seller or any of its Affiliates against any Person, nor has Seller or any of its Affiliates sent any written notice to any Person, regarding or in connection with actual or potential infringement, dilution, misappropriation or other unauthorized use of any Licensed IP Rights in the Territory.

(c) Each Transferred IP Right that is the subject of an application, certificate, filing, registration or other document issued by, filed with or recorded by any Governmental Authority at any time that is owned, held or filed by or filed in the name of Seller or any Divesting Entity is subsisting, and to the Knowledge of Seller, valid, in good

standing and enforceable. All necessary registration, maintenance and renewal fees currently due and owing in connection with the Transferred IP Rights have been paid and all necessary documents, recordations and certifications in connection with the Transferred IP Rights have been filed with the relevant United States, Canadian or foreign patent, copyright or trademark authority or other Governmental Authorities, as the case may be, for the purposes of maintaining ownership of or rights to such Transferred IP Rights and recording ownership by the Seller or the applicable Divesting Entity of such Transferred IP Rights.

(d) The Transferred IP Rights, together with Licensed IP Rights, comprise all Intellectual Property used by Seller to design, develop, commercialize, manufacture, package, label, display, market, distribute or sell or otherwise dispose of any Product in the Territory, provided that this sentence shall not be construed as relating to the infringement, misappropriation, dilution or violation of the Intellectual Property of any Person. Each item of the Transferred IP Rights and Licensed IP Rights will be owned, licensed or held and available for use on identical terms following the consummation of the transactions contemplated hereby as such item was owned, licensed or held and available for use to the Seller or any Divesting Entity prior to the consummation of the transactions contemplated hereby, and none of the execution, delivery or performance by the Seller or the consummation of any transactions contemplated hereby shall result in the loss or impairment of, or give rise to any right of a third party to terminate, any rights of the Seller or any Divesting Entity in any of the Transferred IP Rights.

(e) Schedule 4.09(e) lists all licenses of, options to or covenants not to sue or assert with respect to, any Transferred IP Rights by the Seller or any Divesting Entity to any third party or any other instruments or other arrangements to which the Seller or any Divesting Entity is a party, pursuant to which any third party has obtained any right, title or interest in or to any Transferred IP Rights. With respect to each agreement listed on Schedule 4.09(e), (i) Seller has made available to the Purchaser correct and complete copies of all such agreements (as amended to date), (ii) the agreement was duly authorized, executed and delivered by or on behalf of Seller and each other party thereto, (iii) none of Seller or any other party is in material breach or default of, or has repudiated, any provision of any such agreement, and (iv) to the Knowledge of Seller, no other party is in material breach of default of, or has repudiated, any provision of such agreement.

(f) Except as set forth on Schedule 4.09(f), Seller has required each employee, agent, consultant and other Person employed or engaged by Seller or any Divesting Entity who contributed to the discovery or development of any Transferred IP Rights for or on behalf of Seller or such Divesting Entity to execute a written and enforceable instrument of assignment in favor of Seller or such Divesting Entity as assignee that assigns to Seller or such Divesting Entity full and exclusive ownership of all such Transferred IP Rights.

(g) Except as set forth in Schedule 4.09(g), there are no royalties, fees (including registration, maintenance and renewal fees), honoraria or other payments

payable by Seller or any Divesting Entity to any Person by reason of the ownership, development, modification, use, license, sublicense, sale or other disposition of any Transferred IP Rights.

Section 4.10 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Seller or any of the Divesting Entities.

Section 4.11 Purchased Assets. The Seller and Divesting Entities validly own, lease or have the legal right to use all of the Purchased Assets. The Seller and Divesting Entities have good title to all the Purchased Assets, and have the right to transfer or assign (or cause to be transferred or assigned), in accordance with the terms of this Agreement, such right and title to the Purchased Assets, in each case free and clear of all Liens, except for Permitted Liens. Except for Seller and the Divesting Entities, no Person has any right, title or interest in, to or under the Purchased Assets.

Section 4.12 Financial Information. The Net Sales for the Products, which are unaudited and were prepared using consistent presentation from the books and records of Seller and the Divesting Entities, for the Fiscal Years ended January 3, 2016 and January 1, 2017 and December 31, 2017 are [*****], respectively in U.S. Dollars.

Section 4.13 Inventories. The Inventories are of a quality and quantity useable and saleable in the ordinary course of business and constitute sufficient quantities, in all material respects, for the normal operation of the Business in accordance with past practice of the Business. None of the Inventory is held on consignment by third parties. The manufacturing, ordering, procurement and distribution of Inventories has been conducted by Seller with respect to the Business in the ordinary course of business consistent with past practice during the twelve (12) months preceding the Closing.

Section 4.14 Customers. As of the date hereof, none of the ten (10) largest customers of the Business (measured by dollar volume of purchases or sales, in each case during the Fiscal Year ended January 1, 2017 and the nine-month period ended September 30, 2017) has terminated its relationship with Seller or its applicable Affiliate or engaged in any material dispute with Seller or its applicable Affiliate and no such customer has notified Seller or any Divesting Entity of any such dispute.

Section 4.15 Absence of Certain Developments. Since January 1, 2017, the Purchased Assets and the Business have been operated in the ordinary course of business consistent with past practice.

Section 4.16 Exclusivity of Representations. The representations and warranties made by Seller in this Agreement and the Ancillary Agreements and in the Schedules and Exhibits delivered pursuant hereto and thereto are the exclusive representations and warranties made by Seller with respect to Seller and the Divesting Entities, including the Business, the Products and the

Purchased Assets. Seller hereby disclaims any other express or implied representations or warranties with respect to itself or any of the Divesting Entities, including the Business, the Products and the Purchased Assets. It is understood that any materials made available to Purchaser or its Affiliates do not, directly or indirectly, and shall not be deemed to, directly or indirectly, contain representations or warranties of Seller, the Divesting Entities or their respective Affiliates except as expressly provided in this Agreement or the Ancillary Agreements and in the Schedules and Exhibits delivered pursuant hereto or thereto.

## ARTICLE V.
## REPRESENTATIONS AND WARRANTIES OF PURCHASER

Purchaser hereby represents and warrants to Seller as follows:

Section 5.01 Organization. Purchaser is a corporation incorporated under the laws of Delaware duly organized, validly existing and in good standing under the Laws of Delaware. Purchaser is authorized to do business under the Laws of all jurisdictions in which it is required to be so authorized, except as would not, individually or in the aggregate, have a material and adverse effect on the ability of Purchaser to consummate the Transactions (a "Purchaser Material Adverse Effect").

Section 5.02 Authority; Binding Effect.

(a) Purchaser has all requisite power and authority to own or lease and operate its properties and assets, to carry on its business as it is now being conducted and to execute and deliver this Agreement and the Ancillary Agreements, and to carry out or cause to be carried out, the Transactions. The execution and delivery by Purchaser of this Agreement and the Ancillary Agreements, and the performance by Purchaser of its obligations hereunder and thereunder, have been duly authorized by all requisite corporate action on the part of Purchaser. No approval of Purchaser's shareholders is necessary for Purchaser to execute and deliver this Agreement or any Ancillary Agreements or perform the Transactions.

(b) This Agreement has been duly executed and delivered by Purchaser and, assuming the valid execution and delivery by Seller, constitutes a legal, valid and binding obligation of Purchaser, enforceable against Purchaser in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

(c) Each of the Ancillary Agreements has been duly authorized by all necessary action on the part of Purchaser and has been, or will be at the Closing, duly executed and delivered by Purchaser and, assuming the valid execution and delivery by Seller, constitutes or will constitute a legal, valid and binding obligation of Purchaser, enforceable

against Purchaser in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

Section 5.03 Non-Contravention. The execution, delivery and performance by Purchaser of this Agreement and the other Transaction Documents, and the consummation of the Transactions, do not and will not (a) conflict with or violate any provision of the certificate of incorporation, bylaws or other organizational documents of Purchaser; (b) conflict with, or result in a material breach of, constitute a material default under or give rise to a right of termination, cancellation, material modification, acceleration (whether after the giving of notice or the lapse of time or both) of any right or obligation of Purchaser under, or require consent under, any Contract to which Purchaser is a party or to which its properties or assets are subject; or (c) assuming compliance with the matters set forth in Section 4.04 and Section 5.04, materially violate or result in a material breach of or constitute a material default under any Law or Governmental Order to which Purchaser, or any of its assets or properties, is subject.

Section 5.04 Governmental Authorization. Except as set forth on Schedule 5.04 or in connection with the filings required by the Competition Laws, the execution and delivery of this Agreement and the other Transaction Documents by Purchaser, and the consummation of the Transactions, do not require any material consent or approval of, or any material notice to or other material filing with, any Governmental Authority.

Section 5.05 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Purchaser or any of its Affiliates.

Section 5.06 Financial Capability. Purchaser affirms that it is not required to obtain financing for or related to any of the Transactions, nor is it a condition to the Closing or to any of its other obligations under this Agreement that it obtain financing. Purchaser has, or has unconditional access to, sufficient cash to pay the Purchase Price on the terms and conditions contemplated by this Agreement.

Section 5.07 Solvency. As of the Effective Date, after giving effect to all of the Transactions contemplated by this Agreement, including without limitation the payment of the Purchase Price, and assuming for these purposes the satisfaction of the conditions set forth in Section 7.01, as of the Effective Date, the Purchaser shall be Solvent. For the purposes of this Section 5.07, the term "Solvent" when used with respect to any Person, means that, as of any date of determination, (a) the "fair saleable value" of the assets of such Person will, as of such date, exceed (i) the value of all "liabilities of such Person, including contingent and other liabilities," as of such date, as such quoted terms are generally determined in accordance with applicable federal laws governing determinations of the insolvency of debtors, and (ii) the amount that will be required to pay the probable liabilities of such Person on its existing debts (including contingent liabilities) as such debts become absolute and matured, (b) such Person will not have,

as of such date, unreasonably small capital for the operation of the businesses in which it is engaged or proposed to be engaged following such date and (c) such Person will be able to pay its liabilities, including contingent and other liabilities, as they mature.

## ARTICLE VI.
## COVENANTS

Section 6.01 Conduct of Business.

(a) From the Effective Date to the Closing Date, except as otherwise required by this Agreement or consented to by Purchaser in writing (which consent shall not be unreasonably withheld, conditioned or delayed), Seller shall (and shall cause each Divesting Entity to):

(i) operate the Business in the ordinary course consistent with past practice and use reasonable best efforts to preserve the business relationships of the Business in all material respects; and

(ii) maintain in effect all Transferred IP Rights and applications and registrations included in Transferred IP Rights.

(b) Except as set forth in Schedule 6.01(b), as required by applicable Law or as otherwise required by this Agreement, Seller shall not, and shall not permit any Affiliate or Divesting Entity, without the prior written consent of Purchaser (which consent shall not be unreasonably withheld, conditioned or delayed):

(i) pledge, sell, lease, transfer, license, assign or otherwise make subject to a Lien (other than any Permitted Liens) any material Purchased Asset;

(ii) commence, waive or settle any material claims, litigation, proceedings or arbitrations or rights of material value that relate primarily to the Business or the Purchased Assets;

(iii) transfer, assign or grant any license or sublicense of any material rights under or with respect to Transferred IP Rights, to the extent it is able, outside the ordinary course of business;

(iv) make any material change in any of its present financial accounting methods and practices in a manner impacting the Purchased Assets or the Business other than changes in the ordinary course of business that apply to Seller's businesses generally and other than as may be appropriate to conform to changes in GAAP or as may be required by applicable Law;

(v) create or allow the Business to create, incur, assume or guarantee any indebtedness for borrowed money;

(vi) enter into any distribution, joint venture, strategic alliance or joint marketing or any similar arrangement or agreement that relates to the Business or any Purchased Asset, other than in the ordinary course of business;

(vii) (A) terminate any Transferred Contract or any Contract that provides for the distribution of Products pursuant to which Seller or any Divesting Entity reasonably expects to receive annual revenue in excess of [*****] (a "Material Distribution Contract") or (B) enter into a new Contract that would be a Transferred Contract if entered into prior to the date hereof or a new Material Distribution Contract, in each case other than in the ordinary course of business and except for renewals or terminations in accordance with the terms of any Transferred Contract or Material Distribution Contract, as applicable;

(viii) modify in any material respect any payment terms with any customers or suppliers pursuant to any Transferred Contract or Material Distribution Contract, other than changes in the ordinary course of business as may be initiated by Seller with respect to its applicable businesses generally;

(ix) fail to maintain all existing insurance policies of the Business or related to the Purchased Assets;

(x) other than in the ordinary course of business, (A) delay or postpone in any material respect any payment of Accounts Payable or other Liabilities, (B) accelerate any collection of Accounts Receivable or (C) engage in any practice that could reasonably be considered "channel stuffing" or "trade loading";

(xi) except in the ordinary course of business, consistent with past practice, offer any rebates, discounts, promotions or credits, make any change to any promotional programs or make any change in the manner in Seller or its Affiliates generally extend rebates, discounts or credit to, or otherwise similarly deal with, customers with respect to the Business; or

(xii) agree, whether in writing or otherwise, to do any of the foregoing.

(c) Notwithstanding the foregoing, nothing herein prevents Seller or any of its Affiliates from taking actions, including (i) contributions, transfers, assignments and acceptances of assets and liabilities; (ii) the repayment of indebtedness and the extinguishment of Liens; and (iii) the cancellation of any intercompany contracts and any other agreements that will not constitute Transferred Contracts, in each case in order to facilitate the consummation of the Transactions and the Ancillary Agreements; provided, that any Liability resulting for any of the foregoing will be a Retained Liability.

Section 6.02 No Undue Interference. From the Effective Date to the Closing Date, except as otherwise permitted by this Agreement or consented to by Seller in writing,

Purchaser shall not interfere with the Purchased Assets or the Business in any inappropriate or undue manner that would violate applicable Law.

Section 6.03 Condition of the Purchased Assets. Any claims Purchaser may have for breach of representation or warranty will be based solely on the representations and warranties of Seller or the Divesting Entities expressly set forth in this Agreement and the Schedules and Exhibits delivered pursuant hereto and in the Transaction Documents. In furtherance of the foregoing, **PURCHASER AGREES THAT THE REPRESENTATIONS AND WARRANTIES GIVEN HEREIN AND IN THE TRANSACTION DOCUMENTS BY SELLER ARE IN LIEU OF, AND, PURCHASER HEREBY EXPRESSLY WAIVES ALL RIGHTS TO, ANY IMPLIED WARRANTIES THAT MAY OTHERWISE BE APPLICABLE BECAUSE OF THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY OTHER LAWS, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Section 6.04 [*****].

Section 6.05 Disclosure.

(a) From the date hereof until the Closing, Seller shall promptly notify Purchaser in writing of:

(i) any notice received by Seller from any Person alleging that the consent of such Person is or may be required in connection with the Transactions;

(ii) any notice received by Seller of any material default under any Transferred Contract; and

(iii) any notice received by Seller from any Governmental Authority in connection with the Transactions contemplated by this Agreement.

(b) Purchaser's receipt of information pursuant to this Section 6.05 shall not operate as a waiver or otherwise affect any representation, warranty or agreement given or made by Seller in this Agreement and shall not be deemed to amend or supplement the Schedules.

Section 6.06 Publicity. No Party to this Agreement shall originate any publicity, news release or other public announcement, written or oral, whether relating to this Agreement or any of the other Transaction Documents or the existence of any arrangement between the Parties, without the prior written consent, such consent not to be unreasonably withheld, conditioned or delayed, of the other Party (whether such other Party is named in such publicity, news release or other public announcement or not), except (x) where such publicity, news release or other public announcement is required by Law or any listing or trading agreement concerning its publicly traded securities, or (y) to the extent the contents of such publicity, news release or other similar public announcement have previously been released publicly or are consistent in all

material respects with materials that have previously been released (without violation of this Section 6.06); provided that, in such event under clause (x), the Party issuing the same shall still be required to consult with the other Party (whether such other Party is named in such publicity, news release or public announcement or not) at a reasonable time prior to its release (to the extent practicable) to allow the other Party to comment thereon and, after its release, shall provide the other Party with a copy thereof. If Purchaser, based on the advice of its counsel, determines that this Agreement, or any of the other Transaction Documents, must be filed with the United States Securities and Exchange Commission ("SEC") or any other similar Governmental Authority within the Territory, then Purchaser, prior to making any such filing, shall provide Seller and its counsel with a redacted version of this Agreement (and any other Transaction Document) which it intends to file and any draft correspondence with the SEC (or such other Governmental Authority within the Territory, as applicable) requesting the confidential treatment by the SEC (or such other Governmental Authority within the Territory, as applicable) of those redacted sections of the Agreement, and will give due consideration to any comments provided by Seller or its counsel and use commercially reasonable efforts to ensure the confidential treatment by the SEC (or such other Governmental Authority within the Territory, as applicable) of those sections specified by Seller or its counsel.

Section 6.07 Efforts; Regulatory Approvals. Subject to any obligation imposed by Law, including all Competition Laws:

(a) Subject to the terms and conditions of this Agreement, each of Seller and Purchaser shall cooperate, and shall use its reasonable best efforts, to (i) take, or cause to be taken, all actions and (ii) do, or cause to be done, all things necessary for it to do, under applicable Laws to consummate and make effective the Transactions, including all actions and all things necessary for it to (A) comply promptly with all legal requirements which may be imposed on it with respect to this Agreement and the Transactions (which actions shall include promptly furnishing all information required by applicable Law in connection with approvals of or filings with any Governmental Authority), (B) satisfy the conditions precedent to the obligations of such Party hereto and (C) obtain any consent, authorization, order or approval of, or any exemption by, any Governmental Authority or other public or private third party required to be obtained or made by Seller or Purchaser in connection with the Transactions, in each case, as soon as reasonably practicable following the Effective Date; provided, however, that Seller shall have no obligation to pay money or make any concessions to obtain such consents. Subject to appropriate confidentiality protections, each Party will furnish to the other Party such necessary information and reasonable assistance as such other Party may reasonably request in connection with the foregoing. In addition, Purchaser agrees, subject to any overriding obligations of confidentiality, to provide such evidence as to financial capability, resources and creditworthiness as may be reasonably requested by any third party whose consent or approval is sought hereunder.

(b) Subject to applicable Law relating to the exchange of information, Purchaser and Seller and their respective counsel shall (i) have the right to review in

advance and, to the extent practicable, consult the other on, any filing made with, or written materials to be submitted to, any Governmental Authority in connection with the Transactions; (ii) promptly inform each other of any communication (or other correspondence or memoranda) received from, or given to, the U.S. Department of Justice, the U.S. Federal Trade Commission, Investment Canada, the Canadian Competition Bureau or any other Governmental Authority in connection with the Transactions; (iii) consult with the other Party, and consider in good faith the views of the other Party, prior to entering into any agreement with any Governmental Authority with respect to the Transactions; and (iv) furnish each other with copies of all correspondence, filings and written communications between them, or their respective counsel or Affiliates, on the one hand, and any Governmental Authority or its respective staff, on the other hand, with respect to the Transactions. Purchaser and Seller shall, to the extent practicable, provide each other and their respective counsel with advance notice of and the opportunity to participate in any discussion, telephone call or meeting with any Governmental Authority in respect of any filing, investigation or other inquiry in connection with the Transactions and to participate in the preparation for such discussion, telephone call or meeting.

(c) Purchaser and Seller shall file any notification and report form and related material required under the HSR Act, the Competition Act and the Investment Canada Act, (R.S.C., 1985, c. 28), and any additional filings required under any other Competition Laws, as soon as practicable after the Effective Date. Purchaser and Seller shall promptly file any additional information properly requested by any competent Governmental Authority whose consent, authorization, order or approval is required in connection with the Transactions as soon as practical after receipt of any proper request for additional information. The Parties shall use their reasonable best efforts to obtain early termination of the applicable waiting period, to the extent required, from the applicable Governmental Authority. The Parties shall also use the reasonable best efforts to cooperate by providing information reasonably requested by the other Party in order to fulfill the foregoing obligations.

(d) Purchaser shall, to the extent necessary to obtain the waiver or consent from any Governmental Authority required to satisfy the conditions set forth in Section 7.02(f) and Section 7.01(f), as applicable, or to avoid the entry of or have lifted, vacated or terminated any Closing Legal Impediment, take the following actions to the extent it would be commercially reasonable to do so: (i) propose, negotiate, offer to commit and effect (and if such offer is accepted, commit to and effect), by consent decree, hold separate order or otherwise, the sale, divestiture or disposition (including by licensing any Intellectual Property rights) of any Purchased Assets or any other assets or businesses of Purchaser or any of its Affiliates (or equity interests held by Purchaser or any of its Affiliates in entities with assets or businesses); (ii) terminate any existing relationships and contractual rights and obligations; (iii) otherwise offer to take or offer to commit to take any action which it is capable of taking and, if the offer is accepted, take or commit to take such action, that limits its freedom of action with respect to, or its ability to retain, any of the Purchased Assets or any other assets or businesses of Purchaser or any of its Affiliates (or equity

interests held by Purchaser or any of its Affiliates in entities with assets or businesses); and (iv) take promptly, in the event that any permanent or preliminary injunction or other order is entered or becomes reasonably foreseeable to be entered in any proceeding that would make consummation of the Transactions unlawful or that would prevent or delay consummation of the Transactions, any and all steps (including the appeal thereof, the posting of a bond or the taking of the steps contemplated by clauses (i) and (ii) of this Section 6.07(d)) necessary to vacate, modify or suspend such injunction or order. For the avoidance of doubt, Purchaser's obligations under this Section 6.07(d) shall be qualified or limited by what may be considered commercially reasonable and, in any case and notwithstanding the foregoing, nothing in this Agreement shall be construed to require Purchaser or any of its Affiliates to take any action or do anything if the taking of such action or doing of such thing, individually or in the aggregate, would reasonably be expected to result in a material adverse effect on Purchaser or its Affiliates after giving effect to the Transactions (measured on a scale relative to a company the size of the Business).

(e) To assist Purchaser in complying with its obligations set forth in this Section 6.07, Seller shall, and shall cause its Affiliates to, enter into one or more agreements reasonably requested by Purchaser to be entered into by any of them prior to the Closing with respect to any of the matters contemplated by clauses (i) and (ii) of Section 6.07(d); provided, however, that (i) such agreement shall relate exclusively to the Purchased Assets, (ii) the effectiveness of such agreement(s) shall be conditioned on the occurrence of the Closing, (iii) all rights and obligations of Seller and its Affiliates pursuant to such agreement(s) shall be assumed by Purchaser effective at the Closing and (iv) Purchaser shall indemnify and hold Seller and the other Seller Indemnitees harmless from all Losses arising from or relating to any such agreement(s), it being the intent of the Parties that Seller and its Affiliates and Purchaser and its Affiliates shall be treated as if any such transaction was effected for the account of Purchaser and its Affiliates.

Section 6.08 Access. Seller shall give Purchaser and its Representatives reasonable access, during normal business hours and without undue interruption of Seller's business throughout the period prior to the Closing, to all of the key personnel of the Business and the properties, books and records (other than records relating to income Taxes and attorney-client privileged communications and, for the avoidance of doubt, other than where access to such information is prohibited by applicable Law) to the extent relating to the Business or the Purchased Assets, and will furnish, at Purchaser's expense, Purchaser and its Representatives during such period all such information (other than records relating to income Taxes and attorney-client privileged communications and, for the avoidance of doubt, other than where access to such information is prohibited by applicable Law) concerning the affairs of the Business or the Purchased Assets as Purchaser may reasonably request; provided that this Section 6.08 shall not entitle Purchaser or its Representatives to contact any third party doing business with Seller, or access the properties, books or records of any such third party or of Seller or its Affiliates, to the extent related to any business of the Seller or its Affiliates other than the Business, in each case without Seller's prior written consent (which consent shall not be unreasonably withheld, delayed

or conditioned); provided, that in the event any such books or records or information is subject to attorney-client privilege or such access is prohibited by Law, Seller will use commercially reasonable efforts to provide access to the information in a manner that would not violate such privilege or Law. Purchaser will hold in confidence all information so obtained.

Section 6.09 Books and Records; Regulatory Information. Seller shall transfer to Purchaser on the Closing Date (or as soon as reasonably practicable after the Closing Date) the Business Books and Records and the Regulatory Information and, to the extent that Seller is unable to transfer any such Business Books and Records and Regulatory Information on the Closing Date, Seller shall use commercially reasonable efforts to deliver all such Business Books and Records and Regulatory Information to Purchaser (x) with respect to any such Business Books and Records and Regulatory Information that are in hard copy format, within ninety (90) days following the Closing Date and (y) with respect to any such Business Books and Records and/or Regulatory Information that are in an electronic format, within ninety (90) days following the date on which Purchaser has established systems that are compatible with the relevant electronic format to facilitate such delivery. Seller may transfer copies or originals of the Business Books and Records and Regulatory Information at its election. Notwithstanding anything to the contrary in this Agreement, Seller may retain a copy of all such Business Books and Records to the extent necessary for regulatory, tax, accounting, or litigation purposes or as otherwise required by Law or Seller's or its Affiliates' internal policies for record-keeping purposes.

Section 6.10 Ancillary Agreements. At the Closing, Purchaser and Seller (or their Affiliates, respectively) shall enter into, execute and deliver (a) the U.S. market transition services agreement, substantially in the form attached as Exhibit D (the "U.S. Market Transition Services Agreement"); (b) the Canadian transitional business license agreement, substantially in the form attached as Exhibit E (the "Canadian Transitional Business License Agreement", together with the U.S. Market Transition Services Agreement, the "Transition Agreements"); (c) the quality agreement, in a form reasonably acceptable to Seller and Purchaser (the "Quality Agreement"); (d) a long-term collaboration agreement to be negotiated in good faith by Seller and Purchaser based off of the draft attached as Exhibit F (the "Long Term Collaboration Agreement"); (e) the bill of sale and assignment and assumption agreement substantially in the form attached hereto as Exhibit G (the "Bill of Sale and Assignment and Assumption Agreement"); and (f) the trademark assignment in substantially the form attached hereto as Exhibit H (the "Trademark Assignment", together with the Transition Agreements, the Quality Agreement, the Long Term Collaboration Agreement and the Bill of Sale and Assignment and Assumption Agreement, the "Ancillary Agreements").

Section 6.11 Regulatory Matters.

(a) Transfer of Governmental Authorizations. Within [*****] of Closing, Purchaser shall file (or ensure its Affiliate or third party distributor files) with Health Canada an application for a drug establishment license or an application to amend its drug establishment license to add the applicable foreign site(s) to enable it to import the Products and within [*****] of Closing, file (or ensure its Affiliate or third party distributor files)

the administrative new drug submission with Health Canada to transfer the Governmental Authorizations to it. On the Closing Date, each Party shall execute and deliver to the FDA the U.S. Transfer Letters and to other appropriate Governmental Authorities in the Territory such documents and instruments of conveyance as necessary and sufficient to effectuate the transfer of each Transferred Governmental Authorization in the United States to Purchaser under applicable Law on the Closing Date or as soon as possible if the Transferred Governmental Authorizations are assigned after the Closing. On the Closing Date, the Seller Transfer Letter to Health Canada shall be delivered by the Seller to the Purchaser.

(b) Governmental Authority Contacts. Purchaser and Seller shall promptly give written notice to the other upon becoming aware of any action by, or notification or other information which it receives (directly or indirectly) from, any Governmental Authority in the Territory (together with copies of correspondence related thereto), which (i) raises any material concerns regarding the safety or efficacy of the Products, (ii) indicates or suggests a reasonably likely potential material liability for either Party to third parties arising in connection with the Products, or (iii) indicates a reasonable potential for a need to initiate a recall, market withdrawal or similar action; in each case with respect to the Products sold by Seller prior to Closing or Products sold by Purchaser using any of the Seller Names.

(c) Product Complaints and Adverse Drug Reactions; Pharmacovigilance Agreement.

(i) From and after the Closing, Purchaser shall be responsible for responding to any complaint or adverse drug reaction regarding the Products that is received by either Purchaser or Seller on or after the Closing from any source (provided that Seller shall promptly convey such product complaints or adverse drug reactions to Purchaser, if such complaint or adverse drug reaction information is received solely by Seller) and for investigating and analyzing such complaint or reaction, as required by applicable Law, and making required reports to the FDA and Health Canada as applicable, regardless of whether the Products involved were sold by Seller or Purchaser.

(ii) [*****], or as soon as reasonably practicable, following the Closing Date, the Parties shall negotiate in good faith and use reasonable best efforts to enter into a pharmacovigilance agreement with respect to the Products, on terms conforming with Seller's practices and procedures for such agreements and customary industry practices and procedures.

Section 6.12 NDC and DIN Numbers; Commercial Rebates and Chargebacks.

(a) Following the Closing, Purchaser shall obtain its own NDC numbers for the Products. On the Closing Date, the Seller Transfer Letter to Health Canada delivered by

Seller to Purchaser shall permit the transfer of Seller's DIN numbers for the Products to Purchaser.

(b) Purchaser shall use commercially reasonable efforts to have in place as soon as reasonably practicable after the Closing all authorizations from Governmental Authorities necessary for Purchaser to use such NDC and DIN numbers for the Products. Thereafter, Purchaser shall use its new NDC numbers on all invoices, orders and other communications with customers and Governmental Authorities.

(c) Commercial Rebates. Notwithstanding anything to the contrary in this Agreement, [*****] shall be responsible for (i) all commercial rebates with respect to Products sold or distributed prior to [*****] ("Commercial Rebates"); provided, that claims for such Commercial Rebates are received [*****]. [*****] shall be responsible for all Commercial Rebates claimed following [*****]; provided, that, in the event [*****].

(d) Chargeback Claims. Notwithstanding anything to the contrary in this Agreement, [*****] shall be financially and legally responsible for [*****] chargeback claims related to Products sold or distributed prior to [*****] ("Chargeback Claims"); provided, that claims for such Chargeback Claims are received [*****].[*****] shall process and bear all responsibility (including, without limitation, financial and legal responsibility) for all Chargeback Claims claimed after [*****]; provided, that, in the event [*****].

Section 6.13 Purchaser Use of Seller Names.

(a) During the period commencing on the Closing Date and ending [*****] (the "Limited License Period"), Seller grants, and shall cause its Affiliates to grant, to Purchaser and its Affiliates a limited, non-exclusive, royalty-free right and license, to the extent permitted by Law, to use the Seller Names solely for the purpose of utilizing the labels and packaging, and advertising, marketing, sales and promotional materials, for the Products in the Territory.

(b) Promptly upon the expiration of the Limited License Period, Purchaser shall, and shall cause its Affiliates to, destroy and dispose of all labels and packaging, and all advertising, marketing, sales and promotional materials, in each case in its possession or subject to its control, bearing any Seller Names; provided, however, that the expiration of the Limited License Period shall not restrict Purchaser and its Affiliates from selling the Inventories or any finished goods inventory of Product acquired by Purchaser after the Limited License Period, in accordance with the Transition Agreements.

(c) In no event shall Purchaser or any of its Affiliates (i) use any Seller Names in any manner or for any purpose substantially different from the use of such Seller Names by Seller and its Affiliates immediately prior to the Closing Date to market, distribute, sell

or otherwise commercialize the Products in the Territory or (ii) manufacture or produce, or cause or permit any third party to manufacture or produce, any new labels, packaging or advertising, marketing, sales and promotional materials using or otherwise incorporating any Seller Names in any manner.

(d) The quality of the acquired Inventories and finished goods inventory of Products sold by Purchaser under any Seller Names must be of a sufficiently high quality to be generally comparable to the quality of the Products sold by Seller prior to the Closing Date. At the reasonable request of Seller, Purchaser will send Seller samples of such Inventories or finished goods inventory of Products. In the event Purchaser materially breaches this Section 6.13(d) and fails to cure such breach within sixty (60) days after Seller notifies Purchaser in writing of such breach, Seller may terminate the license to such Seller Names under Section 6.13(a) by delivery to Purchaser of a written notice of termination. If Purchaser disputes in good faith the existence or materiality of an alleged breach specified in a notice provided by Seller pursuant to this Section 6.13(d), and provides notice to Seller of such dispute within the sixty (60) day period following the date that Seller notified Purchaser of the breach, Purchaser will not have the right to terminate the license to such Seller Names unless and until the existence of such material breach has been finally determined in accordance with the dispute resolution provisions of Section 10.11 and Purchaser fails to cure such breach within twenty (20) days following such determination.

(e) Purchaser hereby agrees to indemnify Seller and the other Seller Indemnitees from and against any and all Losses incurred or suffered in connection with, or resulting from, use of any Seller Names by Purchaser or any of its Affiliates (or any third party acting on behalf of Purchaser or any of its Affiliates) permitted under this Section 6.13.

Section 6.14 Further Assurances. From time to time after the Closing, and for no further consideration (other than reimbursement for out-of-pocket expenses incurred in packing or shipping any Purchased Asset), each of the Parties shall, and shall cause its Affiliates to, execute, acknowledge and deliver such assignments, transfers, consents, assumptions and other documents and instruments and take such other commercially reasonable actions as may reasonably be requested to more effectively assign, convey or transfer to or vest in: (a) Purchaser and its designated Affiliates, all rights, title and interests in, to and under the Purchased Assets and the Assumed Liabilities contemplated by this Agreement to be transferred or assumed at the Closing and (b) Seller, any rights, title or interests in, to or under any Excluded Asset that may have been transferred to Purchaser at Closing.

Section 6.15 Bulk Transfer Laws. Purchaser acknowledges that Seller and its Affiliates have not taken, and do not intend to take, any action required to comply with any applicable bulk sale or bulk transfer Laws or similar Laws. Each of Purchaser and Seller hereby waives compliance with the provisions of any bulk sale or bulk transfer Laws or similar Laws of

any jurisdiction in connection with the Transactions, and Seller shall indemnify and hold harmless Purchaser and its Affiliates for any losses arising out of any such non-compliance.

Section 6.16 Right of Reference. Effective as of the Closing:

(a) Purchaser hereby grants to Seller and its Affiliates, solely for use in connection with the Excluded Products outside the Territory, a right of reference to any data generated pursuant to any clinical trial authorized to be conducted under any Transferred Governmental Authorization. Purchaser shall provide a signed statement to this effect, if requested by Seller, in accordance with 21 C.F.R. § 314.50(g)(3) or otherwise provide appropriate notification of such right of Seller to the FDA, Health Canada or other Governmental Authority.

(b) Seller hereby grants, and shall cause its Affiliates to grant, to Purchaser and its Affiliates, solely for use in connection with the Products in the Territory, a right of reference to any regulatory information or data filed with any Governmental Authority with respect to the Excluded Products, including any data generated pursuant to any clinical trial authorized to be conducted with respect to the Excluded Products. Seller or its Affiliate shall provide a signed statement to this effect, if requested by Purchaser, in accordance with 21 C.F.R. § 314.50(g)(3) or otherwise provide appropriate notification of such right of Seller to the FDA, Health Canada or other Governmental Authority.

Section 6.17 Insurance. As of the Closing Date, the coverage under all insurance policies of Seller and its Affiliates shall continue in force only for the benefit of the Seller and its Affiliates, and not for the benefit of Purchaser or any of its Representatives. As of the Closing Date, Purchaser agrees to arrange for its own insurance policies with respect to the Purchased Assets covering all periods following the Closing and, without prejudice to any right to indemnification pursuant to this Agreement or any other Transaction Document, agrees not to seek, through any means, to benefit from any of Seller's or its Affiliates' insurance policies which may provide coverage for claims relating in any way to the Purchased Assets.

Section 6.18 Support. Following the Closing, Purchaser and its Affiliates, on the one hand, and Seller and the Divesting Entities, on the other hand, shall use commercially reasonable efforts to cooperate with each other in conducting recalls (provided, that [*****] shall have sole final authority for [*****]) and in the defense or settlement of any Liabilities or lawsuits involving the Purchased Assets, the Products, the Agreement or the Transition Agreements, in each case for which the other Party has responsibility under this Agreement, by providing the other Party and such other Party's legal counsel reasonable access during normal business hours to employees, records, documents, data, equipment, facilities, products, parts, prototypes and other information relating primarily to the Purchased Assets or the Products, as such other Party may reasonably request, to the extent maintained or under the possession or control of the requested Party; provided, however, that such access shall not unreasonably interfere with the business of Purchaser or Seller, or any of their respective Affiliates; provided, further, that either Party may restrict the foregoing access to the extent that (a) such restriction is required by

applicable Law, (b) such access or provision of information would reasonably be expected to result in a violation of confidentiality obligations to a third party or (c) disclosure of any such information would result in the loss or waiver of the attorney-client privilege. The requesting Party shall reimburse the other Party for reasonable out-of-pocket expenses paid by the other Party to third parties in performing its obligations under this Section 6.18.

Section 6.19 Payments from Third Parties. In the event that, on or after the Closing Date, either Party shall receive any payments or other funds due to the other pursuant to the terms of this Agreement or any of the other Transaction Documents, then the Party receiving such funds shall promptly forward such funds to the proper Party.

Section 6.20 Resale Exemption Certificates. At the Closing (or within such reasonable time thereafter as may be necessary to perfect the resale or other exemption certificates), Purchaser shall deliver to Seller fully completed and executed resale exemption certificates or other applicable exemption certificates for all jurisdictions identified by Seller prior to Closing as jurisdictions in which inventory is to be transferred and for which resale exemption certificates are necessary to comply with applicable Law. To the extent that any jurisdiction refuses to accept any resale exemption certificate or other applicable exemption certificate provided by Purchaser, Seller and Purchaser agree that any Transfer Taxes (and related interest and penalty) assessed by such jurisdiction shall be borne and paid solely by Purchaser.

Section 6.21 Confidentiality. From and after the Closing, Seller shall, and shall cause its Affiliates to, hold, and shall use its commercially reasonable efforts to cause its or their respective Representatives to hold, in confidence any and all information, whether written or oral, concerning the Business or the Purchased Assets, except to the extent that Seller can show that such information (a) is generally available to and known by the public before the Closing; (b) becomes generally available to the public or otherwise part of the public domain, through no fault of Seller, any of its Affiliates or their respective Representatives; (c) was independently developed by or for Seller without reference to such information concerning the Business or the Purchased Assets; or (d) is lawfully acquired by Seller, any of its Affiliates or their respective Representatives from and after the Closing from sources which are not prohibited from disclosing such information by a legal, contractual or fiduciary obligation. If Seller or any of its Affiliates or their respective Representatives are compelled to disclose any information by judicial or administrative process or by other requirements of Law, Seller shall promptly notify Purchaser in writing and shall disclose only that portion of such information which Seller is advised by its counsel in writing is legally required to be disclosed, provided that Seller shall use commercially reasonable efforts to obtain an appropriate protective order or other reasonable assurance that confidential treatment will be accorded such information.

Section 6.22 Data Room. As promptly as practicable after the Closing Date, Seller shall provide Purchaser with an electronic copy of the Data Room.

Section 6.23 Certain Assets. If, [*****], either party or their respective Affiliates holds any right, title, or interest in any asset (including any Intellectual Property) which, pursuant

to the terms of this Agreement or the Ancillary Agreements should have been transferred to, or retained by, the other party (as the case may be):

(a) the party holding the right, title, or interest in such asset shall transfer or cause the transfer of such right, title or interest, as soon as reasonably practicable, to the other party or its designee at no additional cost; and

(b) each party shall do or perform, or cause to be done or performed, all such things and acts, and execute and deliver (or cause the execution or delivery of) all further documents, as may be reasonably necessary, required by applicable Law, or reasonably requested by the other party, to validly effect such transfer and to vest the full benefit of the relevant right, title and/or interest in such asset to the other party or its designee.

## ARTICLE VII.
## CLOSING CONDITIONS

Section 7.01 Conditions Precedent to Purchaser's Obligations on the Closing Date. All of the obligations of Purchaser hereunder are subject to fulfillment, prior to or at the Closing, of the following conditions (compliance with which or the occurrence of which may be waived in whole or in part by Purchaser in writing):

(a) (i) The representations and warranties of Seller contained herein (other than the Seller Fundamental Representations) shall be true and correct (without giving effect to any references to "material," "materially," "Material Adverse Effect," "material adverse effect" or other similar materiality qualifications contained or incorporated in any such representation or warranty) on and as of the date hereof and the Closing Date (other than representations and warranties made as of a specified date, which shall be true and correct as of the date specified), except for such failures to be true and correct that do not, individually or in the aggregate, have a Material Adverse Effect and (ii) the Seller Fundamental Representations shall be true and correct in all material respects on and as of the date hereof and the Closing Date (other than representations and warranties made as of a specified date, which shall be true and correct in all material respects as of the date specified).

(b) Seller shall have performed and complied in all material respects with all of its covenants and agreements under this Agreement and the other Transaction Documents to be complied with and performed by Seller at or before the Closing.

(c) Seller shall have delivered to Purchaser a certificate in the form attached hereto as Exhibit I, dated as of the Closing Date and executed by an authorized officer of Seller, to the effect that each of the conditions specified above in Section 7.01(a) and Section 7.01(b) are satisfied in all respects (the "Seller's Officer's Certificate").

(d) Seller shall have delivered to Purchaser a duly executed certificate stating that Seller is not a foreign person within the meaning set forth in Treasury Regulation Section 1.1445-2(b)(2)(iv) (the "FIRPTA Certificate").

(e) No Law or Judgment enacted, entered, promulgated, enforced or issued by any Governmental Authority or other legal restraint or prohibition preventing the consummation of any of the Transactions (each, a "Closing Legal Impediment") shall be in effect.

(f) The waiting periods, clearances and approvals required under the anti-trust filings as specified on Schedule 7.01(f) (the "Anti-Trust Filings") shall have expired or been obtained.

(g) Since the Effective Date, there shall have been no Material Adverse Effect.

(h) Seller shall have signed and delivered, or caused one or more of its Affiliates to sign and deliver, the instruments and documents set forth on Exhibit A.

(i) The actions set forth in Section 3.01(b) shall have been completed.

Section 7.02 Conditions Precedent to Seller's Obligations on the Closing Date. All of the obligations of Seller hereunder are subject to the fulfillment, prior to or at the Closing, of the following conditions (compliance with which or the occurrence of which may be waived in whole or in part by Seller in writing):

(a) (i) The representations and warranties of Purchaser contained herein (other than the Purchaser Fundamental Representations) shall be true and correct (without giving effect to any references to "material," "materially," "Purchaser Material Adverse Effect," "material adverse effect" or other similar materiality qualifications contained or incorporated in any such representation or warranty) on and as of the date hereof and the Closing Date (other than representations and warranties made as of a specified date, which shall be true and correct as of the date specified), except for such failures to be true and correct that do not, individually or in the aggregate, have a Purchaser Material Adverse Effect and (ii) the Purchaser Fundamental Representations shall be true and correct in all material respects on and as of the date hereof and the Closing Date (other than representations and warranties made as of a specified date, which shall be true and correct in all material respects as of the date specified).

(b) Purchaser shall have performed and complied in all material respects with all of its covenants and agreements under this Agreement and the other Transaction Documents to be complied with and performed by Purchaser at or before the Closing.

(c) Purchaser shall have delivered to Seller a certificate in the form attached hereto as Exhibit J dated the Closing Date and executed by an authorized officer of

Purchaser to the effect that each of the conditions specified above in Section 7.02(a) and Section 7.02(b) is satisfied in all respects (the "Purchaser's Officer's Certificate").

(d) Purchaser shall have delivered to Seller a certificate of a Secretary or an Assistant Secretary of Purchaser in the form attached hereto as Exhibit K enclosing a copy of (i) its certificate of incorporation certified by the Secretary of State of the State of Delaware, (ii) its by-laws and (iii) board of director resolutions authorizing Purchaser to enter into this Agreement and the other Transaction Documents and to consummate the Transactions (the "Purchaser's Secretary's Certificate").

(e) No Closing Legal Impediment shall be in effect.

(f) The waiting periods, clearances and approvals required under Anti-Trust Filings shall have expired or been obtained.

(g) Purchaser shall have signed and delivered, or caused one or more of its Affiliates to sign and deliver, the instruments and documents set forth on Exhibit B.

(h) The actions set forth in Section 3.01(c) shall have been completed.

## ARTICLE VIII.
## INDEMNIFICATION

Section 8.01 Indemnification by Seller.

(a) In addition to the indemnification set forth in Section 6.14, subject to the provisions of this ARTICLE VIII, Seller agrees, from and after the Closing, to defend, indemnify and hold harmless Purchaser and its Affiliates and, if applicable, their respective Affiliates, directors, officers, agents, employees, successors and assigns (collectively, the "Purchaser Indemnitees"), from and against any and all Losses (whether or not involving a Third Party Claim) arising from or relating to (i) any Retained Liability or Excluded Asset; (ii) any breach or inaccuracy of any Seller Fundamental Representation; (iii) any breach or non-fulfillment by Seller or any Divesting Entity of any of its covenants or agreements contained in this Agreement; or (iv) any breach or inaccuracy of any warranty or representation of Seller or any Divesting Entity contained in this Agreement (other than any Seller Fundamental Representation).

(b) Purchaser shall take, and shall cause the other Purchaser Indemnitees to take, all commercially reasonable steps required by applicable Law to mitigate any Loss upon becoming aware of any event that gives rise thereto, provided that the foregoing shall not be deemed to limit the ability of Purchaser and the other Purchaser Indemnitees to incur reasonable costs and expenses in connection therewith.

Section 8.02 Indemnification by Purchaser.

(a) In addition to the indemnification set forth in Section 6.07(e) and Section 6.13(e), subject to the provisions of this ARTICLE VIII, Purchaser agrees, from and after the Closing, to defend, indemnify and hold harmless Seller and its Affiliates and, if applicable, their respective Affiliates, directors, officers, agents, employees, successors and assigns (collectively, the "Seller Indemnitees"), from and against any and all Losses (whether or not involving a Third Party Claim) arising from or relating to (i) any Assumed Liability or Purchased Asset; (ii) any breach or inaccuracy of any Purchaser Fundamental Representation; (iii) any breach or non-fulfillment by Purchaser of any of its covenants or agreements contained in this Agreement; or (iv) any breach of any warranty or representation of Purchaser contained in this Agreement (other than any Purchaser Fundamental Representation).

(b) Seller shall take, and cause the other Seller Indemnitees to take, all commercially reasonable steps required by applicable Law to mitigate any Loss upon becoming aware of any event that gives rise thereto, provided that the foregoing shall not be deemed to limit the ability of Seller and the other Seller Indemnitees to incur reasonable costs and expenses in connection therewith.

Section 8.03 Notice of Claims. Any Purchaser Indemnitee or Seller Indemnitee claiming that it has suffered or incurred any Loss for which it may be entitled to indemnification under Section 6.07(e), Section 6.13(e) or this ARTICLE VIII (the "Indemnified Party") shall give prompt written notice to the Party from whom indemnification is sought (the "Indemnifying Party") of the matter, action, cause of action, claim, demand, proceeding, fact or other circumstances upon which a claim for indemnification under Section 6.07(e), Section 6.13(e) or this ARTICLE VIII (each, a "Claim") may be based. Such notice shall contain, with respect to each Claim, such facts and information as are then reasonably available to the Indemnified Party with respect to such Claim, including the amount or estimated amount of such Losses (if known or reasonably capable of estimation) and the basis for indemnification hereunder. If any Claim is based on any action, claim, suit or proceeding (in equity or at law) instituted by a third party with respect to which the Indemnified Party intends to claim any Loss under this ARTICLE VIII (a "Third Party Claim"), the Indemnified Party shall promptly notify (the "Third Party Claim Notice") the Indemnifying Party of such Third Party Claim and offer to tender to the Indemnifying Party the defense of such Third Party Claim. A failure by the Indemnified Party to give written notice of (or the contents of such notice) and to offer to tender the defense of any Third Party Claim in a timely manner pursuant to this Section 8.03 shall not limit the obligation of the Indemnifying Party under this ARTICLE VIII, except (a) to the extent such Indemnifying Party is actually prejudiced thereby or (b) as provided in Section 8.05.

Section 8.04 Third Party Claims. The Indemnifying Party shall have the right, but not the obligation, exercisable by written notice to the Indemnified Party within thirty (30) days of receipt of a Third Party Claim Notice from the Indemnified Party with respect to a Third Party Claim, to assume the conduct and control (subject to the terms hereof), at the expense of the

Indemnifying Party and through counsel of its choosing that is reasonably acceptable to the Indemnified Party, of such Third Party Claim, and the Indemnifying Party may compromise or settle the same; provided, however, that the Indemnifying Party shall give the Indemnified Party advance written notice of any proposed compromise or settlement and shall not, without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld, conditioned or delayed), consent to the entry of any Judgment or enter into any compromise or settlement; provided, further, that the Indemnified Party's consent may be reasonably withheld with respect to entry into any Judgment, compromise or settlement that (a) does not relate solely to monetary damages (other than non-monetary relief incidental to such monetary damages) arising from such Third Party Claim, which shall be paid solely by the Indemnifying Party, (b) commits the Indemnified Party to take, or to forbear to take, any action harmful to, or adverse to the interests of, the Indemnified Party, (c) does not provide for a full and complete written release by the applicable third party of the Indemnified Party (which release is actually given) or (d) includes any admission of wrongdoing or misconduct by the Indemnified Party. During the thirty (30) day period following receipt of a Third Party Claim Notice from the Indemnified Party, the Indemnified Party may not compromise or settle, nor assume the defense of, any Third Party Claim for which it is seeking indemnification hereunder without the prior written consent of the Indemnifying Party. Notwithstanding anything to the contrary contained in this ARTICLE VIII, the Indemnifying Party shall not be entitled to assume the defense of any Third Party Claim without the consent of the Indemnified Party (A) unless, at the time the Indemnifying Party elected to assume the defense of such Third Party Claim, the Indemnifying Party confirms in writing to the Indemnified Party that the Indemnifying Party will be responsible for indemnifying the Indemnified Party for the Losses resulting from such Claim up to the amount for which it is responsible to so indemnify the Indemnified Party under this ARTICLE VIII (including Section 8.06) or (B) if such Claim (x) seeks an injunction or other equitable or non-monetary relief against the Indemnified Party (other than equitable or non-monetary relief that is incidental to monetary damages as the primary relief sought) or (y) is brought by a Governmental Authority or is related to or otherwise arises in connection with any criminal matter. In such circumstance, if the Indemnifying Party is not permitted by the Indemnified Party to assume the defense of such Third Party Claim, the Indemnified Party shall assume responsibility for the defense of such Third Party Claim, and the Indemnified Party shall allow the Indemnifying Party a reasonable opportunity to participate in such defense with its own counsel and at its own expense. Notwithstanding an election by the Indemnifying Party to assume the defense of any Third Party Claim, the Indemnifying Party shall permit the Indemnified Party to participate in, but not control, the defense of any such Third Party Claim through separate counsel chosen by the Indemnified Party, provided that the fees and expenses of such counsel shall be borne solely by the Indemnified Party; provided, further that if, based on advice from counsel, there exists any actual or potential conflict of interest between the Indemnified Party and the Indemnifying Party in connection with the defense of the Third Party Claim the Indemnifying Party shall bear the reasonable fees, costs and expenses of such separate counsel. If the Indemnifying Party elects not to control or conduct the defense of a Third Party Claim, the Indemnifying Party nevertheless shall have the right to participate in the defense of any Third Party Claim and, at its own expense, to employ counsel of its own choosing for such purpose. The Parties shall reasonably cooperate in the defense of any

Third Party Claim, with such cooperation to include (i) the retention and the provision to the Indemnifying Party of records and information that are reasonably relevant to such Third Party Claim and (ii) reasonable access to employees on a mutually convenient basis for providing additional information and explanation of any material provided hereunder.

Section 8.05 Expiration. If the Closing shall have occurred, all covenants, agreements, warranties and representations made herein or in any Exhibit or Schedule delivered pursuant hereto shall survive the Closing. Notwithstanding the foregoing, (a) all representations, warranties, covenants and agreements made herein or in any Exhibit or Schedule delivered pursuant hereto, and all indemnification obligations under Section 8.01(a)(ii), Section 8.01(a)(iii), Section 8.01(a)(iv), Section 8.02(a)(ii), Section 8.02(a)(iii) and Section 8.02(a)(iv) with respect to any such representations, warranties, covenants and agreements, shall (i) in the case of any such representations or warranties (other than the Seller Fundamental Representations and the Purchaser Fundamental Representations) and all covenants and agreements that contemplate performance in whole or in part prior to the Closing Date, terminate and expire on, and no action or proceeding seeking damages or other relief for breach of any thereof or for any inaccuracy with respect thereto, shall be commenced after, the date that is fifteen (15) months after the Closing Date, unless prior to such date a claim for indemnification with respect thereto shall have been made, with reasonable specificity, by written notice given in accordance with Section 8.03; (ii) in the case of any covenants or agreements that are to be performed at or after the Closing, terminate and expire on, and no action or proceeding seeking damages or other relief for breach of any thereof shall be commenced after, the date that is sixty (60) days after the last date on which such covenant or agreement is to be fully performed, including for such covenants and agreements in which no date is specified, unless prior to such date a claim for indemnification with respect thereto shall have been made, with reasonable specificity, by written notice given in accordance with Section 8.03; and (iii) in the case of the Seller Fundamental Representations and the Purchaser Fundamental Representations, terminate and expire on, and no action or proceeding seeking damages or other relief for breach of any thereof or for any inaccuracy with respect thereto, shall be commenced after, the date that is the expiration of the applicable statute of limitations for such Claim, unless prior to such date a claim for indemnification with respect thereto shall have been made, with reasonable specificity, by written notice given in accordance with Section 8.03.

Section 8.06 Certain Limitations.

(a) Notwithstanding the other provisions of this ARTICLE VIII, neither Seller nor Purchaser shall have any indemnification obligations for Losses under Section 8.01(a)(iv) or Section 8.02(a)(iv), respectively, (a) for any individual item or series of related items where the aggregate Loss relating to such item or series of related items is less than [*****] (the "De Minimis Amount") and (b) in respect of each individual item or series of related items where the Loss relating thereto is equal to or greater than the De Minimis Amount, unless the aggregate amount of all Losses exceeds [*****], in which event Seller or Purchaser, as applicable, shall be required to pay the full amount of such Losses that exceeds [*****], but only up to a maximum amount, on a cumulative basis in

respect of all such Claims, equal to [*****]. The aggregate Liability of Seller, on the one hand, and Purchaser, on the other hand, for any Losses with respect to matters set forth in this ARTICLE VIII or Claims under Section 8.01(a)(i) or Section 8.02(a)(i), respectively, shall not exceed the Purchase Price. Seller shall only be required to indemnify a Purchaser Indemnitee for any particular claim one time.

(b) For purposes of this ARTICLE VIII, the amount of any Loss (but not the existence of any breach, misrepresentation or inaccuracy with respect to any representation or warranty of Seller or Purchaser) shall be determined without reference to, and disregarding, the terms "material," "materially," "Material Adverse Effect," "material adverse effect" or other similar qualifications as to materiality contained or incorporated in or applicable to any such representation or warranty.

Section 8.07 Losses Net of Insurance, Etc. The amount of any Loss for which indemnification is provided under Section 8.01 or Section 8.02 shall be net of (a) any amounts actually recovered by the Indemnified Party pursuant to any indemnification by or indemnification agreement with any non-affiliated third party, (b) any insurance proceeds actually received as an offset against such Loss, in each case, net of any costs of recovery and (c) any Tax benefit actually realized by the Indemnified Party or its Affiliates with respect to such Losses. If the amount to be netted hereunder from any payment required under Section 8.01 or Section 8.02 is determined after payment by the Indemnifying Party of any amount otherwise required to be paid to an Indemnified Party pursuant to this ARTICLE VIII, the Indemnified Party shall repay to the Indemnifying Party, promptly after such determination, any amount that the Indemnifying Party would not have had to pay pursuant to this ARTICLE VIII had such determination been made at the time of such payment solely to avoid duplicative recovery for the same Loss, but not in excess of any amount previously so paid by the Indemnifying Party to or on behalf of the Indemnified Party in respect of such matter.

Section 8.08 Sole Remedy/Waiver. Except for the enforcement of any covenant or agreement to be performed after the Closing and claims for fraud or intentional misrepresentation, this ARTICLE VIII provides the exclusive means by which a Party may assert and remedy Claims after the Closing, and Section 10.11 provides the exclusive means by which a Party may bring actions against the other Party with respect to Claims under this Agreement. Except as set forth in Section 10.10(c) and this ARTICLE VIII, effective as of the Closing, each Party hereby waives and releases any other remedies or claims that it may have against the other Party (or any of its Affiliates) with respect to the matters arising out of or in connection with this Agreement, except that nothing herein shall limit the liability of any Party hereto for fraud or intentional misrepresentation. With respect to any Losses arising under this Agreement, Purchaser agrees that Purchaser shall only seek such Losses from Seller, and Purchaser hereby waives the right to seek Losses from or equitable remedies, such as injunctive relief, against any Affiliate of Seller (other than a Divesting Entity) or any director, officer or employee of Seller (or any of its Affiliates). With respect to any Losses arising under this Agreement, Seller agrees that Seller shall only seek such Losses from Purchaser, and Seller hereby waives the right to seek Losses

from or equitable remedies, such as injunctive relief, against any Affiliate of Purchaser or any director, officer or employee of Purchaser (or any of its Affiliates).

Section 8.09 Indemnity Payments. In the event that either Party agrees to, or has an obligation to, reimburse the other Party for Losses as provided in this ARTICLE VIII, the Indemnifying Party shall promptly pay such amount to the Indemnified Party in U.S. Dollars via wire transfer of immediately available funds to the accounts specified in writing by the Indemnified Party.

Section 8.10 Tax Treatment of Indemnity Payments. Any indemnity payment under this Agreement shall be treated as an adjustment to the Purchase Price for Tax purposes unless otherwise required by applicable Law. If any payment made by Seller or Purchaser as the result of a breach, modification or termination of this Agreement, or of any other agreement delivered pursuant to this Agreement, is deemed by the *Excise Tax Act* (Canada) to include GST/HST, or is deemed by any applicable provincial or territorial legislation to include a similar value added or multi-staged tax, the amount of such payment shall be increased accordingly.

Section 8.11 No Consequential Damages. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, (I) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR LOST REVENUES OR PROFITS OR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR ANY LIABILITY RETAINED OR ASSUMED HEREUNDER UNLESS SUCH LOST REVENUES OR PROFITS OR DAMAGES ARE THE NATURAL, PROBABLE AND REASONABLY FORESEEABLE RESULT OF THE EVENT THAT GAVE RISE TO THE CLAIM FOR INDEMNIFICATION, INCLUDING DIRECT DAMAGES UNDER APPLICABLE LAW, AND (II) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR PUNITIVE, EXEMPLARY OR MULTIPLIED DAMAGES; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY OF SUCH LOST REVENUES OR PROFITS OR DAMAGES THAT ARE PAID OR REQUIRED TO BE PAID BY AN INDEMNIFIED PARTY TO AN UNRELATED THIRD PARTY.

## ARTICLE IX.
## TERMINATION

Section 9.01 Termination.

(a) Mutual Termination. This Agreement may be terminated at any time prior to the Closing by mutual written agreement of Purchaser and Seller.

(b) Termination by Purchaser.

(i) This Agreement may be terminated by written notice from Purchaser to Seller at any time prior to the Closing, if Purchaser is not then in material breach of any provision of this Agreement if (A) Seller shall have failed to comply with any of Seller's covenants or agreements contained in this Agreement or (B) any one or more of the representations or warranties of Seller contained in this Agreement shall prove to have been inaccurate or breached and, in the case of clauses (A) and (B), such failure, inaccuracy or breach would give rise, if occurring and continuing on the Closing Date, to the failure of any of the conditions specified in Section 7.01(a) or Section 7.01(b). If such failure, inaccuracy or breach is curable through the exercise of commercially reasonable efforts, Purchaser shall have given Seller a reasonable opportunity to cure any such failure, inaccuracy or breach to so comply by the Outside Date or within thirty (30) days following Purchaser having notified Seller of its intent to terminate this Agreement under this Section 9.01(b)(i).

(ii) This Agreement may be terminated by written notice from Purchaser to Seller if the Closing shall not have occurred on or before the Outside Date; provided, however, that Purchaser may terminate this Agreement pursuant to this Section 9.01(b)(ii) only if at the time of termination Purchaser is not in material breach of any of its representations, warranties, covenants or agreements contained in this Agreement and Purchaser has satisfied those conditions set forth in Section 7.02 (other than the conditions set forth in Section 7.02(d) and Section 7.02(f) and those conditions that by their terms are to be satisfied by actions taken at the Closing and could have been satisfied or would have been waived assuming a Closing would occur).

(c) Termination by Seller.

(i) This Agreement may be terminated by written notice from Seller to Purchaser at any time prior to the Closing, if Seller is not then in material breach of any provision of this Agreement if (A) Purchaser shall have failed to comply with any of Purchaser's covenants or agreements contained in this Agreement or (B) any one or more of the representations or warranties of Purchaser contained in this Agreement shall prove to have been inaccurate or breached and, in the case of clauses (A) and (B), such failure, inaccuracy or breach would give rise, if occurring and continuing on the Closing Date, to the failure of any of the conditions specified in Section 7.02(a) or Section 7.02(b). If such failure, inaccuracy or breach is curable through the exercise of commercially reasonable efforts, Seller shall have given Purchaser a reasonable opportunity to cure any such failure, inaccuracy or breach to so comply by the Outside Date or within thirty (30) days following Seller having notified Purchaser of its intent to terminate this Agreement under this Section 9.01(c)(i).

(ii) This Agreement may be terminated by written notice from Seller to Purchaser if the Closing shall not have occurred on or before the Outside Date; provided, however, that Seller may terminate this Agreement pursuant to this Section 9.01(c)(ii) only if at the time of termination Seller is not in material breach of any of its representations, warranties, covenants or agreements contained in this Agreement and Seller has satisfied those conditions set forth in Section 7.01 (other than the conditions set forth in Section 7.01(e) and Section 7.01(f) and those conditions that by their terms are to be satisfied by actions taken at the Closing and could have been satisfied or would have been waived assuming a Closing would occur).

Section 9.02 Effect of Termination.

(a) In the event of the termination of this Agreement in accordance with Section 9.01, this Agreement shall thereafter become void and have no effect, and neither Party shall have any liability to the other Party or to such other Party's Affiliates or Representatives in respect of this Agreement, except for the obligations of the Parties contained in Section 6.21, this Section 9.02 and in ARTICLE X; provided, however, that nothing herein shall limit the liability of any Party hereto for fraud, intentional misrepresentation or willful breach.

(b) In the event this Agreement shall be terminated in accordance with Section 9.01 and, at such time, a Party is in material breach of or default under any term or provision hereof, such termination shall be without prejudice to, and shall not affect, any and all rights to damages and other equitable remedies that the other Party may have hereunder.

## ARTICLE X.
## MISCELLANEOUS

Section 10.01 Notices. All notices or other communications hereunder shall be deemed to have been duly given and made if in writing and if served by personal delivery upon the Party for whom it is intended, delivered by registered or certified mail, return receipt requested, or by a national overnight courier service, or sent by facsimile (provided that notice by facsimile is promptly confirmed by telephone confirmation thereof and receipt is confirmed by the sending facsimile machine), to the Person at the address set forth below, or such other address as may be designated in writing hereafter, in the same manner, by such Person:

to Seller and any Divesting Entity:

Janssen Pharmaceuticals, Inc.
c/o Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Telephone: [*****]
Facsimile: [*****]
Attn: Assistant General Counsel, Corporate Legal Department

with copies (which shall not constitute notice) to:

Johnson & Johnson
Office of General Counsel
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Telephone: [*****]
Facsimile: [*****]
Attn: General Counsel

and:

Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
Telephone: [*****]
Facsimile: [*****]
Attn: Steven A. Wilcox

to Purchaser:

VIVUS, Inc.
900 E. Hamilton Avenue, Suite 550
Campbell, CA 95008
Email: [*****] and [*****]
Attn: Chief Financial Officer and General Counsel

with a copy (which shall not constitute notice) to:

Hogan Lovells US LLP
100 International Drive
Suite 2000
Baltimore, MD 21202
Telephone: [*****]
Facsimile: [*****]
Attn: Asher Rubin

All notices and other communications under this Agreement shall be deemed to have been received (a) when delivered by hand, if personally delivered; (b) one (1) Business Day after being sent, if delivered to a national overnight courier service; or (c) one (1) Business Day after being sent, if sent by facsimile, with a telephonic acknowledgment of sending and confirmation of receipt by the sending facsimile machine.

Section 10.02 Amendment; Waiver. Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (a) in the case of an amendment, by Purchaser and Seller and (b) in the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by either Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

Section 10.03 Assignment. Neither Party to this Agreement may assign any of its rights or obligations under this Agreement, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets, without the prior written consent of the other Party, except that (a) Seller may, without such consent, assign its rights or obligations to an Affiliate (provided, however, that no such assignment by Seller shall relieve Seller of any of its obligations under this Agreement) and (b) Purchaser may, without such consent, assign its rights to acquire the Purchased Assets hereunder, in whole or in part, to one or more of its Affiliates (provided, however, that no such assignment by Purchaser shall relieve Purchaser of any of its obligations hereunder). Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 10.03 shall be null and void.

Section 10.04 Entire Agreement. This Agreement, together with the Exhibits and Schedules delivered pursuant hereto (which are hereby incorporated by reference), and the Transaction Documents and the Confidentiality Agreement, contains the entire agreement between the Parties with respect to the Transactions and supersedes all prior agreements, discussions, negotiations or understandings between the Parties not expressly set forth in this Agreement, the Exhibits and Schedules delivered pursuant hereto, the Transaction Documents or the Confidentiality Agreement. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises,

this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

Section 10.05 Fulfillment of Obligations. Any obligation of a Party to the other Party under this Agreement, which obligation is performed, satisfied or fulfilled by an Affiliate of such Party, shall be deemed to have been performed, satisfied or fulfilled by such Party.

Section 10.06 Parties in Interest. This Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns. Other than as explicitly set forth herein, including in Section 8.01 and Section 8.02, nothing in this Agreement, express or implied, is intended to confer upon any Person other than Purchaser and Seller, or their successors or permitted assigns, any rights or remedies under or by reason of this Agreement.

Section 10.07 Survival. The provisions of this Agreement set forth in Section 6.21, Section 9.02, ARTICLE VIII and ARTICLE X, and any remedies for the breach thereof, shall survive the termination of this Agreement.

Section 10.08 Expenses. Except as otherwise expressly provided in this Agreement, whether or not the Transactions are consummated, all costs and expenses incurred in connection with this Agreement and the Transactions shall be borne solely by the Party incurring such expenses.

Section 10.09 Schedules. The disclosure of any matter in any Schedule to this Agreement shall be deemed to be a disclosure for the purposes of the Section or subsection of this Agreement to which it corresponds in number and each other Section and subsection of this Agreement to the extent it is reasonably apparent on the face thereof that such disclosure is applicable to such other Section or subsection. The disclosure of any matter in any Schedule to this Agreement shall expressly not be deemed to constitute an admission by any Party, or to otherwise imply, that any such matter is material for the purposes of this Agreement, could reasonably be expected to have a Material Adverse Effect or a Purchaser Material Adverse Effect, as applicable, or is required to be disclosed under this Agreement.

Section 10.10 Governing Law; Jurisdiction; No Jury Trial; Specific Performance.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law, principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction.

(b) The Parties consent to the exclusive jurisdiction of the Federal and State courts located in the State of New York for the resolution of all disputes or controversies between the Parties which, pursuant to applicable Law, are not subject to the provisions of Section 10.11. Each of the Parties (i) consents to the exclusive personal jurisdiction and

venue of each such court in any suit, action or proceeding relating to or arising out of this Agreement or the Transactions; (ii) waives any objection that it may have to the laying of venue in any such suit, action or proceeding in any such court; and (iii) agrees that service of any court paper may be made in such manner as may be provided under applicable Laws or court rules governing service of process. THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE, AND AGREE TO CAUSE THEIR RESPECTIVE AFFILIATES TO WAIVE, THE RIGHT TO TRIAL BY JURY IN ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY RELATED AGREEMENTS OR ANY OF THE TRANSACTIONS. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) EACH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) EACH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (IV) EACH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 10.10(b).

(c) Without intending to limit the remedies available to the Parties hereunder, the Parties acknowledge and agree that irreparable damage would occur in the event that any provision of this Agreement were not performed in accordance with its specific terms or is otherwise breached or violated, and that money damages or other legal remedies would not be an adequate remedy for any such damages. Accordingly, the Parties agree that, without posting bond or other undertaking, the non-breaching party shall be entitled to an injunction or injunctions to prevent breaches or violations of this Agreement by the other Party and to enforce specifically this Agreement and the terms and provisions hereof in any action instituted in any court specified in Section 10.10(b) in addition to any other remedy to which the Parties may be entitled, at law or in equity. Purchaser further agrees that, in the event of any action for an injunction or specific performance in respect of any such threatened or actual breach or violation, it shall not assert that a remedy at law would be adequate.

Section 10.11 Dispute Resolution. The Parties recognize that a dispute may arise relating to this Agreement ("Dispute"). Any Dispute, including Disputes that may involve any Affiliates of a Party, shall be resolved in accordance with this Section 10.11.

(a) Mediation.

(i) The Parties shall first attempt in good faith to resolve any Dispute by confidential mediation in accordance with the then current *Mediation Procedure* of the International Institute for Conflict Prevention and Resolution ("CPR Mediation Procedure") (www.cpradr.org) before initiating arbitration. The CPR Mediation Procedure shall control, except where it conflicts with these provisions,

in which case these provisions control. The mediator shall be chosen pursuant to CPR Mediation Procedure. The mediation shall be held in New York, New York.

(ii) Either Party may initiate mediation by written notice to the other Party of the existence of a Dispute. The Parties agree to select a mediator within twenty (20) days of the notice and the mediation will begin promptly after the selection. The mediation will continue until the mediator, or either Party, declares in writing, no sooner than after the conclusion of one full day of a substantive mediation conference attended on behalf of each Party by a senior business person with authority to resolve the Dispute, that the Dispute cannot be resolved by mediation. In no event, however, shall mediation continue more than sixty (60) days from the initial notice by a Party to initiate meditation unless the Parties agree in writing to extend that period.

(iii) Any period of limitations that would otherwise expire between the initiation of mediation and its conclusion shall be extended until twenty (20) days after the conclusion of the mediation.

(b) Arbitration.

(i) If the Parties fail to resolve the Dispute in mediation, and a Party desires to pursue resolution of the Dispute, the Dispute shall be submitted by either Party for resolution in arbitration pursuant to the then current CPR *Non-Administered Arbitration Rules* ("CPR Rules") (www.cpradr.org), except where they conflict with these provisions, in which case these provisions control. The arbitration will be held in New York, New York. All aspects of the arbitration shall be treated as confidential.

(ii) The arbitrators will be chosen from the CPR Panel of Distinguished Neutrals, unless a candidate not on such panel is approved by both Parties. Each arbitrator shall be a lawyer with at least fifteen (15) years' experience with a law firm or corporate law department of over twenty-five (25) lawyers or who was a judge of a court of general jurisdiction. To the extent that the Dispute requires special expertise, the Parties will so inform CPR prior to the beginning of the selection process.

(iii) The arbitration tribunal shall consist of three (3) arbitrators, of whom each Party shall designate one in accordance with the "screened" appointment procedure provided in CPR Rule 5.4. The chair will be chosen in accordance with CPR Rule 6.4. If, however, the aggregate award sought by the Parties is less than [*****] and equitable relief is not sought, a single arbitrator shall be chosen in accordance with the CPR Rules. Candidates for the arbitrator position(s) may be interviewed by Representatives of the Parties in advance of their selection, provided that all Parties are represented.

(iv) The Parties agree to select the arbitrator(s) within forty-five (45) days of initiation of the arbitration. The hearing will be concluded within nine (9) months after selection of the arbitrator(s) and the award will be rendered within sixty (60) days of the conclusion of the hearing, or of any post-hearing briefing, which briefing will be completed by both sides within forty-five (45) days after the conclusion of the hearing. In the event the Parties cannot agree upon a schedule, then the arbitrator(s) shall set the schedule following the time limits set forth above as closely as practical.

(v) The hearing will be concluded in ten (10) hearing days or less. Multiple hearing days will be scheduled consecutively to the greatest extent possible. A transcript of the testimony adduced at the hearing shall be made and shall be made available to each Party.

(vi) The arbitrator(s) shall be guided, but not bound, by the *CPR Protocol on Disclosure of Documents and Presentation of Witnesses in Commercial Arbitration* (www.cpradr.org) ("Protocol"). The Parties will attempt to agree on modes of document disclosure, electronic discovery, witness presentation, etc. within the parameters of the Protocol. If the Parties cannot agree on discovery and presentation issues, the arbitrator(s) shall decide on presentation modes and provide for discovery within the Protocol, understanding that the Parties contemplate reasonable discovery.

(vii) The arbitrator(s) shall decide the merits of any Dispute in accordance with the law governing this Agreement, without application of any principle of conflict of laws that would result in reference to a different law. The arbitrator(s) may not apply principles such as "*amiable compositeur*" or "*natural justice and equity*."

(viii) The arbitrator(s) are expressly empowered to decide dispositive motions in advance of any hearing and shall endeavor to decide such motions as would a United States District Court Judge sitting in the jurisdiction whose substantive law governs.

(ix) The arbitrator(s) shall render a written opinion stating the reasons upon which the award is based. The Parties consent to the jurisdiction of the United States District Court for the district in which the arbitration is held for the enforcement of these provisions and the entry of judgment on any award rendered hereunder. Should such court for any reason lack jurisdiction, any court with jurisdiction may act in the same fashion.

(x) Each Party has the right to seek from the appropriate court provisional remedies such as attachment, preliminary injunction, replevin, etc. to

avoid irreparable harm, maintain the status quo, or preserve the subject matter of the Dispute. Rule 14 of the CPR Rules does not apply to this Agreement.

Section 10.12 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that both Parties need not sign the same counterpart. This Agreement, following its execution, may be delivered via .pdf or other form of electronic delivery, which shall constitute delivery of an execution original for all purposes.

Section 10.13 Headings. The heading references herein and the table of contents hereto are for convenience purposes only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

Section 10.14 Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any term or other provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid, illegal or unenforceable, (a) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity, illegality or unenforceability, nor shall such invalidity, illegality or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

*[remainder of page intentionally blank]*

IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed as of the Effective Date.

JANSSEN PHARMACEUTICALS, INC.

By: /s/ Flavia Pease
Name: Flavia Pease
Title: Treasurer

IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed as of the Effective Date.

VIVUS, INC.

By: /s/ John P. Amos
Name: John P. Amos
Title: Chief Executive Officer

EXHIBIT A

SELLER CLOSING DELIVERABLES

(a) A receipt for payment of the Purchase Price at Closing;

(b) A certificate of a secretary or other authorized signatory of Seller enclosing a copy of (i) board of directors resolutions authorizing Seller to enter in to this Agreement and the other Transaction Documents and to consummate the Transactions and (ii) a good standing certificate for Seller;

(c) The Seller's Officer's Certificate;

(d) The executed Bill of Sale and Assignment and Assumption Agreement, dated the Closing Date;

(e) The executed Trademark Assignment (with assignments in recordable form to be delivered promptly after the Closing), dated the Closing Date;

(f) The executed U.S. Market Transition Services Agreement, dated the Closing Date;

(g) The executed Canadian Transitional Business License Agreement, dated the Closing Date;

(h) The executed Quality Agreement, dated the Closing Date;

(i) The executed Long Term Collaboration Agreement, dated the Closing Date;

(j) The executed Seller Transfer Letter to FDA, dated the Closing Date;

(k) The executed Seller Transfer Letter to Health Canada, dated the Closing Date; and

(l) The executed FIRPTA Certificate.

EXHIBIT B

PURCHASER CLOSING DELIVERABLES

(a) A good standing certificate for Purchaser;

(b) The Purchaser's Officer Certificate;

(c) The Purchaser's Secretary's Certificate;

(d) The executed Bill of Sale and Assignment and Assumption Agreement, dated the Closing Date;

(e) The executed Trademark Assignment, dated the Closing Date;

(f) The executed U.S. Market Transition Services Agreement, dated the Closing Date;

(g) The executed Canadian Transitional Business License Agreement, dated the Closing Date;

(h) The executed Quality Agreement, dated the Closing Date;

(i) The executed Long Term Collaboration Agreement, dated the Closing Date;

(j) The executed Purchaser Transfer Letter to FDA, dated the Closing Date; and

(k) Executed exemption certificates identified by Seller prior to Closing.

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

EXHIBIT C

JOHNSON & JOHNSON UNIVERSAL CALENDAR, 2018

[*****]

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

EXHIBIT D

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# U.S. MARKET TRANSITION SERVICES AGREEMENT

between

JANSSEN PHARMACEUTICALS, INC.

and

VIVUS, INC.

Dated as of [·], 2018

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This U.S. MARKET TRANSITION SERVICES AGREEMENT (this "Agreement") dated as of [·], 2018 (the "Effective Date"), is between JANSSEN PHARMACEUTICALS, INC., a Pennsylvania corporation ("Service Provider"), and VIVUS, INC., Delaware corporation ("Service Recipient"). Service Provider and Service Recipient may be referred to in this Agreement individually as a "Party," or collectively as the "Parties."

WHEREAS, pursuant to the Asset Purchase Agreement dated as of April 30, 2018 between Service Provider and Service Recipient (the "Asset Purchase Agreement"), Service Provider has agreed to sell (and cause the Divesting Entities to sell) to Service Recipient (or one or more Affiliates of Service Recipient), and Service Recipient has agreed to purchase (or cause to be purchased) from Service Provider (or one or more Divesting Entities), the Purchased Assets;

WHEREAS, Service Recipient desires to purchase from Service Provider, and Service Provider is willing to provide to Service Recipient, the transition services set forth in Schedule A hereto, in order (i) to facilitate Service Recipient's manufacturing, importing, marketing, sale and distribution of the Products after the date of this Agreement and (ii) to provide Service Recipient the opportunity to obtain alternate sources of such services within a reasonable time after the date of this Agreement; and

WHEREAS, Service Recipient understands and agrees that Service Provider may arrange to have certain of its Affiliates or Third Parties provide certain of the transition services in accordance with the terms of this Agreement (each such Affiliate of Service Provider and such Third Party, an "Other Service Provider", and collectively, the "Service Providing Entities").

NOW, THEREFORE, in view of the foregoing premises and in consideration of the mutual covenants, agreements, representations and warranties herein contained, the Parties agree as follows:

## ARTICLE I

## DEFINITIONS

SECTION 1.01. Defined Terms. (a) Each capitalized term used and not defined in this Agreement shall have the meaning assigned to it in the Asset Purchase Agreement. The following terms used in this Agreement shall have the respective meanings assigned to them below:

"Calendar Quarter" means a financial quarter based on the J&J Universal Calendar (a copy of which for the year 2018 is attached as Exhibit A); provided, however, that (a) the first Calendar Quarter under this Agreement shall extend from the Effective Date until the last day of the first Calendar Quarter of the Transition Period and (b) the last Calendar Quarter under this Agreement shall extend from the first day of such Calendar Quarter until the last day of the Transition Period.

"Calendar Year" means a calendar year based on the J&J Universal Calendar (a copy of which for the year 2018 is attached as Exhibit A); provided, however, that (a) the first Calendar Year under this Agreement shall extend from the Effective Date until the last day of the

first Calendar Year of the Transition Period and (b) the last Calendar Year under this Agreement shall extend from the first day of such Calendar Year until the last day of the Transition Period.

"Current Promotional Materials" means any Promotional Materials used by or on behalf of Service Provider or its Affiliates as set forth within the Transferred Domain Names.

"Net Economic Benefit" or "NEB" means for any particular period after the Effective Date through the conclusion of the Transition Period, an amount equal to the difference between (i) the Net Sales of the Products during such period and (ii) the sum of (A) [*****] and (B) the Service Fees set forth on Schedule A for such period, subject to any reduction on account of completed or terminated Services. Notwithstanding anything to the contrary set forth in subclause (ii) of this definition, [*****].

"Net Sales" means the gross amounts invoiced by Service Provider, licensees and Affiliates, for the sale of Products to Third Parties in an arms-length transaction, excluding sales for compassionate use, named patient access and clinical trials, but solely wherein the excluded sales are made at wholesale costs without profit, less the following deductions, which deductions will be determined on a country-by-country and Product-by-Product basis and in accordance with GAAP, and except for those deductions (a) for which Service Provider is responsible pursuant to the Asset Purchase Agreement, including pursuant to Sections 6.12(c) and 6.12(d) thereof and all Retained Liabilities, or pursuant to the terms of the Long Term Collaboration Agreement, as applicable, and (b) that are otherwise attributable to the sale or distribution of Products by Service Provider prior to the Effective Date, as applicable:

(i) [*****];

(ii) [*****];

(iii) [*****];

(iv) [*****]; and

(v) [*****].

Net Sales shall not include sales by Service Provider to its Affiliates or licensees, if such sales are not at arm's length, for resale; rather, in each such instance, Net Sales shall include the amounts invoiced or otherwise received by such Affiliate or licensee for such resale of the Products to Third Parties.

"Nordmark" means Nordmark Arzneimittel GmbH & Co. and its successors and assigns.

"Ongoing Business Expenses" means, for any period, the following business expenses of Service Provider incurred during such period pursuant to the express terms hereof (i) [*****], (ii) [*****], (iii) [*****], (iv) solely for the purposes of calculating the Ongoing Business Expenses for the Quarterly Statement corresponding to the last Calendar Quarter of the

Transition Period under this Agreement, the costs [*****]; provided, that the costs referred to in this subclause (iv) shall only be payable in respect of Products with an expiration date of no fewer than (a) [*****]; and (b) [*****]; following the end of the last Calendar Quarter of the Transition Period; (v) out-of-pocket expenses arising under [*****] and (vi) other reasonable documented out-of-pocket business expenses of a type not incurred by Service Provider or its Affiliates during the Reference Period and required to be incurred during such period in order to perform the Services. For the avoidance of doubt, in no event will Ongoing Business Expenses include anything deducted from Net Sales or NEB.

"Promotion" means those activities undertaken by a pharmaceutical company's sales force to implement marketing plans and strategies aimed at encouraging the appropriate use of a particular prescription or other pharmaceutical product. When used as a verb, "Promote" means to engage in such activities.

"Promotional Materials" means any advertising, marketing, sales and promotional materials used by or on behalf of Service Provider or its Affiliates for the Promotion of the Products.

"Territory" means the United States.

"Third Party" means any Person other than the Parties and their respective Affiliates.

"Transition Period" means the period commencing on the date of this Agreement and ending on the last date of expiration or termination of any Service under this Agreement.

"True-Up NEB" means, for the period after the Effective Date through the conclusion of the Transition Period, the NEB during such period determined, notwithstanding the definition thereof and of Net Sales, using the actual amounts incurred under subsections (i) through (v) of clause (b) of the definition of Net Sales, as applicable, determined based on evidence available as of [*****].

(b) The following terms used in this Agreement shall have the meanings assigned to them in the respective Sections set forth below:

| Term | Location |
|---|---|
| Accounting Firm | §4.02 (b) |
| Agreement | Recitals |
| Agreement Coordinator | §2.02 |
| Asset Purchase Agreement | Recitals |
| Business | §2.01(a) |
| Confidential Information | §7.01 |
| Disputed Matters | §4.02(a) |
| Effective Date | Recitals |
| Estimated NEB | §4.03(b) |

| Term | Location |
|---|---|
| force majeure event | Article X |
| Informal Resolution Period | §4.02(a) |
| Intended Tax Treatment | §4.04(b) |
| Licensed Materials | §2.06(a) |
| NEB Invoice | §4.01(d) |
| Notice of Disagreement | §4.02(a) |
| Omitted Service | §2.01(a) |
| Other Service Provider | Recitals |
| Party, Parties | Recitals |
| Permitted Term Extension | §3.01 |
| Quarterly Statement | §4.01(b) |
| Reference Period | §2.01(a) |
| Service Fee | Schedule A |
| Service Period | §3.01 |
| Service Provider | Recitals |
| Service Provider Indemnified Parties | §9.02(a) |
| Service Providing Entities | Recitals |
| Service Recipient | Recitals |
| Service Recipient Indemnified Parties | §9.02(b) |
| Service Suspensions | §5.01 |
| Services | §2.01(a) |
| Third Party Claim | §9.02(a) |
| True-Up NEB Invoice | §4.03(b) |
| True-Up NEB Statement | §4.03(a) |

## ARTICLE II

## SERVICES TO BE PROVIDED

SECTION 2.01. Provision of Services

(a) Subject to the terms and conditions of this Agreement (including the Schedules hereto), Service Provider shall provide, directly or through one or more Service Providing Entities, and Service Recipient hereby appoints Service Provider to perform, the services set forth in Schedule A (the "Services") in the Territory to enable Service Recipient to manufacture, import, market, sell and distribute the pharmaceutical products included in the Purchased Assets in compliance with all applicable regulations in the manner in which such activities were previously conducted by Service Provider (the "Business") during the twelve-month period prior to the Effective Date (the "Reference Period"). Service Provider shall perform the Services on behalf of and for the account of Service Recipient. If, after the execution of this Agreement, Service Recipient determines that any additional service provided to the Business by Service Provider or an Other Service Provider during the Reference Period was not included in Schedule A, but was reasonably necessary for the operation of the Business in substantially the same manner as conducted during the Reference Period (each, an "Omitted Service"), then such Omitted Service

will be deemed to be part of the Services at Service Recipient's request. The Parties will discuss in good faith the terms governing such Omitted Service, including the scope, duration, a commercially reasonable and mutually agreeable Service Fee [*****], Service Provider would have incurred if such additional service were initially included as a Service as of the date hereof) and other material terms with respect to the provision of such Omitted Service. The Services to be provided by Service Provider to Service Recipient pursuant to its appointment shall be limited to those specified in Schedule A and any Omitted Service, unless otherwise agreed to in writing by the Parties.

(b) If Service Recipient requests that the level or volume of any Service be increased materially beyond that provided by Service Provider in respect of the Business during the Reference Period, Service Provider agrees to discuss any such increase in good faith with Service Recipient and to use commercially reasonable efforts to increase the level or volume of such Service; provided, however, that Service Provider will be obligated to provide an increased level or volume of any Service due to changes in market demand; provided, further, however that such increase is subject to any limitations set forth in the Nordmark License. In the event of such increased level or volume, the Parties will equitably and proportionally adjust the applicable Service Fee(s) to reflect such increases in Services. If Service Recipient requests that the manner in which any Service is to be provided be materially different from the manner in which such Service was provided by Service Provider in respect of the Business during the Reference Period, Service Recipient may request such a change by providing reasonable notice in writing of the requested change to Service Provider and Service Provider shall accommodate such requested change so long as to do so would not have an unduly burdensome impact on Service Provider or its ability to provide services to its Affiliates. Service Provider shall provide a good faith estimate of its out-of-pocket costs and expenses associated with such requested change. If it wishes to proceed, Service Recipient shall confirm in writing to Service Provider to initiate such requested change. Service Recipient shall bear any reasonable out-of-pocket costs and expenses that are actually incurred in the performance of such requested and confirmed change, and the Parties will equitably and proportionally adjust the applicable Service Fee(s) to reflect such changes in Services.

(c) Subject to the terms and conditions of the Asset Purchase Agreement, Service Recipient and Service Provider shall reasonably cooperate with each other to facilitate the orderly transition of the Purchased Assets and the responsibility for performing the Services from Service Provider to Service Recipient as soon as reasonably practicable, and to minimize any disruption to the other businesses of the Parties and their respective Affiliates that might result from the transactions contemplated by the Asset Purchase Agreement and the Ancillary Agreements (including this Agreement). Without limiting the generality of the foregoing, the Parties shall, and shall cause their respective Affiliates to, use commercially reasonable efforts to transfer the Transferred Governmental Authorizations to Service Recipient or an Affiliate or Third Party distributor thereof (in each case as designated by Service Recipient) as soon as reasonably practicable following the Closing.

(d) Prior to the Transferred Governmental Authorizations being transferred by the FDA from Service Provider to Service Recipient (or its designee), Service Recipient may, with

respect to its Promotion in the Territory, only Promote or engage in Promotional activities regarding the Products in compliance with all applicable Law, including without limitation Laws relating to labeling and Promotion, and only through use of the Current Promotional Materials. Any documented out-of-pocket expenses incurred in connection with the activities contemplated by this Section 2.01(d) are the responsibility of Service Recipient. After the Transferred Governmental Authorizations are transferred by the FDA from Service Provider to Service Recipient, Service Recipient shall be fully responsible with respect to any Promotional activities it engages in with respect to the Products.

(e) To the extent reasonably required for performance of the Services or the transition thereof, Service Recipient shall provide personnel of Service Provider and its subcontractors with reasonable access during normal business hours to Service Recipient's personnel, equipment, office space, plants, telecommunications and computer equipment and systems, and any other areas and equipment to the extent necessary for the performance of the Services. Service Provider shall or shall cause its Affiliates to access Service Recipient's facilities only in accordance with all applicable Law, the terms and conditions of Service Recipient's leases affecting or relating to the facilities, Service Recipient's policies and procedures and Service Recipient's reasonable directions (including directions relating to security and health and safety).

(f) In connection with any Service, Service Provider shall provide Service Recipient with all reports and reporting data relating to the operation of the Business in the same manner as such reports were provided to the Business during the Reference Period.

(g) For all software, data, computer equipment, communications equipment and other similar items used by Service Provider to provide the Services, Service Provider shall provide business continuity, disaster recovery services and backup and archival services pursuant to the disaster recovery and business continuity plan that Service Provider provides to itself for services, software, data, computer equipment, communications equipment and other similar items.

SECTION 2.02. Agreement Coordinators. Unless otherwise set forth on Schedule B, within three (3) Business Days after the Effective Date, each Party shall designate in writing a representative to act as the primary contact person with respect to all issues relating to the provision of Services pursuant to this Agreement (each, an "Agreement Coordinator"). Additional functional experts for each of Service Recipient and Service Provider will be identified to facilitate the transfer of knowledge with respect to the Purchased Assets. The Agreement Coordinators shall hold review meetings with each other by telephone or in person, as mutually agreed upon, acting reasonably, at reasonable intervals to be agreed by the Agreement Coordinators, to discuss (i) the provision of the Services, (ii) issues relating to the provision of the Services, (iii) any problems identified with the provision of the Services, (iv) to the extent changes in the provision of the Services have been agreed upon by the Parties, the implementation of such changes and (v) any upcoming projects or activities within Service Provider's or its Service Providing Entities' organizations, processes or systems that may cause changes or otherwise impact delivery, method or location of providing the Services or the available duration of the Services to Service Recipient. The names and contact information of each Party's initial Agreement Coordinators are set forth in Schedule B. Each Party may replace its Agreement Coordinator at any time upon prior written

notice to the other Party. Each Party may treat an act of the other Party's Agreement Coordinator as an act authorized by such other Party.

SECTION 2.03. Performance Standard.

(a) Service Provider represents, warrants, and covenants that: (i) Service Provider has the full valid legal right and authority to provide each Service, (ii) Service Provider will manage the relationships with all Third Party service providers and licensors and will obtain all approvals required thereby and (iii) Service Provider will maintain all personnel and property of Service Provider reasonably required to render the Services.

(b) In providing the Services hereunder, Service Provider represents and warrants that Service Provider shall provide, or shall cause one or more of its Service Providing Entities to provide, the Services to Service Recipient in accordance with applicable Law, in all material respects, and shall perform, or cause one or more of its Service Providing Entities to perform, the Services with at least the same degree of care and diligence, having the same priority, quality, timeliness, volume and frequency and in accordance with at least the same standards and at least the same service levels as such Services historically have been provided to the Business during the Reference Period, taking into account historical fluctuations, but in no case in a lesser manner than provided to Service Provider's retained businesses that are similarly situated to that of the Business.

(c) The Parties hereby acknowledge that, even though Service Provider may provide through one or more Service Providing Entities the performance of any of the Services hereunder, (i) Service Provider shall remain responsible for (A) the performance of all Services in accordance with the terms and conditions hereof and in accordance with applicable Law, in all material respects, and requirements of applicable Governmental Authorities to the extent relevant to the provision of a Service, (B) compliance by such Other Service Provider with the terms and conditions of this Agreement, and (C) any failures of such Other Service Provider to comply with Service Provider's obligations under this Agreement (to the same extent as if such failures were caused by Service Provider); and (ii) the hiring of any Other Service Provider (including any replacement Other Service Provider) shall be subject to Service Recipient's prior written consent (such consent to not be unreasonably withheld, delayed or conditioned), unless (x) the proposed Other Service Provider has provided the relevant Services to the Business during the Reference Period, or (y) the proposed Other Service Provider will be performing the subject services for Service Provider and its Affiliates as well as for Service Recipient and its Affiliates as part of the Services.

SECTION 2.04. Warranty Disclaimer. EXCEPT AS SET FORTH IN THIS AGREEMENT, THE ASSET PURCHASE AGREEMENT OR THE LONG TERM COLLABORATION AGREEMENT, NEITHER SERVICE PROVIDER NOR ANY OF ITS AFFILIATES MAKES ANY REPRESENTATION OR WARRANTY CONCERNING THE SERVICES, INCLUDING ANY APPLICABLE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SERVICE PROVIDER HEREBY EXPRESSLY DISCLAIMS ANY APPLICABLE IMPLIED

WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES.

SECTION 2.05. Consents. Service Recipient and Service Provider shall, and shall cause their respective Affiliates to, cooperate and use reasonable best efforts to promptly obtain and maintain all consents, approvals, licenses, permits or authorizations required for the provision of the Services. Service Provider shall pay any out-of-pocket fee, cost or expense incurred in connection with obtaining and maintaining any consent, approval or authorization required for the provision of any Service, except for such fees, costs or expenses that are specifically addressed in the definition of Net Sales, NEB or Ongoing Business Expenses. If any such consent, approval, license, permit or authorization is unable to be obtained promptly after the date of this Agreement, Service Provider shall notify Service Recipient and the Parties shall cooperate in good faith to devise an alternative arrangement for the provision of each affected Service including the payment of any additional out-of-pocket costs and expenses incurred in the performance of such alternative arrangement.

SECTION 2.06. Use of Intellectual Property.

(a) With respect to each Service, Service Recipient hereby grants to Service Provider and the Service Providing Entities a non-exclusive, non-transferable, royalty-free, revocable, limited license, with the right to grant sublicenses through multiple tiers in accordance with this Agreement, for the term of the Service Period applicable to such Service under all Intellectual Property owned or controlled by Service Recipient that is required for the provision or receipt of such Service, to use (i) the Transferred IP Rights and (ii) Licensed IP Rights that pertain to the Products (the "Licensed Materials"), for the sole purpose of providing, and solely to the extent necessary to provide, to Service Recipient and its Affiliates such Service.

(b) Each use by Service Provider or any Other Service Provider of any of the Transferred Trademark Rights shall be preapproved by Service Recipient in writing and shall be in compliance with any trademark usage guidelines which may be promulgated by Service Recipient from time to time (including, without limitation, guidelines as to the use and display of notices which may be associated with the Transferred Trademark Rights) and provided to Service Provider in writing. Once a particular use of a Transferred Trademark Right has been approved by Service Recipient in writing, Service Provider and the other Service Providing Entities may continue to make identical use of the Transferred Trademark Right in the same or similar instances without obtaining further approval from Service Recipient, unless and until Service Recipient notifies Service Provider or any Other Service Provider to the contrary. Service Recipient shall have the right to inspect Service Provider's or any Other Service Provider's use of the Transferred Trademark Rights, and it will constitute a material breach under Section 3.02 of this Agreement if Service Provider's or any Other Service Provider's use of the Transferred Trademark Rights is in violation of this Agreement or Service Recipient's trademark usage guidelines, or is otherwise disparaging to Service Recipient's public image or dilutive of the goodwill symbolized by any of the Transferred Trademark Rights. All rights in and to the Transferred Trademark Rights and the goodwill associated therewith, and symbolized thereby, shall at all times remain the property of and inure to the sole benefit of Service Recipient.

(c) Except as expressly permitted by this Agreement, Service Provider shall not: (i) lease, rent, loan, license, sublicense, assign, sell, pledge, charge, encumber, transfer or otherwise dispose of any Licensed Materials to any third party, provide service bureau, outsourcing or other services in connection with the Licensed Materials to third parties, or otherwise permit the use of or access to any Licensed Materials by or for the benefit of any third party; (ii) remove or destroy, or permit others to remove or destroy, any proprietary markings of Service Recipient or other parties that may appear on any components of any Licensed Materials; or (iii) modify, adapt, enhance, improve, revise or create derivative works based on any Licensed Materials. Notwithstanding the foregoing, Service Provider hereby assigns (on its own behalf and on behalf of the Other Service Providers) to Service Recipient all right, title and interest in and to all modifications, adaptions, enhancements, improvements, revisions and derivative works based on any Licensed Materials created by or on behalf of Service Provider or any Other Service Provider.

(d) As between Service Recipient and Service Provider, all Licensed Materials shall remain the exclusive property of Service Recipient. Except for the rights expressly granted to Service Provider and the other Service Providing Entities hereunder, Service Recipient shall retain all right, title and interest in, to and under the Licensed Materials.

## ARTICLE III

## TERM

SECTION 3.01. Service Term. The term of the provision of each Service is as set forth in Schedule A (the "Service Period"). Service Recipient may extend the term of any such Service for additional thirty day periods by written notice to Service Provider ("Permitted Term Extensions"); provided, however, that in no event shall any Service be provided [*****], unless the Parties mutually agree to extend the Service Period for any one or more Services in order to transition such Service as soon as possible; and provided, further, that Service Recipient shall use commercially reasonable efforts to transition the Business as soon as is reasonably practicable after the Effective Date. During any Permitted Term Extension, Service Provider may assign or subcontract its obligations to provide such Service to one or more Other Service Providers subject to prior consultation with Service Recipient (but without Service Recipient's consent); provided that if any such assignment or subcontracting will materially increase the cost of such Service, then the Parties will collaborate in good faith to limit any such cost increase and the Service Provider shall obtain Service Recipient's prior written consent to such assignment or subcontract, such consent not to be unreasonably delayed or withheld. For the avoidance of doubt, Service Recipient, at its option, may elect to terminate any Service provided hereunder at any time prior to the expiration of the Service Period or any Permitted Term Extension.

SECTION 3.02. Early Termination. This Agreement may be terminated at any time by mutual written agreement of Service Recipient and Service Provider. Either Party may immediately terminate this Agreement, in whole or in part, upon the material breach of this Agreement by the other Party if such material breach has not been cured within thirty (30) days after written notice thereof to the Party in material breach. Except as otherwise agreed to by the Parties, Service Recipient may terminate any or all Services (or any portion of a Service) at any

time during the term of this Agreement so long as Service Recipient shall have provided Service Provider written notice of such termination with respect to such Service within the time period set forth in Schedule A.

SECTION 3.03. Effects of Termination/Expiration. The expiration or termination of this Agreement, in whole or in part, for any reason will not (i) affect any outstanding obligations or payments due hereunder for Services provided prior to such expiration or termination (provided that, for the avoidance of doubt, if this Agreement expires or is terminated in part with respect to certain but not all Services, the Service Fee for any expired or terminated Service (or portion thereof) shall terminate as of the date of such expiration or termination), (ii) release either Party from any liability which at such time has already accrued or which thereafter accrues from a breach or default prior to such expiration or termination, or (iii) affect in any way the survival of any other right, duty or obligation of either Party which is expressly stated in this Agreement to survive. Upon any termination or reduction of any Service pursuant to Section 3.02, (i) any licenses granted under Section 2.08 shall immediately terminate with respect to the terminated Services and (ii) Service Provider shall promptly return to Service Recipient any of Service Recipient's equipment and materials (including any documentation) that are not required for use in connection with any non-terminated Services. Except in the event of a termination by Service Recipient for Service Provider's material breach under Section 3.02, Service Recipient shall bear any termination fees or other amounts payable by Service Provider or its Affiliates to a Third Party as a result of the termination of any Service. Upon receipt of any notice from Service Recipient of an intent to terminate a particular Service pursuant to the foregoing sentence, Service Provider shall provide Service Recipient a good faith estimate of any termination fees that will be due to any Third Party as a result of such termination.

## ARTICLE IV

## INVOICES; TAXES; PAYMENT

SECTION 4.01. Payment; Net Economic Benefit Arrangement.

(a) During the Transition Period, Service Provider shall provide Service Recipient with the NEB resulting from the sale or distribution by the Service Providing Entities of the Products in the Territory as agent for Service Recipient.

(b) During the Transition Period, on a Calendar Quarter basis, Service Provider shall provide Service Recipient with a reasonably detailed written statement (the "Quarterly Statement") setting forth the NEB and Ongoing Business Expenses for the corresponding Calendar Quarter, including all information reasonable necessary to calculate and validate the NEB and Ongoing Business Expenses (including all components thereof).

(c) Service Provider shall provide Service Recipient with its good faith estimation of each element of NEB and Ongoing Business Expenses for the corresponding Calendar Quarter, reasonably necessary to permit Service Recipient to record such amounts in its financial statements for accrual and accounting purposes, no later than five (5) Business Days following the end of each Calendar Quarter. The Quarterly Statement shall be provided no later than twenty (20)

calendar days following the end of each Calendar Quarter, provided, however, that for the last Calendar Quarter in each Calendar Year during the Transition Period, an updated Quarterly Statement may be submitted no later than ninety (90) calendar days after the end of such Calendar Year, reflecting any adjustments required therein resulting from audits of the accounts of Service Provider and its Affiliates.

(d) If the NEB set forth in the Quarterly Statement is positive, then on the basis of such Quarterly Statement, (i) Service Recipient shall, within ten (10) Business Days following receipt of such Quarterly Statement, send to Service Provider an invoice for the NEB, as reduced to account for any terminated or completed Services, set forth in the Quarterly Statement conforming to such invoice guidelines as Service Provider may reasonably specify (the "NEB Invoice"), and (ii) Service Provider shall pay to Service Recipient no later than twenty (20) calendar days following delivery of the corresponding NEB Invoice by wire transfer of immediately available funds in accordance with the wire transfer instructions set forth in the NEB Invoice, the amount set forth in such NEB Invoice.

(e) Service Provider or one or more of its Affiliates shall issue and send to Service Recipient a consolidated invoice with each Quarterly Statement for (i) the amount of the Ongoing Business Expenses set forth in the Quarterly Statement, and (ii) if the NEB set forth in a Quarterly Statement is negative, then for such difference. Service Recipient shall remit such amount to Service Provider within twenty (20) days from date of delivery of the relevant invoice.

(f) All payments in connection with the NEB and Ongoing Business Expenses shall be in US Dollars.

(g) Service Provider shall keep complete and accurate books and records and documentation of the Services provided and reasonable supporting documentation of all charges and expenses incurred in providing such Services for a period and in a manner consistent with its current management practices or as otherwise required by applicable Law. Service Recipient may reasonably request, and Service Provider shall provide, any further information or documentation in order for Service Recipient to verify the information contained in the Quarterly Statement or any invoice.

(h) Without limitation to Section 4.01(g), if there is a significant variance from historical trends reported in the Quarterly Statement, Service Recipient may reasonably request, and Service Provider shall provide, further information and/or documentation in order for Service Recipient to clarify potential sources of variance.

(i) Notwithstanding anything in this Agreement, the U.S. Market Transition Services Agreement or the Asset Purchase Agreement to the contrary, Service Provider shall promptly pay, or cause to be paid, (i) all amounts that are included in clause [*****] of the definition of Net Economic Benefit, to [*****] or any other Person to which payment of any such amount is required, and (ii) all amounts that are included in clause [*****] of the definition of Net Sales to the persons entitled to receive the rebates, returns, chargebacks, allowances, reimbursements, costs or payments set forth in clause [*****] of such definition and (iii) all

Ongoing Business Expenses to [*****] or any other Person to which payment of such amount is required. Each Party shall use good faith efforts to minimize the fees and charges for the Services.

SECTION 4.02. Disagreements.

(a) In the event Service Recipient disagrees with any Quarterly Statement or any amount set forth therein, Service Recipient shall give Service Provider notice thereof (the "Notice of Disagreement") no later than sixty (60) days after delivery of the Quarterly Statement and shall be entitled to withhold payment of any amounts to the extent subject to a bona fide dispute. The Notice of Disagreement shall specify in reasonable detail the nature and amount, if known, of any disagreement so asserted (the "Disputed Matters"). During the thirty (30) day period immediately following the delivery of the Notice of Disagreement (the "Informal Resolution Period"), Service Provider and Service Recipient shall seek in good faith to resolve the Disputed Matters.

(b) If at the end of the Informal Resolution Period, the Disputed Matters have not been resolved by agreement of the Parties, either or both of the Parties may submit the Disputed Matters for review and resolution by an accounting firm jointly selected by Service Provider and Service Recipient in writing or if the Parties are unable to agree, an independent accounting firm jointly selected by Service Provider's and Service Recipient's independent certified public accountants (such firm, the "Accounting Firm"). The Accounting Firm shall be entitled, on a reasonable and confidential basis, to audit the books, records, and accounts of Service Provider and its Affiliates related to such matter in dispute and to make a final determination of the amounts to be properly set forth on the applicable Quarterly Statement(s), and shall use such determination to prepare revised Quarterly Statement(s) as necessary to reflect the Accounting Firm's determination in accordance with this Agreement, which determination and final Quarterly Statement(s) shall be final and binding on the Parties, from and after their delivery to the Parties by the Accounting Firm, it being understood that any such values shall be only within the range of the amounts proposed by Service Recipient and Service Provider in the course of such audit and that in making its determination the Accounting Firm will be acting as an expert and not as an arbitrator; provided, however, the scope of such determination by the Accounting Firm shall be limited to (i) those matters that remain in dispute and that were included in the Notice of Disagreement, (ii) whether, for each piece of information or calculation on the Quarterly Statement(s), as the case may be, such information was accurate or such calculation was performed in accordance with this Agreement and (iii) whether there were mathematical or factual errors in the Quarterly Statement(s), as the case may be, and the Accounting Firm is not authorized or permitted to make any other determination. Without limiting the generality of the foregoing, the Accounting Firm is not authorized or permitted to make any determination as to any representation or warranty in this Agreement or as to compliance by Service Provider or any Affiliate with any of the covenants in this Agreement (other than the compliance by Service Provider with any payment and reporting provisions of this Agreement to the extent such compliance is the subject of any dispute being resolved in accordance with this Section 4.02).

(c) If, following resolution of the matter in dispute under this Section 4.02, the amount shown on any Quarterly Statement(s) indicates that a Party has overpaid or underpaid the other Party for the applicable period, then the amount of such underpayment or overpayment, as

the case may be, plus interest on such amount accrued from the required date of payment of the original Quarterly Statement at an annual rate equal to [*****] shall be taken into account on the Quarterly Statement for the Calendar Quarter in which such matter was resolved for purposes of calculating the NEB and the Ongoing Business Expenses for such Quarterly Statement; provided, however, that if such matter is resolved following the expiration of the last Calendar Quarter to occur during the Transition Period, then such amount, together with interest thereon as provided herein, shall be due and payable by the applicable Party no later than ten (10) Business Days following the date on which such matter was resolved as provided herein. The fees, costs and expenses of the Accounting Firm with respect to the resolution of any Disputed Matters shall be allocated and borne by Parties based on the inverse of the percentage that the Accounting Firm's determination (before such allocation) bears to the total amount of the total items in dispute as originally submitted to the Accounting Firm. For example, should the items in dispute total in amount to one thousand dollars ($1,000) and the Accounting Firm awards six hundred dollars ($600) in favor of Service Recipient's position, forty percent (40%) of the costs of its review would be borne by Service Recipient and sixty percent (60%) of the costs would be borne by Service Provider.

SECTION 4.03. NEB True-Up.

(a) Service Recipient shall provide Service Provider with a written statement (the "True-Up NEB Statement") setting forth the True-Up NEB no later than [******].

(b) If the True-Up NEB set forth on the True-Up NEB Statement is greater than the aggregate amount of NEB paid by Service Provider to Service Recipient with respect to the Transition Period (such amount paid by the Service Provider, the "Estimated NEB"), Service Recipient shall include with such True-Up NEB Statement an invoice for the difference between the True-Up NEB and the Estimated NEB conforming to such invoice guidelines as Service Provider may reasonably specify (the "True-Up NEB Invoice"), and Service Provider shall pay to Service Recipient, no later than twenty (20) calendar days following delivery of the corresponding True-Up NEB Invoice by wire transfer of immediately available funds in accordance with the wire transfer instructions set forth in the True-Up NEB Invoice, the amount set forth in such True-Up NEB Invoice.

(c) If the True-Up NEB set forth on the True-Up NEB Statement is less than the Estimated NEB, then Service Provider or one or more of its Affiliates shall issue and send to Service Recipient a consolidated invoice for the difference, and Service Recipient shall remit such amount to Service Provider within twenty (20) days from date of delivery of the relevant invoice.

(d) The True-Up NEB Statement will be subject to the disagreement provisions, procedures and information access rights of Section 4.02, *mutatis mutandis*.

SECTION 4.04. Taxes.

(a) Service Recipient and the Service Providing Entities shall each cooperate, as reasonably requested by the other Party to minimize the amount of all Transfer Taxes and withholding Taxes imposed by applicable Taxing Authorities attributable to any payments

contemplated by this Agreement, including by claiming any available exemption or by executing and filing any invoices, forms or certificates reasonably required. Each of Service Recipient and Service Provider shall be responsible for any (i) real or personal property Taxes on property it owns or leases, (ii) franchise, margin, privilege and similar Taxes on its business, (iii) employment Taxes or contributions imposed on it or required from it with respect to its employees and (iv) Taxes based on its income, gross receipts or capital.

(b) The Parties acknowledge and agree that the arrangement contemplated by Section 4.01 has the effect of transferring a preponderance of the net economic benefits and burdens associated with sale of the Products during the Transition Period to Service Recipient. The Parties intend that, for United States income tax purposes, Service Recipient shall be treated as the beneficial owner of the Products procured from Nordmark, that all revenues and expenses associated with the procuring and sales of such Products are revenues and expenses of Service Recipient, and that Service Provider shall be treated as an independent agent of Service Recipient acting in the ordinary course of its business providing distribution services to Service Recipient in exchange for Service Fees (the "Intended Tax Treatment"). The Parties shall make all Tax filings consistent with such intent except as otherwise required by applicable Tax law, and the Parties shall reasonably cooperate in connection with the provision of available information required to prepare their respective Tax Returns consistent with the Intended Tax Treatment.

(c) Except to the extent otherwise required by a change in law occurring after the date of this Agreement (and provided that Service Recipient complies with its obligation to provide an Internal Revenue Service Form W-9 as described in the last sentence of this Section 4.04(c) and does not assign its rights and obligations under this Agreement to any Third Party), Service Provider will make all payments to Service Recipient under this Agreement without deduction or withholding for Taxes, consistent with the Intended Tax Treatment. To the extent there is any change in law after the date of this Agreement that would impose any deduction or withholding on the amounts paid to Service Recipient by Service Provider hereunder, or if Service Recipient fails to deliver an IRS Form W-9 as described in this last sentence of this Section 4.04(c) or assigns its rights and obligations under this Agreement to a Third Party such that withholding is required, Service Provider shall be entitled to deduct and withhold only those Taxes from the payments made hereunder as are required to be deducted and withheld under applicable Law. Any such Taxes that are deducted or withheld shall be remitted to the appropriate Governmental Authority, and Service Provider shall provide Service Recipient with proof of payment to the appropriate Governmental Authority. Service Provider and Service Recipient will cooperate with respect to all documentation required by any Taxing Authority or reasonably requested by Service Provider to secure a reduction in the rate of applicable withholding Taxes. On the date of execution of this Agreement, Service Recipient will deliver to Service Provider an accurate and complete Internal Revenue Service Form W-9 certifying that Service Recipient is a U.S. person and beneficial owner of the payment and is entitled to receive such payment free of backup withholding.

(d) Service Provider shall collect all sales, use, value added or similar Taxes assessed in connection with the distribution and sale of the Products in the United States (including any jurisdiction located therein), in accordance with Service Provider's past practice. Service Provider shall provide such collected amounts to Service Recipient so that they may be remitted

to the appropriate Taxing Authority. The Parties will reasonably cooperate with respect to the collection and remittance of any Taxes described in this Section 4.04(d); provided that nothing herein shall require Service Provider to make any changes or modifications to its systems or processes as a result of its status as agent for Service Recipient.

(e) The Parties agree that: (i) Service Provider is authorized, as an agent of Service Recipient and in accordance with the instructions provided by Service Recipient, to act on behalf of Service Recipient and to enter into contracts with third parties in connection with the sales of the Products, (ii) the proceeds from the sales of the Products shall be collected directly by Service Provider on behalf of Service Recipient and strictly as an agent of Service Recipient, and (iii) Service Provider shall not use, alter or consume in any way whatsoever the Products sold on behalf of Service Recipient.

SECTION 4.05. Offsetting. Any Party may offset any amount due to it or any of its Affiliates against any payment due under this Agreement in the event that the other Party or any of its Affiliates fails to remit payment that is not subject to a *bona fide* dispute between the Parties as to whether such payment is due to the first Party or any of its Affiliates in full within sixty (60) days following the applicable time period for payment thereof.

## ARTICLE V

## SUSPENSIONS; OPERATION AND USE OF SERVICE PROVIDER FACILITIES

SECTION 5.01. Service Provider Suspensions. Service Recipient acknowledges that Services may, from time to time, in the reasonable discretion of Service Provider, be interrupted in each case for ordinary course modifications and ordinary maintenance to the assets needed to provide Services and any other routine matters of a reasonable and short-term nature (the "Service Suspensions"). Except in emergency situations, Service Provider shall notify Service Recipient as promptly as practicable and as far in advance as reasonably practicable, but in no event later than seven (7) days, before any Service Suspension, and, in all cases, shall keep Service Recipient apprised of its efforts and use reasonable best efforts to progress in eliminating such Service Suspension. Service Provider shall consider the impact of any such Service Suspensions on Service Recipient, and the Parties shall use commercially reasonable efforts to minimize any disruption on, or adverse consequences to, Service Recipient's business related to such Service Suspension. In the event that a particular Service Fee is based on the duration of time for which Service Provider provides the applicable suspended Service, Service Provider shall reduce the charges related to such suspended Service on a pro rata basis based on the number of days such Service is suspended.

SECTION 5.02. Governmental Suspension. If any applicable Law, final order or decree shall prevent or limit Service Provider in providing (or arranging for the provision of) any Service, Service Provider shall not be required to provide (or arrange for the provision of) such Service to the extent so limited, restricted or regulated. Service Provider shall give Service Recipient prompt notice of any such occurrence, and the Parties shall cooperate, in a commercially reasonable manner, to devise an alternative arrangement for the provision of such Service. Service

Provider shall perform such mutually satisfactory alternative arrangement, and Service Recipient shall bear any additional reasonable out-of-pocket costs and expenses incurred in the performance of such alternative arrangement to which Service Recipient has agreed.

SECTION 5.03. Governmental Communications. All communications and requests received by a Party from a Governmental Authority related to or concerning the Purchased Assets, the Products or Services shall be immediately forwarded to the other Party for its comments. Each Party shall copy the other Party on the responses provided to such Governmental Authority and, where possible, permit comments by the other Party on such communications prior to their submission to such Governmental Authority. Each Party shall consider and reasonably reflect any such comments by the other Party in good faith. Neither Party shall provide any undertakings to a Governmental Authority relating to the Purchased Assets, the Products or Services without the specific prior written agreement of the other Party, unless the prior written agreement would cause such Party to be in violation of any applicable Law.

SECTION 5.04. Additional Facilities Required by Law. If any applicable Law, final order or decree shall require Service Provider or any of its Affiliates to modify its facilities or equipment in any material respect, or to obtain additional facilities or material equipment, Service Provider shall not be required to provide (or arrange for the provision of) any Services to the extent such Services are directly affected by the matters described in this Section 5.04, unless (a) Service Provider is concurrently providing (or arranging for the provision of) such Services for its own operations, (b) the Parties agree on the allocation of the costs of such required modifications or (c) otherwise mutually agreed by the Parties.

## ARTICLE VI

## SERVICE RECIPIENT'S OPERATIONS

SECTION 6.01. General. If Service Recipient modifies the current operation or facilities of the Business with respect to the Products in any material respect not contemplated hereby during the term of this Agreement, and such modified operations would prevent Service Provider from performing the Services or materially increase the cost to provide any Services, Service Provider shall notify Service Recipient in writing, and if Service Recipient does not remedy the conditions within thirty (30) days of such written notice, then the Parties shall negotiate in good faith to continue the provision of (or arrange for the provision of) the relevant Services and, failing such agreement, Service Provider shall not be required to provide (or arrange for the provision of) such Services to the extent affected by such modifications, unless there is a reasonable alternative that would allow Service Provider to perform the Services and Service Recipient agrees to bear any increased cost and additional out-of-pocket costs and expenses of providing such Services as a result thereof.

## ARTICLE VII

## CONFIDENTIALITY

SECTION 7.01. Confidential Information. As used herein, "Confidential Information" means all confidential or proprietary information given to one Party by the other Party, or otherwise properly acquired by such Party, in each case in connection with this Agreement, relating to such other Party or any of its Affiliates, including information regarding any of the products of such other Party or any of its Affiliates, information regarding its sales, advertising, distribution, marketing or strategic plans or information regarding its costs, productivity, manufacturing processes or technological advances and the terms of this Agreement. Neither Party will use or disclose to any Person (or permit the use or disclosure of) any Confidential Information of the other Party (except to comply with its obligations and receive the benefit of Services under this Agreement) and each Party will ensure that its and its Affiliates' respective Representatives will not use or disclose to Third Parties any Confidential Information (except to comply with its obligations and receive the benefit of Services under this Agreement) and upon the termination of this Agreement will return to the other Party or destroy all Confidential Information in written form except as necessary for corporate record keeping or legal archive purposes; provided, however, that the foregoing shall not require either Party to destroy any electronic copies of the other Party's Confidential Information that were automatically-generated for disaster recovery purposes that cannot be destroyed without undue effort and to which access is limited. The receiving Party shall, and shall cause its Affiliates and their respective Representatives to, protect the Confidential Information of the disclosing Party by using the same degree of care to prevent the unauthorized disclosure of such as the receiving Party uses to protect its own confidential information of a like nature, but in any event no less than a reasonable degree of care. Confidential Information will not include information that (i) was already known to the receiving party at the time of its receipt thereof or is independently developed by the receiving Party, in each case without reference to or use of the Confidential Information, (ii) is disclosed to the receiving Party after its receipt thereof by a Third Party who, the receiving Party in good faith believes, has a right to make such disclosure without violating any obligation of confidentiality or (iii) is or becomes part of the public domain through no fault of the receiving Party in violation of this Agreement or the Asset Purchase Agreement. If Confidential Information of a Party is required to be disclosed by law, regulation, or court order, the other Party must first (to the extent permissible under applicable Law or the rules governing such proceeding) notify such Party and permit such Party an opportunity to seek an appropriate protective order or other confidential treatment thereof. Notwithstanding the foregoing, all information regarding the Business, included in the Purchased Assets, and generated for the Service Recipient in connection with the Services shall be deemed to be the Confidential Information of Service Recipient regardless of Service Provider's prior knowledge of such information, receipt of such information from a Third Party, or independent development of such information.

## ARTICLE VIII

## DOCUMENTATION OF AUTHORITY; ASSISTANCE

SECTION 8.01. Service Recipient Assistance. The timely completion of the Services by Service Provider may depend upon the provision of certain materials and information or the taking of certain actions by Service Recipient, and Service Provider shall not be responsible for the failure to provide any Services to the extent that such failure results from the failure of Service Recipient to provide such materials or information or take such actions following the receipt of written notice from Service Provider. Service Recipient shall provide to Service Provider, subject to Service Recipient's reasonable discretion, (a) subject to Article VII, information reasonably necessary for the performance of the Services that is in the possession of Service Recipient, (b) reasonable access to Service Recipient's books and records as reasonably necessary for the performance of the Services, and (c) reasonable access to, during normal business hours, and cooperation from Service Recipient's employees involved with the Products. Notwithstanding the provisions of Section 11.05, subject to Service Recipient's reasonable discretion, Service Recipient will execute any documents evidencing the limited scope of authority of Service Providing Entities to represent Service Recipient and its Affiliates as Service Provider and Service Recipient shall mutually reasonably deem necessary for the performance of the Services.

SECTION 8.02. Documents and Forms(o) . Except as otherwise mutually agreed by the Parties (such agreement not to be unreasonably withheld, conditioned or delayed), Service Recipient acknowledges that during the period of this Agreement, documents prepared by Service Provider will continue to be printed on Service Provider forms except as may be otherwise agreed to by the Parties or required by Law.

SECTION 8.03. Misdirected Receipts(p) . In the event that, on or after the date of this Agreement, either Party shall receive any payments or other funds due to the other pursuant to the terms hereof, the Asset Purchase Agreement or otherwise, then the Party receiving such funds shall promptly forward such funds to the proper Party. The Parties acknowledge that there is no right of offset regarding such payments and a Party may not withhold funds received from Third Parties for the account of the other Party in the event there is a dispute regarding any other issue under this Agreement.

SECTION 8.04. Governmental Authorizations(q) . Service Recipient shall use reasonable best efforts to promptly transfer or otherwise obtain the required regulatory approvals, including without limitation the Transferred Governmental Authorizations in the Territory, in order to transition off of the Services.

## ARTICLE IX

## LIMITATION OF LIABILITY AND INDEMNIFICATION

SECTION 9.01. Limitation on Liability.

(a) Except for gross negligence, fraud or intentional misconduct by Service Provider, any of its Affiliates or any Other Service Provider or incurred as a result of or related to a Third Party Claim or as a result of a breach of Article VII, Service Provider's maximum liability (including any liability for the acts and omissions of its Affiliates or the Service Providing Entities or its or their respective Representatives) to, and the sole monetary remedy with respect to Losses of, Service Recipient for matters arising out of this Agreement shall be limited to the aggregate amount of the Service Fees received by Service Provider, its Affiliates and the other Service Providing Entities under this Agreement. With respect to any Losses arising under this Agreement, except for fraud, intentional misrepresentation or willful breach, Service Recipient agrees that it shall only seek Losses from Service Provider, and Service Recipient hereby waives the right to seek monetary compensation for Losses from or against any Affiliate of Service Provider, any Other Service Provider, or any Representative of Service Provider or any Other Service Provider and any of their respective Affiliates other than Service Provider. Service Provider shall be liable and responsible (subject to the terms hereof) for the Services provided by any Other Service Provider, and any acts or omissions of such Other Service Provider, to the same degree and subject to the same limitations as Service Provider is liable and responsible for its acts or omissions hereunder. If Service Provider or any Other Service Provider commits an error with respect to or incorrectly performs or fails to perform any Service in compliance with the terms of this Agreement, at Service Recipient's request, Service Provider shall, or shall cause such Other Service Provider to, correct such error and re-perform or perform such Service at no additional cost to Service Recipient.

(b) NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, (I) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR LOST REVENUES OR PROFITS OR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR ANY LIABILITY RETAINED OR ASSUMED HEREUNDER UNLESS SUCH LOST REVENUES OR PROFITS OR DAMAGES ARE THE NATURAL, PROBABLE AND REASONABLY FORESEEABLE RESULT OF THE EVENT THAT GAVE RISE TO THE CLAIM FOR INDEMNIFICATION, INCLUDING DIRECT DAMAGES UNDER APPLICABLE LAW, AND (II) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR PUNITIVE, EXEMPLARY OR MULTIPLIED DAMAGES; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY OF SUCH LOST REVENUES OR PROFITS OR DAMAGES THAT ARE PAID OR REQUIRED TO BE PAID BY AN INDEMNIFIED PARTY TO AN UNRELATED THIRD PARTY.

(c) Notwithstanding anything to the contrary contained herein, none of Service Provider, any of its Affiliates or any Other Service Provider shall have any liability relating to the implementation, execution or use by Service Recipient or any of its Affiliates of the Services provided under the terms of this Agreement, except in the case of any breach of this Agreement,

fraud, intentional misconduct or negligence by Service Provider, any of its Affiliates or any other Service Providing Entities.

SECTION 9.02. Indemnification.

(a) Service Recipient shall defend, indemnify and hold harmless Service Provider, its Affiliates and any Other Service Provider and its and their respective directors, officers, employees, Affiliates, agents and representatives (collectively, the "Service Provider Indemnified Parties") from and against any and all Losses which any Service Provider Indemnified Party may incur or suffer from any action, claim or proceeding instituted by a Third Party (each, a "Third Party Claim") in connection with (i) any breach by Service Recipient, its Affiliates or its or their respective employees, agents or contractors of this Agreement, or (ii) fraud, intentional misconduct, gross negligence or violation of any Law by Service Recipient, other than, in each case of clauses (i) and (ii), any Losses directly arising or resulting from fraud, intentional misconduct, negligence, violation of any Law or breach of this Agreement by Service Provider, any of its Affiliates or any other Service Providing Entities.

(b) Service Provider shall defend, indemnify and hold harmless Service Recipient and its Affiliates and its and their respective directors, officers, employees, agents and representatives (collectively, the "Service Recipient Indemnified Parties") from and against any and all Losses which any Service Recipient Indemnified Party may incur or suffer from any Third Party Claim in connection with (i) any breach by Service Provider, its Affiliates, any other Service Providing Entities or its or their respective employees, agents or contractors of its obligations under this Agreement, or (ii) fraud, intentional misconduct, gross negligence or violation of any Law by Service Provider, its Affiliates or any other Service Providing Entities, other than, in each case of clauses (i) and (ii), any Losses directly arising or resulting from fraud, intentional misconduct, negligence, violation of any Law or material breach of this Agreement by Service Recipient or any of its Affiliates.

(c) All claims for indemnification under clauses (a) or (b) above shall be asserted and resolved pursuant to procedures equivalent to the indemnity procedures set forth in Sections 8.03 and 8.04 of the Asset Purchase Agreement.

SECTION 9.03. Representations and Warranties. Each Party represents and warrants to the other Party that as of the date of this Agreement: (a) it has the capacity and authority to enter into this Agreement; (b) the Persons entering into this Agreement on its behalf have been duly authorized to do so; and (c) this Agreement and the obligations created hereunder are binding upon it and enforceable against it in accordance with their terms (subject to applicable principles of equity) and do not and will not violate the terms of any other material agreement, or any judgment or court order, to which it is bound.

## ARTICLE X

## FORCE MAJEURE

SECTION 10.01. Force Majeure. The Parties shall be relieved of their obligations hereunder, if and to the extent that an event caused by circumstances beyond the reasonable control of either Party, which by its nature could not have been foreseen by such Party, or, if it could have been foreseen, was unavoidable, including the following events: war, terrorist act, riot, fire, explosion, accident, flood, sabotage, national defense requirements, labor strike, lockout or injunction, or any other event beyond the reasonable control and, in each case, without the fault or negligence of such Party or the other Service Providing Entities (each a "force majeure event"). The Party thus hindered or whose performance is otherwise affected shall promptly give the other Party notice thereof and shall use commercially reasonable efforts to remove or otherwise address the impediment to action as soon as practicable and to promptly resume performance of its obligations hereunder; provided that Service Provider and its Affiliates shall not be required to settle a labor dispute other than as it may determine in its sole judgment. Service Recipient shall have the right to immediately terminate this Agreement or any Service hereunder in the event that Service Provider is unable to meet its obligations due to a force majeure event lasting or anticipated to last longer than thirty (30) days. Service Recipient shall be entitled to, at Service Recipient's option, an extension of the term of the Services and this Agreement for the period of any such delay and an equitable abatement of any fees for Services, as applicable, for the period during which such Services are not provided.

## ARTICLE XI

## MISCELLANEOUS

SECTION 11.01. Notices. Any notice, request, instruction or other communication to be given hereunder by either Party to the other Party shall be in writing and delivered in the manner and to the address of the applicable Party as set forth in Section 10.01 of the Asset Purchase Agreement.

SECTION 11.02. Assignment. Neither Party to this Agreement may assign any of its rights or obligations under this Agreement, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets, without the prior written consent of the other Party, except that (a) Service Provider may, without such consent, assign its rights or obligations to an Affiliate (provided, however no such assignment by Service Provider shall relieve Service Provider of any of its obligations under this Agreement) and (b) Service Recipient may, without such consent, assign its rights hereunder, in whole or in part, to one or more of its Affiliates (provided, however, that no such assignment by Service Recipient shall relieve Service Recipient of any of its obligations hereunder). Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 11.02 shall be null and void.

SECTION 11.03. Amendments and Waivers. Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (a) in the case of an amendment, by Service Provider and Service Recipient and (b) in the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by either Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

SECTION 11.04. Law; Dispute Resolution.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction. The Parties consent to the exclusive jurisdiction of the Federal and State courts located in the State of New York for the resolution of all disputes or controversies between the Parties which, pursuant to applicable Law, are not subject to the provisions of Section 10.11 of the Asset Purchase Agreement. Each of the Parties (i) consents to the exclusive personal jurisdiction and venue of each such court in any suit, action or proceeding relating to or arising out of this Agreement or the Transactions; (ii) waives any objection that it may have to the laying of venue in any such suit, action or proceeding in any such court; and (iii) agrees that service of any court paper may be made in such manner as may be provided under applicable Laws or court rules governing service of process. THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE, AND AGREE TO CAUSE THEIR RESPECTIVE AFFILIATES TO WAIVE, THE RIGHT TO TRIAL BY JURY IN ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY RELATED AGREEMENTS OR ANY OF THE TRANSACTIONS. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) EACH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) EACH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (IV) EACH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 11.04. Any dispute, controversy or claim arising out of or related to this Agreement, or the interpretation, application, breach, termination or validity thereof, including any claim of inducement by fraud or otherwise, will be submitted to arbitration and before submission to arbitration will be first mediated through non-binding mediation, in each case in accordance with the arbitration and mediation procedures set forth in Section 10.11 of the Asset Purchase Agreement.

(b) Without intending to limit the remedies available to the Parties hereunder, the Parties acknowledge and agree that irreparable damage would occur in the event that any provision of this Agreement were not performed in accordance with its specific terms or is otherwise breached or violated, and that money damages or other legal remedies would not be an adequate

remedy for any such damages. Accordingly, the Parties agree that, without posting bond or other undertaking, the non-breaching party shall be entitled to an injunction or injunctions to prevent breaches or violations of this Agreement by the other Party and to enforce specifically this Agreement and the terms and provisions hereof in any action instituted in any court specified in Section 11.04(a) in addition to any other remedy to which the Parties may be entitled, at law or in equity. Each Party further agrees that, in the event of any action for an injunction or specific performance in respect of any such threatened or actual breach or violation, it shall not assert that a remedy at law would be adequate.

SECTION 11.05. Independent Contractors. The relationship of Service Recipient and Service Provider established by this Agreement is that of independent contractors, and nothing contained herein shall be construed to (i) subject to the last sentence of Section 8.01, give either Party any right or authority to create or assume any obligation of any kind on behalf of the other or (ii) constitute the Parties as partners, joint venturers, co-owners or otherwise as participants in a joint or common undertaking. Nothing in this Agreement is intended to transfer the employment of employees engaged in the provision of any Service from one party to the other. All employees and representatives of Service Provider and any of its Affiliates and any Other Service Provider will be deemed for all employment related obligations, including compensation, employee benefits, Tax and social security contribution purposes to be employees or representatives of such party or its Affiliates (or their subcontractors) and not employees or representatives of Service Recipient or any of its Affiliates (or their subcontractors) and as between Service Provider and Service Recipient, Service Provider shall be responsible for all such obligations. In providing the Services, such employees and representatives will be under the direction, control and supervision of Service Provider or its Affiliates (or Other Service Provider) and not of Service Recipient.

SECTION 11.06. Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any term or other provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid, illegal or unenforceable, (a) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity, illegality or unenforceability, nor shall such invalidity, illegality or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

SECTION 11.07. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that both Parties need not sign the same counterpart. This Agreement, following its execution, may be delivered via telecopier machine or other form of electronic delivery, which shall constitute delivery of an execution original for all purposes.

SECTION 11.08. Further Assurances. Each Party covenants and agrees to (and to cause its Affiliates to) (i) promptly execute and deliver such additional documents as may be reasonably requested by the other Party, and (ii) make available on a timely basis such additional information and materials as may be reasonably requested by the other Party, in each case (i) and (ii) in order to make the Services available to Service Recipient in accordance with the terms and conditions hereof and to otherwise implement or give effect to this Agreement and the matters contemplated hereby.

SECTION 11.09. Interpretation. The heading references herein are for convenience purposes only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The words "hereof", "herein", "hereto" and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The terms defined in the singular have a comparable meaning when used in the plural, and vice versa. The terms "U.S. Dollars" and "$" mean lawful currency of the United States. The terms "include," "includes" and "including" means "including, without limitation." When a reference is made in this Agreement to an Article, a Section, an Exhibit or a Schedule, such reference shall be to an Article or a Section of, or an Exhibit or a Schedule to, this Agreement unless otherwise indicated. Time periods based on a number of days within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends and, if applicable, by extending the period to the next Business Day following if the last day of the period is not a Business Day. The term "United States" shall refer to the United States of America and its territories, including Puerto Rico.

SECTION 11.10. Asset Purchase Agreement. Nothing contained in the Agreement is intended or shall be construed to amend or modify in any respect, or constitute a waiver of, any of the rights and obligations of the Parties under the Asset Purchase Agreement.

SECTION 11.11. Entire Agreement. This Agreement, together with the Exhibits and Schedules delivered pursuant hereto (which are hereby incorporated by reference), and the Asset Purchase Agreement, the Transaction Documents and the Confidentiality Agreement, contains the entire agreement between the Parties with respect to the Transactions and supersedes all prior agreements, discussions, negotiations or understandings between the Parties not expressly set forth in this Agreement, the Exhibits and Schedules delivered pursuant hereto, the Asset Purchase Agreement, the Transaction Documents or the Confidentiality Agreement. Other than the Confidentiality Agreement entered into between the Parties, the Asset Purchase Agreement, the Transaction Documents or the Exhibits and Schedules thereto are intended to define the full extent of the legally enforceable undertakings and representations of the Parties, and no promise or representation, written or oral, which is not set forth in such Transaction Documents or the Exhibits and Schedules thereto is intended by either Party to be legally binding. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

*[remainder of page intentionally blank]*

IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed as of the Effective Date.

JANSSEN PHARMACEUTICALS, INC.

By: _____
Name:
Title: Authorized Signatory

IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed as of the Effective Date.

**VIVUS, INC.**

By: _____
Name: John P. Amos
Title: Chief Executive Officer

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

## Exhibit A – J&J Universal Calendar

[*****]

EXHIBIT E

# TRANSITIONAL BUSINESS LICENSE AGREEMENT (CANADA)

THIS TRANSITIONAL BUSINESS LICENSE AGREEMENT (this "Agreement") dated as of _____ (the "Effective Date"), between VIVUS, Inc., a corporation organized under the laws of the State of Delaware (the "Licensor"), and Cilag GmbH International, a company with limited liability organized under the laws of Switzerland (the "Licensee"). Licensor and Licensee may be referred to in this Agreement individually as a "Party," or collectively as the "Parties."

WHEREAS, pursuant to the Asset Purchase Agreement between Janssen Pharmaceuticals, Inc. ("Seller") and Licensor dated as of April 30, 2018 (the "APA"), Purchaser agreed among other things to purchase (or cause one or more of its Affiliates to purchase) from Seller and certain of its Affiliates all of the Purchased Assets (as defined in the APA) and Purchaser agreed to assume all of the Assumed Liabilities (as defined in the APA), in each case upon the terms and conditions set forth in the APA;

WHEREAS, Licensee is an Affiliate of Seller; and

WHEREAS, Licensee desires to obtain a license from Licensor to conduct the Business in order to (i) carry on the manufacturing, importing, marketing, sale and distribution of the Products (as defined in the APA) after the date of this Agreement on its own account during the period when Licensor is unable to do so and (ii) to provide Licensor the opportunity to find an alternate licensee or obtain alternate sources of services necessary to allow it to operate the Business (as defined below) within a reasonable time after the Effective Date.

NOW, THEREFORE, in consideration of the mutual agreements contained herein, and subject to and on the terms herein set forth, the Parties hereto agree as follows:

## ARTICLE I

## DEFINITIONS

SECTION 1.01. Defined Terms. Each capitalized term used and not defined in this Agreement shall have the meaning assigned to it in the APA. For purposes of this Agreement and unless not defined otherwise herein, the following words and phrases shall have the following meaning:

"Approved Promotional Materials" means Promotional Materials that comply in all respects with applicable Laws, including those related to prescription drug advertising and materials submitted to, and approved by, the applicable Governmental Authority.

"Business" means the business of manufacturing, importing, marketing, selling and distributing the pharmaceutical products included in the Purchased Assets, all for ultimate sale in Canada, in compliance with all applicable Law in the manner in which such activities were

previously conducted by Seller and the Divesting Entities (directly or indirectly through Third Parties on behalf of Seller and the Divesting Entities) during the Reference Period.

"Calendar Quarter" means a financial quarter based on the J&J Universal Calendar (a copy of which for the year 2018 is attached as Exhibit A); provided, however, that (a) the first Calendar Quarter under this Agreement shall extend from the Effective Date until the last day of the first Calendar Quarter of the Term and (b) the last Calendar Quarter under this Agreement shall extend from the first day of such Calendar Quarter until the last day of the Term.

"Calendar Year" means a calendar year based on the J&J Universal Calendar (a copy of which for the year 2018 is attached as Exhibit A); provided, however, that (a) the first Calendar Year under this Agreement shall extend from the Effective Date until the last day of the first Calendar Year of the Term and (b) the last Calendar Year under this Agreement shall extend from the first day of such Calendar Year until the last day of the Term.

"Current Promotional Materials" means any Promotional Materials used by or on behalf of Licensee or its Affiliates as set forth within the Transferred Domain Names.

"Exchange Rate" means (i) the exchange rate expressed on the last day of the Calendar Quarter as the amount of the relevant local currency per one U.S. dollar, as the case may be, published by Bloomberg on the relevant Bloomberg page or, if the Bloomberg page is not available for any reason, (ii) a comparable authoritative source proposed by Licensor and reasonably acceptable to Licensee, each on the date five (5) days prior to the date a payment is due.

"Historical Promotional Materials" means any Promotional Materials, other than Current Promotional Materials, owned by Licensee or its Affiliates and related to the Products.

"Net Economic Benefit" or "NEB" means for any particular period after the Effective Date through the conclusion of the Term, an amount equal to the difference between (i) the Net Sales of the Products during such period and (ii) the sum of (A) [*****] and (B) an amount equal to [*****] of the amount described in clause (i).

"Net Sales" means the gross amounts invoiced by Licensee, its Sublicensees and Affiliates, for the sale of Products to Third Parties in an arms-length transaction in Canada, excluding sales for compassionate use, named patient access and clinical trials, but solely wherein the excluded sales are made at wholesale costs without profit, less the following deductions, which deductions will be determined on a Product-by-Product basis and in accordance with GAAP, and except for those deductions (a) for which Licensee (or any of its Affiliates) is responsible pursuant to the APA, including pursuant to Sections 6.12(c) and 6.12(d) thereof and all Retained Liabilities, and (b) that are otherwise attributable to the sale or distribution of Products by Licensee prior to the Effective Date, as applicable:

(i) [*****];

(ii) [*****];

(iii) [*****];

(iv) [*****]; and

(v) [*****].

Net Sales shall not include sales by Licensee to its Affiliates or Sublicensees, if such sales are not at arm's length, for resale; rather, in each such instance, Net Sales shall include the amounts invoiced or otherwise received by such Affiliate or Sublicensee for such resale of the Products to Third Parties.

"New Promotional Materials" means any new Promotional Materials intended for use for the Promotion of the Products (whether or not based in whole or in part on Current Promotional Materials or Historical Promotional Materials).

"Nordmark" means Nordmark Arzneimittel GmbH & Co. and its successors and assigns.

"Ongoing Business Expenses" means, for any period, the following business expenses of Licensee incurred during such period pursuant to the express terms hereof (i) [*****], (ii) [*****], (iii) solely for the purposes of calculating the Ongoing Business Expenses for the Quarterly Statement corresponding to the last Calendar Quarter of the Term under this Agreement, the costs [*****]; provided, that the costs referred to in this subclause (iii) shall only be payable in respect of Products with an expiration date of no fewer than [*****]; and (iv) other reasonable documented out-of-pocket business expenses of a type not incurred by Licensee or its Affiliates during the Reference Period and required to be incurred during such period in order to conduct the Business. For the avoidance of doubt, in no event will Ongoing Business Expenses include anything deducted from Net Sales or NEB.

"Promotion" means those activities undertaken by a pharmaceutical company's sales force to implement marketing plans and strategies aimed at encouraging the appropriate use of a particular prescription or other pharmaceutical product. When used as a verb, "Promote" means to engage in such activities.

"Promotional Materials" means any advertising, marketing, sales and promotional materials used by or on behalf of Licensee or its Affiliates for the Promotion of the Products.

"Reference Period" means the twelve-month period prior to the Effective Date.

"Sublicensee" shall mean any Affiliates of Licensee and, as notified to and approved in writing by Licensor in advance (such approval not to be unreasonably withheld, conditioned or delayed), any Third Party sublicensee of Licensee.

"Territory" means Canada.

"Term" has the meaning set forth in Section 5.01.

"Third Party" means any Person other than the Parties and their respective Affiliates.

"True-Up NEB" means, for the period after the Effective Date through the conclusion of the Term, the NEB during such period determined, notwithstanding the definition thereof and of Net Sales, using the actual amounts incurred under subsections (i) through (v) of clause (b) of the definition of Net Sales, as applicable, determined based on evidence available as of [******].

## ARTICLE II

## GRANT OF LICENSE

SECTION 2.01. Grant of License. Subject to the terms and conditions of this Agreement and as of immediately after Closing, Licensor hereby grants to Licensee during the term of this Agreement, and Licensee accepts a sole, non-transferable royalty-bearing right and license, with the right to sublicense to Sublicensees, to conduct the Business in Licensee's own name and for Licensee's own account, and for such purpose Licensor hereby grants Licensee a right to the full use of the Purchased Assets in relation thereto and to the benefit of its proceeds, in exchange for the Royalties (in accordance with Article 3).

SECTION 2.02. Fit For Purpose of Business License. Licensor agrees and confirms to make the Business, immediately after Closing, available to Licensee in a condition fit for its designated use and operation pursuant to this Agreement as it existed at Closing.

SECTION 2.03. Conduct of Business. Licensee shall, or shall cause one or more of its Sublicensees to, conduct the Business in a manner substantially consistent with the conduct of the Business by Seller in the Reference Period, maintaining substantially the same level of business activities (unless otherwise agreed to by the Parties); provided, however, that notwithstanding anything in this Agreement to the contrary, neither Licensee nor any of its Affiliates or Sublicensees shall have any obligation to (i) maintain any minimum level of Net Sales in respect of the Business or (ii) engage in any development, marketing, promotion, advertising, detailing or any other commercialization activities with respect to the Business that were not being conducted by Licensee or its Affiliates for the Territory during the Reference Period. Subject to this Section 2.03, the Parties agree that Licensee, in its sole discretion, is free to conduct the Business, as it deems appropriate.

SECTION 2.04. Compliance with Laws. Licensee's, and its Affiliates' and Sublicensees', conduct of the Business shall be in compliance in all material respects with all applicable Law, including the Food and Drugs Act (Canada) R.S.C. 1985, c. F-27 and the regulations thereunder, each as amended.

SECTION 2.05. Governmental Authorizations. Licensee shall maintain, or shall cause its Affiliates to maintain at all times during the Term of this Agreement, at its expense, all

Governmental Authorizations relating to the Business, including all Governmental Authorizations for the Products in the Territory; provided, however, that Licensee or its Affiliates shall only be required to maintain a Transferred Governmental Authorization (i) until such Transferred Governmental Authorization has been transferred by Health Canada from Licensee, or its Affiliates, to Licensor (or its designee) and (ii) if Licensor (or its designee) complies with its regulatory covenants in the APA. For greater certainty, during the Term, while Licensee or its Affiliates are required to maintain the relevant Transferred Governmental Authorization(s), Licensee and its Affiliates shall remain responsible for all fabrication, packaging, labelling, testing, importing, distribution, and wholesaling of the Products in the Territory.

SECTION 2.06. Co-operation of Parties. Subject to the terms and conditions of the APA, each Party shall reasonably cooperate with the other Party to facilitate the orderly transition of the Purchased Assets and the responsibility for the conduct of the Business from Licensee to Licensor as soon as reasonably practicable, and to minimize any disruption to the other businesses of the Parties and their respective Affiliates that might result from the transactions contemplated by the APA and the Ancillary Agreements (including this Agreement). Without limiting the generality of the foregoing the Parties shall, and shall cause their respective Affiliates to, use commercially reasonable efforts to transfer the Transferred Governmental Authorizations to Licensor (or its designee) as soon as reasonably practicable following the Closing.

SECTION 2.07. Supply of Products. Licensee will be responsible for procuring the supply of the Products for the Business from Affiliates or Third Party suppliers, as Licensee deems appropriate. In the event any of the Products are, or are reasonably anticipated by Licensee to become, insufficient to satisfy market requirements in Canada and the market requirements of the Sublicensees, Licensee shall notify Licensor of such shortage or anticipated shortage together with the Licensee's current understanding of the reason for such shortage within ten (10) Business Days of becoming aware of any such shortage. In the event that a shortage of a Product causes Licensee to be unable to deliver such Product for sale to any customers in Canada, Licensee shall have no obligation to distribute such Product in Canada until such time as it is reasonably able to do so and Licensee shall not be liable to Licensor (or any of its Affiliates) under this Agreement for the shortage of such Product, except for any penalties or fines imposed by retailers as a result of such shortage.

SECTION 2.08. Promotional Materials. Prior to the Transferred Governmental Authorizations being transferred by Health Canada from Licensee (or its Affiliates) to Licensor (or its designee), Licensor may, with respect to its Promotion in Canada, only Promote or engage in Promotional activities regarding the Products in Canada if such activity has been precleared by either Ad Standards (for all Promotions directed to consumers or nonhealthcare professionals) or the Pharmaceutical Advertising Advisory Board (for Promotions directed to healthcare professionals), and only through use of the Approved Promotional Materials. Licensee shall use its commercially reasonable efforts to assist and cooperate with Licensor in submitting to Ad Standards or Pharmaceutical Advertising Advisory Board any New Promotional Materials that require approval under applicable Laws. Prior to the Transferred Governmental Authorizations being transferred by Health Canada from Licensee (or its Affiliates) to Licensor (or its designee),

Licensor may, with respect to its Promotion in Canada, only Promote or engage in Promotional activities regarding the Products in compliance with all applicable Law, including without limitation Laws relating to labeling and Promotion, and only through use of the Current Promotional Materials. Any documented out-of-pocket expenses incurred in connection with the activities contemplated by this Section 2.08 are the responsibility of Licensor. After the Transferred Governmental Authorizations are transferred by Health Canada from Licensee (or its Affiliates) to Licensor, Licensor shall be fully responsible with respect to any Promotional activities it engages in with respect to the Products.

SECTION 2.09. Consents. Licensee and Licensor shall, and shall cause their respective Affiliates and Sublicensees to, cooperate and use reasonable best efforts to promptly obtain and maintain all consents, approvals, licenses, permits or authorizations required for the performance of obligations under this Agreement. Licensee shall pay any out-of-pocket fee, cost or expense incurred in connection with obtaining and maintaining any consent, approval or authorization required for Licensee (or its Affiliates) to conduct of the Business, except for such fees, costs or expenses that are specifically addressed in the definition of Net Sales, NEB or Ongoing Business Expenses. If any such consent, approval, license, permit or authorization is unable to be obtained promptly after the date of this Agreement, Licensee shall notify Licensor and the Parties shall cooperate in good faith to devise an alternative arrangement for the performance of the affected obligations under this Agreement and Licensor shall bear any additional out-of-pocket costs and expenses incurred in the performance of such alternative arrangement.

SECTION 2.10. Use of Intellectual Property.

(a) Licensor hereby grants to Licensee a non-exclusive, non-transferable, royalty-free, revocable, limited license, with the right to grant sublicenses through multiple tiers in accordance with this Agreement, for the Term under all Intellectual Property owned or controlled by Licensor that is required for the performance of Licensee's obligations under this Agreement, and in furtherance of the license provided under Section 2.01 above, to use (i) the Transferred IP Rights and (ii) Licensed IP Rights that pertain to the Products (the "Licensed Materials"), for the sole purpose of performing such obligations and exercising such rights granted under Section 2.01 above.

(b) Each use by Licensee of any of the Transferred Trademark Rights shall be preapproved by Licensor in writing and shall be in compliance with any trademark usage guidelines which may be promulgated by Licensor from time to time (including, without limitation, guidelines as to the use and display of notices which may be associated with the Transferred Trademark Rights) and provided to Licensee in writing. Once a particular use of a Transferred Trademark Right has been approved by Licensor in writing, Licensee may continue to make identical use of the Transferred Trademark Right in the same or similar instances without obtaining further approval from Licensor, unless and until Licensor notifies Licensee to the contrary. Licensor shall have the right to inspect Licensee's use of the Transferred Trademark Rights, and it will constitute a material breach under Section 5.01 of this Agreement if Licensee's

use of the Transferred Trademark Rights is in violation of this Agreement or Licensor's trademark usage guidelines, or is otherwise disparaging to Licensor's public image or dilutive of the goodwill symbolized by any of the Transferred Trademark Rights. All rights in and to the Transferred Trademark Rights and the goodwill associated therewith, and symbolized thereby, shall at all times remain the property of and inure to the sole benefit of Licensor.

(c) Except as expressly permitted by this Agreement, Licensee shall not: (i) lease, rent, loan, license, sublicense, assign, sell, pledge, charge, encumber, transfer or otherwise dispose of any Licensed Materials to any Third Party, provide service bureau, outsourcing or other services in connection with the Licensed Materials to Third Parties, or otherwise permit the use of or access to any Licensed Materials by or for the benefit of any Third Party; (ii) remove or destroy, or permit others to remove or destroy, any proprietary markings of Licensor or other parties that may appear on any components of any Licensed Materials; or (iii) modify, adapt, enhance, improve, revise or create derivative works based on any Licensed Materials. Notwithstanding the foregoing, Licensee hereby assigns to Licensor all right, title and interest in and to all modifications, adaptions, enhancements, improvements, revisions and derivative works based on any Licensed Materials created by or on behalf of Licensee.

(d) As between Licensor and Licensee, all Licensed Materials shall remain the exclusive property of Licensor. Except for the rights expressly granted to Licensee hereunder, Licensor shall retain all right, title and interest in, to and under the Licensed Materials.

SECTION 2.11. Disclaimer. Licensee disclaims any interest in and right to any part or all of Business or the goodwill pertaining thereto, whether arising out of this Agreement, or arising in some other manner, except that Licensee shall, during and only during the term of this Agreement, enjoy the limited license rights specifically granted herein.

SECTION 2.12. Governmental Communications. All communications and requests received by a Party from a Governmental Authority related to or concerning the Purchased Assets, the Products or the conduct of the Business shall be immediately forwarded to the other Party for its comments. Each Party shall copy the other Party on the responses provided to such Governmental Authority and, where possible, permit comments by the other Party on such communications prior to their submission to such Governmental Authority. Each Party shall consider and reasonably reflect any such comments by the other Party in good faith. Neither Party shall provide any undertakings to a Governmental Authority relating to the Purchased Assets, the Products or the conduct of the Business without the specific prior written agreement of the other Party, unless the prior written agreement would cause such Party to be in violation of any applicable Law.

SECTION 2.13. PMPRB Compliance. In the event that, prior to the Transferred Governmental Authorizations being transferred by Health Canada from Licensee (or its Affiliates) to Licensor (or its designee), the Products are subject to the jurisdiction of the Patented Medicine Prices Review Board ("PMPRB"), a quasi-judicial federal tribunal constituted under the Patent Act, R.S.C. 1985, c. P-4, as amended, Licensee is solely responsible as between the parties with

respect to PMRPB compliance including the requirements of the Patent Act, R.S.C. 1985, c. P-4, reporting obligations pursuant to the Patented Medicines Regulations SOR/94-68, and the excessive pricing guidelines of the PMPRB.

## ARTICLE III

## ROYALTIES

SECTION 3.01. Royalties. In consideration of the limited license rights and licenses granted to Licensee under this Agreement, Licensee shall pay to Licensor the NEB resulting from the sale or distribution by the Licensee of the Products in Canada (collectively, the "Royalties").

SECTION 3.02. Invoicing.

(a) During the Term, on a Calendar Quarter basis, Licensee shall provide Licensor with a reasonably detailed written statement (the "Quarterly Statement") setting forth the NEB and Ongoing Business Expenses for the corresponding Calendar Quarter, including all information reasonable necessary to calculate and validate the NEB and Ongoing Business Expenses (including all components thereof).

(b) Licensee shall provide Licensor with its good faith estimation of the Royalties for the corresponding Calendar Quarter, reasonably necessary to permit Licensor to record such amounts in its financial statements for accrual and accounting purposes, no later than five (5) Business Days following the end of each Calendar Quarter. The Quarterly Statement shall be provided no later than twenty (20) calendar days following the end of each Calendar Quarter, provided, however, that for the last Calendar Quarter in each Calendar Year during the Term, an updated Quarterly Statement may be submitted no later than ninety (90) calendar days after the end of such Calendar Year, reflecting any adjustments required therein resulting from audits of the accounts of Licensee and its Affiliates.

(c) If the NEB set forth in the Quarterly Statement is positive, then on the basis of such Quarterly Statement, (i) Licensor shall, within ten (10) Business Days following receipt of such Quarterly Statement send to Licensee an invoice for the NEB set forth in the Quarterly Statement conforming to such invoice guidelines as Licensee may reasonably specify (the "NEB Invoice"), and (ii) Licensee shall pay to Licensor no later than twenty (20) calendar days following delivery of the corresponding NEB Invoice by wire transfer of immediately available funds in accordance with the wire transfer instructions set forth in the NEB Invoice, the amount set forth in such NEB Invoice.

(d) Licensee or one or more of its Affiliates shall issue and send to Licensor a consolidated invoice with each Quarterly Statement for (i) the amount of the Ongoing Business Expenses set forth in the Quarterly Statement, and (ii) if the NEB set forth in a Quarterly Statement is negative, then for such difference. Licensor shall remit such amount to Licensee within twenty (20) days from date of delivery of the relevant invoice.

(e) All payments in connection with the NEB and Ongoing Business Expenses shall be in US Dollars and the calculation of all amounts payable in connection with a Quarterly Statement shall be converted into US Dollars at the Exchange Rate.

(f) Licensee shall keep complete and accurate books and records and documentation of Licensee's conduct of the Business provided and reasonable supporting documentation of all charges and expenses incurred in connection with Licensee's performance of this Agreement for a period and in a manner consistent with its current management practices or as otherwise required by applicable Law. Licensor may reasonably request, and Licensee shall provide, any further information or documentation in order for Licensor to verify the information contained in the Quarterly Statement.

(g) Without limitation to Section 3.02(f), if there is a significant variance from historical trends reported in the Quarterly Statement, Licensor may reasonably request, and Licensee shall provide, further information and/or documentation in order for Licensor to clarify potential sources of variance.

(h) Notwithstanding anything in this Agreement, the U.S. Market Transition Services Agreement or the APA to the contrary, Licensee shall promptly pay, or cause to be paid, (i) all amounts that are included in clause [*****] of the definition of Net Economic Benefit, [*****] or any other Person to which payment of any such amount is required, and (ii) all amounts that are included in clause [*****] of the definition of Net Sales to the persons entitled to receive the [*****] set forth in clause [*****] of such definition and (iii) all Ongoing Business Expenses to [*****] or any other Person to which payment of such amount is required. Each Party shall use good faith efforts to minimize the fees and charges in its performance of this Agreement.

(i) In furtherance of subclause (iii) of the definition of "Ongoing Business Expenses", Licensee's Affiliate incorporated in Canada shall sell to Licensor (or its designee) all such inventories of Products held for sale in Canada then remaining and not yet sold to a Third Party upon expiration or earlier termination of the Term for cost. The Canadian Affiliate shall issue an invoice for such amount in Canadian dollars, plus applicable Transfer Taxes (if any) to Licensor (or its designee) and such payment shall reduce the amount of the Ongoing Business Expenses for the Quarterly Statement corresponding to the last Calendar Quarter of the Term under this Agreement accordingly.

SECTION 3.03. Disagreements.

(a) In the event Licensor disagrees with any Quarterly Statement or any amount set forth therein, Licensor shall give Licensee notice thereof (the "Notice of Disagreement") no later than sixty (60) days after delivery of the Quarterly Statement and shall be entitled to withhold payment of any amounts to the extent subject to a bona fide dispute. The Notice of Disagreement shall specify in reasonable detail the nature and amount, if known, of any disagreement so asserted (the "Disputed Matters"). During the thirty (30) day period immediately following the delivery of

the Notice of Disagreement (the "Informal Resolution Period"), Licensee and Licensor shall seek in good faith to resolve the Disputed Matters.

(b) If at the end of the Informal Resolution Period, the Disputed Matters have not been resolved by agreement of the Parties, either or both of the Parties may submit the Disputed Matters for review and resolution by an accounting firm jointly selected by Licensee and Licensor in writing or if the Parties are unable to agree, an independent accounting firm jointly selected by Licensee's and Licensor's independent certified public accountants (such firm, the "Accounting Firm"). The Accounting Firm shall be entitled, on a reasonable and confidential basis, to audit the books, records, and accounts of Licensee and its Affiliates related to such matter in dispute and to make a final determination of the amounts to be properly set forth on the applicable Quarterly Statement(s), and shall use such determination to prepare revised Quarterly Statement(s) as necessary to reflect the Accounting Firm's determination in accordance with this Agreement, which determination and final Quarterly Statement(s) shall be final and binding on the Parties, from and after their delivery to the Parties by the Accounting Firm, it being understood that any such values shall be only within the range of the amounts proposed by Licensor and Licensee in the course of such audit and that in making its determination the Accounting Firm will be acting as an expert and not as an arbitrator; provided, however, the scope of such determination by the Accounting Firm shall be limited to (i) those matters that remain in dispute and that were included in the Notice of Disagreement, (ii) whether, for each piece of information or calculation on the Quarterly Statement(s), as the case may be, such information was accurate or such calculation was performed in accordance with this Agreement and (iii) whether there were mathematical or factual errors in the Quarterly Statement(s), as the case may be, and the Accounting Firm is not authorized or permitted to make any other determination. Without limiting the generality of the foregoing, the Accounting Firm is not authorized or permitted to make any determination as to any representation or warranty in this Agreement or as to compliance by Licensee or any Affiliate with any of the covenants in this Agreement (other than the compliance by Licensee with any payment and reporting provisions of this Agreement to the extent such compliance is the subject of any dispute being resolved in accordance with this Section 3.03).

(c) If, following resolution of the matter in dispute under this Section 3.03, the amount shown on any Quarterly Statement(s) indicates that a Party has overpaid or underpaid the other Party for the applicable period, then the amount of such underpayment or overpayment, as the case may be, plus interest on such amount accrued from the required date of payment of the original Quarterly Statement at an annual rate equal to [*****] shall be taken into account on the Quarterly Statement for the Calendar Quarter in which such matter was resolved for purposes of calculating the NEB and the Ongoing Business Expenses for such Quarterly Statement; provided, however, that if such matter is resolved following the expiration of the last Calendar Quarter to occur during the Term, then such amount, together with interest thereon as provided herein, shall be due and payable by the applicable Party no later than ten (10) Business Days following the date on which such matter was resolved as provided herein. The fees, costs and expenses of the Accounting Firm with respect to the resolution of any Disputed Matters shall be allocated and borne by Parties based on the inverse of the percentage that the Accounting Firm's determination (before such allocation) bears to the total amount of the total items in dispute as originally

submitted to the Accounting Firm. For example, should the items in dispute total in amount to one thousand dollars ($1,000) and the Accounting Firm awards six hundred dollars ($600) in favor of Licensor's position, forty percent (40%) of the costs of its review would be borne by Licensor and sixty percent (60%) of the costs would be borne by Licensee.

SECTION 3.04. NEB True-Up.

(a) Licensee shall provide Licensor with a written statement (the "True-Up NEB Statement") setting forth the True-Up NEB no later than [*****].

(b) If the True-Up NEB set forth on the True-Up NEB Statement is greater than the aggregate amount of NEB paid by Licensee to Licensor with respect to the Term (such amount paid by the Licensee, the "Estimated NEB"), Licensee shall include with such True-Up NEB Statement an invoice for the difference between the True-Up NEB and the Estimated NEB conforming to such invoice guidelines as Licensee may reasonably specify (the "True-Up NEB Invoice"), and Licensee shall pay to Licensor, no later than twenty (20) calendar days following delivery of the corresponding True-Up NEB Invoice by wire transfer of immediately available funds in accordance with the wire transfer instructions set forth in the True-Up NEB Invoice, the amount set forth in such True-Up NEB Invoice.

(c) If the True-Up NEB set forth on the True-Up NEB Statement is less than the Estimated NEB, then Licensee or one or more of its Affiliates shall issue and send to Licensor a consolidated invoice for the difference, and Licensor shall remit such amount to Licensee within twenty (20) days from date of delivery of the relevant invoice.

(d) The True-Up NEB Statement will be subject to the disagreement provisions, procedures and information access rights of 3.03, mutatis mutandis.

SECTION 3.05. Offsetting. Any Party may offset any amount due to it or any of its Affiliates against any payment due under this Agreement in the event that the other Party or any of its Affiliates fails to remit payment that is not subject to a bona fide dispute between the Parties as to whether such payment is due to the first Party or any of its Affiliates in full within sixty (60) days following the applicable time period for payment thereof.

SECTION 3.06. Misdirected Receipts. In the event that, on or after the date of this Agreement, either Party shall receive any payments or other funds due to the other pursuant to the terms hereof, the APA or otherwise, then the Party receiving such funds shall promptly forward such funds to the proper Party. The Parties acknowledge that there is no right of offset regarding such payments and a Party may not withhold funds received from Third Parties for the account of the other Party in the event there is a dispute regarding any other issue under this Agreement.

## ARTICLE IV

## TAXES

SECTION 4.01. Taxes.

(a) As of the Effective Date, each of Licensor and Licensee is a non-registered non-resident of Canada (and is not deemed to be a resident of Canada) for purposes of the *Excise Tax Act* (Canada). If Licensee is required to pay any goods and services, harmonized sales, value added, sales, use, and other similar Taxes levies and charges (other than income or branch Taxes of the Licensee) imposed by applicable Taxing Authorities attributable to the Royalties paid by Licensee, it should use commercially reasonable efforts to recover, obtain credit for or claim a refund of any such Taxes; in the event that such Taxes are not so recovered by, credited to or refunded to Licensee, Licensor shall reimburse Licensee for such Taxes.

(b) Licensee will make all payments to Licensor under this Agreement without deduction or withholding for Taxes except to the extent that any such deduction or withholding is required by law in effect at the time of payment. If any Tax is required to be withheld on amounts payable under this Agreement, Licensee shall withhold such amounts and the withheld amounts will be paid by Licensee to the appropriate Governmental Authority. If any such Tax is assessed against Licensee, then Licensor will indemnify and hold harmless Licensee from and against such Tax. Licensee and Licensor will cooperate with respect to all documentation required by any taxing authority or reasonably requested by Licensee to secure a reduction in the rate of any applicable withholding Taxes.

## ARTICLE V

## TERM AND TERMINATION

SECTION 5.01. Term. This Agreement will commence on the date hereof and continue until the earlier of (i) [*****] or (ii) termination in accordance with Section 5.01 (the "Term"); provided, however, that the Term may be extended by the mutual agreement of the Parties to transition the Business as soon as possible or if there has been a delay in Health Canada issuing the drug establishment license to the Licensor; provided, further, that such agreement to extend the Term shall not be unreasonably withheld or delayed by either Party. Notwithstanding the foregoing, in no event shall the Term exceed the date that is [*****].

SECTION 5.02. Early Termination. This Agreement may be terminated at any time by mutual written agreement of Licensor and Licensee. Either Party may immediately terminate this Agreement, in whole or in part, upon the material breach of this Agreement by the other Party if such material breach has not been cured within thirty (30) days after written notice thereof to the Party in material breach. Except as otherwise agreed to by the Parties, Licensor may, on thirty (30) days' prior written notice to Licensee thereof, terminate this Agreement with the Licensee at any time with or without cause.

SECTION 5.03. Effect of Termination/Expiration.

(a) The limited license rights and licenses granted to Licensee under this Agreement will terminate with upon the expiration or earlier termination of the Term. Upon such termination or expiration, Licensee will no longer make any use of any rights related to the Business. The Business and the goodwill associated therewith, are the exclusive property of Licensor and the use of such Business, and the goodwill arising there from, shall inure to the benefit of Licensor. Notwithstanding anything to the contrary contained herein, any account receivables from sales of Products made by Licensee, existing as of the expiration of the Term or created thereafter based on sales of Products made by Licensee during the Term under this Agreement, shall not be transferred to Licensor (but shall be retained by Licensee) and Licensee shall be entitled to collect such account receivables for its own account; provided, however, that the foregoing shall not apply for any such invoice for which Licensee shall not have delivered the relevant Product to the customer and Licensor instead makes such delivery, and provided further, for the avoidance of doubt, that all such accounts receivable collected by Licensee shall be taken into account in computing NEB.

(b) The expiration or termination of this Agreement, in whole or in part, for any reason will not (i) release either Party from any liability which at such time has already accrued or which thereafter accrues from a breach or default prior to such expiration or termination, or (ii) affect in any way the survival of any other right, duty or obligation of either Party which is expressly stated in this Agreement to survive.

## ARTICLE VI

## LIMITATION ON LIABILITY

SECTION 6.01. Limitation on Liability.

(a) Notwithstanding anything to the contrary contained herein, neither Licensee nor any of its Affiliates or Sublicensees shall have any liability to Licensor or its Affiliates for any losses arising or resulting from, in respect of, or involving the performance of Licensee, its Affiliates or its Sublicensees under this Agreement in excess of the aggregate amount received by Licensee from Licensor under this Agreement, except for losses resulting from the gross negligence, fraud or intentional misconduct by Licensee or its Affiliates in the performance of this Agreement. With respect to any such losses described in the immediately preceding sentence, except for fraud, intentional misrepresentation or willful breach, Licensor agrees that it shall only seek to recover such losses from or against Licensee or Seller, and Licensor hereby waives the right to seek to recover losses from, or equitable remedies against, any director, officer or employee of Licensee or any of its Affiliates (other than Seller). For the avoidance of doubt, Licensee (or its applicable Affiliate) shall be responsible for the payment of invoices received from Third Party trade creditors in connection with the performance of its obligations to conduct the Business hereunder.

(b) NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, (I) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR LOST REVENUES OR PROFITS OR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR ANY LIABILITY RETAINED OR ASSUMED HEREUNDER UNLESS SUCH LOST REVENUES OR PROFITS OR DAMAGES ARE THE NATURAL, PROBABLE AND REASONABLY FORESEEABLE RESULT OF THE EVENT THAT GAVE RISE TO THE CLAIM FOR INDEMNIFICATION, INCLUDING DIRECT DAMAGES UNDER APPLICABLE LAW, AND (II) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR PUNITIVE, EXEMPLARY OR MULTIPLIED DAMAGES; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY OF SUCH LOST REVENUES OR PROFITS OR DAMAGES THAT ARE PAID OR REQUIRED TO BE PAID BY AN INDEMNIFIED PARTY TO AN UNRELATED THIRD PARTY.

## ARTICLE VII

## INDEMNIFICATION

SECTION 7.01. Licensor hereby agrees to defend, indemnify and hold Licensee and the Sublicensees, and its and their respective Affiliates and its and their respective officers, directors, employees, agents, auditors, consultants, financial advisers and other representatives, harmless from and against any and all claims, actions, suits, losses, demands, damages, costs and expenses (including reasonable attorneys' fees) of every kind, nature, or description ("Losses") brought by a Third Party in connection with, arising out of or related to Licensor's or any of its Affiliates' fraud, intentional misconduct, gross negligence or violation of Law in the performance of this Agreement, or breach of this Agreement, except those Losses arising out of Licensee's or any of its Affiliates' fraud, intentional misconduct, negligence or violation of Law in the performance of this Agreement, or breach of this Agreement.

SECTION 7.02. Licensee hereby agrees to defend, indemnify and hold Licensor and its Affiliates and its and their respective officers, directors, employees, agents, auditors, consultants, financial advisers and other representatives, harmless from and against any and all Losses brought by a Third Party in connection with or arising out of or related to Licensee's or any of its Affiliates' fraud, intentional misconduct, gross negligence or violation of Law in the performance of this Agreement, or breach of this Agreement, except those Losses arising out of Licensor's or any of its Affiliates' fraud, intentional misconduct, negligence or violation of Law in the performance of this Agreement, or breach of this Agreement.

SECTION 7.03. All claims for indemnification under Section 7.01 or 7.02 above shall be asserted and resolved pursuant to procedures equivalent to the indemnity procedures set forth in Sections 8.03 and 8.04 of the APA.

SECTION 7.04. Representations and Warranties. Each Party represents and warrants to the other Party that as of the date of this Agreement: (a) it has the capacity and authority to enter into this Agreement; (b) the Persons entering into this Agreement on its behalf have been duly authorized to do so; and (c) this Agreement and the obligations created hereunder are binding upon it and enforceable against it in accordance with their terms (subject to applicable principles of equity) and do not and will not violate the terms of any other material agreement, or any judgment or court order, to which it is bound.

## ARTICLE VIII

## DEVELOPMENTS; CONFIDENTIALITY

SECTION 8.01. During the Term, all data developed by Licensee solely from the promotion, marketing, selling and/or supplying of the Products to customers and/or Third Parties in connection with the Business shall be deemed confidential and will be the sole property of Licensor and Licensee hereby assigns all right, title and interest in and to such data to Licensee, and will not be used or disclosed by Licensee, its distributor and/or sub-distributor without the prior express written consent of Licensor, except for purposes of performing this Agreement or as otherwise expressly set forth herein. Licensor shall not disclose to any person or entity, or permit to be disclosed by any of its employees, officers, directors or agents, any confidential information of Licensee except for disclosures authorized in writing by appropriate officers of Licensee. This paragraph shall survive termination of this Agreement.

SECTION 8.02. Confidential Information. As used herein, "Confidential Information" means all confidential or proprietary information given to one Party by the other Party, or otherwise properly acquired by such Party, in each case in connection with this Agreement, relating to such other Party or any of its Affiliates, including information regarding any of the products of such other Party or any of its Affiliates, information regarding its sales, advertising, distribution, marketing or strategic plans or information regarding its costs, productivity, manufacturing processes or technological advances and the terms of this Agreement. Neither Party will use or disclose to any Person (or permit the use or disclosure of) any Confidential Information of the other Party (except to comply with its obligations and receive the benefit of Licensee's conduct of the Business under this Agreement) and each Party will ensure that its and its Affiliates' respective Representatives will not use or disclose to Third Parties any Confidential Information (except to comply with its obligations and receive the benefit of Licensee's conduct of the Business under this Agreement) and upon the termination of this Agreement will return to the other Party or destroy all Confidential Information in written form except as necessary for corporate record keeping or legal archive purposes; provided, however, that the foregoing shall not require either Party to destroy any electronic copies of the other Party's Confidential Information that were automatically-generated for disaster recovery purposes that

cannot be destroyed without undue effort and to which access is limited. The receiving Party shall, and shall cause its Affiliates and their respective Representatives to, protect the Confidential Information of the disclosing Party by using the same degree of care to prevent the unauthorized disclosure of such as the receiving Party uses to protect its own confidential information of a like nature, but in any event no less than a reasonable degree of care. Confidential Information will not include information that (i) was already known to the receiving party at the time of its receipt thereof or is independently developed by the receiving Party, in each case without reference to or use of the Confidential Information, (ii) is disclosed to the receiving Party after its receipt thereof by a Third Party who, the receiving Party in good faith believes, has a right to make such disclosure without violating any obligation of confidentiality or (iii) is or becomes part of the public domain through no fault of the receiving Party in violation of this Agreement or the APA. If Confidential Information of a Party is required to be disclosed by law, regulation, or court order, the other Party must first (to the extent permissible under applicable Law or the rules governing such proceeding) notify such Party and permit such Party an opportunity to seek an appropriate protective order or other confidential treatment thereof. Notwithstanding the foregoing, all information regarding the Business, included in the Purchased Assets, and generated for the Licensor in connection with the performance of Licensee's obligations under this Agreement shall be deemed to be the Confidential Information of Licensor regardless of Licensee's prior knowledge of such information, receipt of such information from a Third Party, or independent development of such information.

## ARTICLE IX

## MISCELLANEOUS

SECTION 9.01. Agreement Coordinators. Unless otherwise set forth on Exhibit B, within three (3) Business Days after the Effective Date, each Party shall designate in writing a representative to act as the primary contact person with respect to all issues arising out of the performance of obligations under this Agreement and to facilitate the performance of this Agreement (each, an "Agreement Coordinator"). The Agreement Coordinators shall hold review meetings with each other by telephone or in person, as mutually agreed upon, acting reasonably, at reasonable intervals to be agreed by the Agreement Coordinators, to discuss (i) the performance of obligations under this Agreement, (ii) issues relating to performance of obligations under this Agreement, (iii) any problems identified with the performance of obligations under this Agreement, (iv) to the extent changes in the obligations required to be performed under this Agreement have been agreed upon by the Parties, the implementation of such changes and (v) any upcoming projects or activities within Licensee's organization, processes or systems that may cause changes or otherwise impact delivery, method or location of performance of obligations under this Agreement. The names and contact information of each Party's initial Agreement Coordinators are set forth in Exhibit B. Each Party may replace its Agreement Coordinator at any time upon prior written notice to the other Party. Each Party may treat an act of the other Party's Agreement Coordinator as an act authorized by such other Party.

SECTION 9.02. Notices. Any notice, request, instruction or other communication to be given hereunder by either Party to the other Party shall be in writing and delivered in the manner and to the address of the applicable Party as set forth in Section 10.01 of the APA.

SECTION 9.03. Assignment; Beneficiaries. Neither Party to this Agreement may assign any of its rights or obligations under this Agreement, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets, without the prior written consent of the other Party, except that (a) Licensee may, without such consent, assign its rights or obligations to an Affiliate (provided, however no such assignment by Licensee shall (i) relieve Licensee of any of its obligations under this Agreement or (ii) be permitted without Licensor's prior written consent to the extent such assignment would have the effect of increasing withholding of Taxes on amounts payable under this Agreement) and (b) Licensor may, without such consent, assign its rights hereunder, in whole or in part, to one or more of its Affiliates (provided, however, that no such assignment by Licensor shall relieve Licensor of any of its obligations hereunder). Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 9.03 shall be null and void.

SECTION 9.04. Independent Contractors. The relationship of Licensee and Licensor established by this Agreement is that of independent contractors, and nothing contained herein shall be construed to (i) give either Party any right or authority to create or assume any obligation of any kind on behalf of the other Party or (ii) constitute the Parties as partners, joint venturers, co-owners or otherwise as participants in a joint or common undertaking. Nothing in this Agreement is intended to transfer the employment of employees engaged in the conduct of the Business from one Party to the other Party. All employees and representatives of Licensee will be deemed for all employment related obligations, including compensation, employee benefits, Tax and social security contribution purposes to be employees or representatives of Licensee or its Affiliates and not employees or representatives of Licensor or any of its Affiliates and as between Licensee and Licensor, Licensee shall be responsible for all such obligations. In conducting the Business, such employees and representatives will be under the direction, control and supervision of Licensee or its Affiliates and not of Licensor.

SECTION 9.05. Force Majeure. The Parties shall be relieved of their obligations hereunder, if and to the extent that an event caused by circumstances beyond the reasonable control of either Party, which by its nature could not have been foreseen by such Party, or, if it could have been foreseen, was unavoidable, including the following events: war, terrorist act, riot, fire, explosion, accident, flood, sabotage, national defense requirements, labor strike, lockout or injunction, or any other event beyond the reasonable control and, in each case, without the fault or negligence of such Party (each a "force majeure event"). The Party thus hindered or whose performance is otherwise affected shall promptly give the other Party notice thereof and shall use commercially reasonable efforts to remove or otherwise address the impediment to action as soon as practicable and to promptly resume performance of its obligations hereunder; provided that Licensee and its Affiliates shall not be required to settle a labor dispute other than as it may determine in its sole judgment. Licensor shall have the right to immediately terminate this Agreement in the event that Licensee is unable to meet its obligations due to a force majeure event

lasting or anticipated to last longer than thirty (30) days. Licensor shall be entitled to, at Licensor's option, an extension of the Term of this Agreement for the period of any such delay and an equitable abatement of any fees for the period during which Licensee's obligations hereunder are not performed.

SECTION 9.06. Amendments and Waivers. Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (a) in the case of an amendment, by Licensee and Licensor and (b) in the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by either Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

SECTION 9.07. Governing Law; Disputes; Waiver of Jury Trial.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction. The Parties consent to the exclusive jurisdiction of the Federal and State courts located in the State of New York for the resolution of all disputes or controversies between the Parties which, pursuant to applicable Law, are not subject to the provisions of Section 10.11 of the APA. Each of the Parties (i) consents to the exclusive personal jurisdiction and venue of each such court in any suit, action or proceeding relating to or arising out of this Agreement or the Transactions; (ii) waives any objection that it may have to the laying of venue in any such suit, action or proceeding in any such court; and (iii) agrees that service of any court paper may be made in such manner as may be provided under applicable Laws or court rules governing service of process. THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE, AND AGREE TO CAUSE THEIR RESPECTIVE AFFILIATES TO WAIVE, THE RIGHT TO TRIAL BY JURY IN ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY RELATED AGREEMENTS OR ANY OF THE TRANSACTIONS. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) EACH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) EACH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (IV) EACH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 9.07. Any dispute, controversy or claim arising out of or related to this Agreement, or the interpretation, application, breach, termination or validity thereof, including any claim of inducement by fraud or otherwise, will be submitted to arbitration and before submission to arbitration will be first mediated through non-binding mediation, in each case in accordance with the arbitration and mediation procedures set forth in Section 10.11 of the APA.

(b) Without intending to limit the remedies available to the Parties hereunder, the Parties acknowledge and agree that irreparable damage would occur in the event that any provision of this Agreement were not performed in accordance with its specific terms or is otherwise breached or violated, and that money damages or other legal remedies would not be an adequate remedy for any such damages. Accordingly, the Parties agree that, without posting bond or other undertaking, the non-breaching party shall be entitled to an injunction or injunctions to prevent breaches or violations of this Agreement by the other Party and to enforce specifically this Agreement and the terms and provisions hereof in any action instituted in any court specified in Section 9.07(b) in addition to any other remedy to which the Parties may be entitled, at law or in equity. Each Party further agrees that, in the event of any action for an injunction or specific performance in respect of any such threatened or actual breach or violation, it shall not assert that a remedy at law would be adequate.

SECTION 9.08. Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any term or other provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid, illegal or unenforceable, (a) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity, illegality or unenforceability, nor shall such invalidity, illegality or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

SECTION 9.09. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that both Parties need not sign the same counterpart. This Agreement, following its execution, may be delivered via telecopier machine or other form of electronic delivery, which shall constitute delivery of an execution original for all purposes.

SECTION 9.10. Interpretation. The heading references herein are for convenience purposes only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The words “hereof”, “herein”, “hereto” and “hereunder” and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The terms defined in the singular have a comparable meaning when used in the plural, and vice versa. The terms “U.S. Dollars” and “$” mean lawful currency of the United States. The terms “include,” “includes” and “including” means “including, without limitation.” When a reference is made in this Agreement to an Article, a Section, an Exhibit or a Schedule, such reference shall be to an Article or a Section of, or an Exhibit or a Schedule to, this Agreement unless otherwise indicated. Time periods based on a number of days within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends

and, if applicable, by extending the period to the next Business Day following if the last day of the period is not a Business Day. The term "Canada" shall refer to Canada, including all of its provinces and territories.

SECTION 9.11. Asset Purchase Agreement. Nothing contained in the Agreement is intended or shall be construed to amend or modify in any respect, or constitute a waiver of, any of the rights and obligations of the Parties under the APA.

SECTION 9.12. Entire Agreement. This Agreement, together with the Exhibits and Schedules delivered pursuant hereto (which are hereby incorporated by reference), and the Asset Purchase Agreement, the Transaction Documents and the Confidentiality Agreement, contains the entire agreement between the Parties with respect to the Transactions and supersedes all prior agreements, discussions, negotiations or understandings between the Parties not expressly set forth in this Agreement, the Exhibits and Schedules delivered pursuant hereto, the Asset Purchase Agreement, the Transaction Documents or the Confidentiality Agreement. Other than the Confidentiality Agreement entered into between the Parties, the Asset Purchase Agreement, the Transaction Documents or the Exhibits and Schedules thereto are intended to define the full extent of the legally enforceable undertakings and representations of the Parties, and no promise or representation, written or oral, which is not set forth in such Transaction Documents or the Exhibits and Schedules thereto is intended by either Party to be legally binding. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

SECTION 9.13. Further Assurances. Each Party covenants and agrees to (and to cause its Affiliates to) (i) promptly execute and deliver such additional documents as may be reasonably requested by the other Party, and (ii) make available on a timely basis such additional information and materials as may be reasonably requested by the other Party, in each case (i) and (ii) in order to permit the Licensee to conduct the Business in accordance with the terms and conditions hereof and to otherwise implement or give effect to this Agreement and matters contemplated hereby.

[*Remainder of page intentionally blank*]

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute this Agreement as of the date first above written.

VIVUS, INC.

By: _____
Name: John P. Amos
Title: Chief Executive Officer

[Signature Page to Transitional Business License Agreement]

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute this Agreement as of the date first above written.

CILAG GMBH INTERNATIONAL

By: _____
Name:
Title:

By: _____
Name:
Title:

[Signature Page to Transitional Business License Agreement]

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

## Exhibit A – J&J Universal Calendar

[*****]

## Exhibit B – Agreement Coordinators

| Licensor's Agreement Coordinator: | Licensee's Agreement Coordinator: |
|---|---|
| Ken Suh<br>President and CEO, Willow Biopharma Inc.<br>8865 Woodbine Avenue, Unit D, Suite 137<br>Markham, ON L3R 5G1<br>Email: [*****]<br>Tel: [*****] | [NAME]<br>[ADDRESS]<br>[TELEPHONE NUMBER]<br>[E-MAIL ADDRESS] |

**EXHIBIT F**

# LONG TERM COLLABORATION AGREEMENT

This **LONG TERM COLLABORATION AGREEMENT** (this "**Agreement**"), effective as of the Closing Date (the "**Effective Date**"), is made by and between Johnson & Johnson Health Care Systems Inc., a New Jersey corporation ("**HCS**") acting on behalf of Janssen Pharmaceuticals Inc. ("**Janssen**"), and Vivus, Inc., a Delaware corporation ("**PURCHASER**"). HCS and PURCHASER are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**." All capitalized terms used in this Agreement and not otherwise defined herein shall have the respective meanings assigned to them in the Purchase Agreement (as defined below).

## RECITALS

WHEREAS, pursuant to that certain Asset Purchase Agreement dated as of _____, (the "**Purchase Agreement**"), PURCHASER agreed to purchase from Janssen certain pharmaceutical products assigned the NDCs listed on Exhibit A hereto (the "**Products**"); and

WHEREAS, for a period after the Effective Date, the Products will continue to be manufactured, and PURCHASER is permitted to sell the existing inventory of Products, bearing labeler code 50458 ("**Labeler Code 50458**"), which is held by Janssen; and

WHEREAS, certain pricing and sales data with respect to the Products is required to be reported and certified to the Centers for Medicare & Medicaid Services ("**CMS**") and certain rebates with respect to utilization of the Products by Medicaid recipients ("**Medicaid Rebates**") are required to be paid to state Medicaid agencies; and

WHEREAS, certain pricing and sales data with respect to the Products are required to be reported and certified to certain state agencies and certain rebates with respect to utilization of the Products under state supplemental rebate agreements and agreements with state pharmaceutical assistance programs ("**State Rebates**") are required to be paid to such state agencies; and

WHEREAS, certain coverage gap discounts with respect to utilization of the Products by Medicare Part D beneficiaries in the coverage gap ("**Coverage Gap Discounts**") are required to be paid to Medicare Part D plans and Medicare Advantage plans with prescription drug coverage under the Coverage Gap Discount Program (the "**Coverage Gap Discount Program**"), as required by 42 U.S.C. § 1860D-14A, the Medicare Coverage Gap Discount Program Agreement, and any applicable guidance from CMS (collectively, the "**Applicable Coverage Gap Discount Program Law**") between HCS and the Secretary of Health and Human Services; and

WHEREAS, the Products must continue to be listed on Janssen's Federal Supply Schedule ("**FSS**") contract until PURCHASER can transition the Products onto its FSS and certain pricing and sales data with respect to the Products is required to be reported and certified to the Department

of Veterans Affairs ("**DVA**") for non-Federal Average Manufacturer Price ("**non-FAMP**") or Federal Ceiling Price ("**FCP**") reporting as required by 38 U.S.C. § 8126; and

WHEREAS, certain rebates with respect to utilization of the Products under the TRICARE Retail Pharmacy Refunds Program ("**TRICARE Program**") are required to be paid to the Department of Defense, Defense Health Agency ("**DHA**"), as required by 10 U.S.C. § 1074g and any applicable guidance from DHA (collectively, the "**Applicable TRICARE Program Law**") between HCS and the DHA; and

WHEREAS, HCS performs certain services on behalf of Janssen with respect to the payment of Medicaid Rebates, State Rebates, TRICARE rebates, and Coverage Gap Discounts; and

WHEREAS the Parties desire to cooperate in the reporting and certification of pricing and sales data and the payment of rebates and discounts under such programs, all on the terms set forth herein;

NOW, THEREFORE, in consideration of the representations, covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Data Exchange.

(a) HCS shall, no later than [*****] after the Effective Date occurs, provide to PURCHASER the following information, as contemplated in 42 U.S.C. § 1396r-8, 42 C.F.R. Part 447, the National Medicaid Rebate Agreement, and/or any applicable guidance from CMS (collectively, "**Applicable Medicaid Rebate Law**") with respect to each Product, in a format mutually agreeable to both Parties: (i) baseline Average Manufacturer Price ("**AMP**"), (ii) baseline CPI-U, (iii) FDA approval date, and (iv) original market date.

(b) In order for HCS or its Affiliates to incorporate any lagged data which impacts best price realized determined by HCS prior to the Effective Date, PURCHASER shall, no later than the [*****] of each month after the Effective Date, provide to HCS, with respect to each Product, in a format mutually agreeable to both Parties, any transactional data related to a Product sale in PURCHASER's possession that could reasonably be expected to affect the best price realized for a Product, prior to the Effective Date.

(c) For so long as Medicaid price reporting is required under Applicable Medicaid Rebate Law for any Product manufactured bearing Labeler Code 50458 (the "**Labeler Code 50458 Reporting Period**"), HCS shall, as soon as reasonably possible but no later than [*****] after the Effective Date provide to PURCHASER all transactional data in HCS' possession necessary for PURCHASER to perform the required government price calculations.

(d) During the Labeler Code 50458 Reporting Period, PURCHASER shall notify HCS within [*****] of any change to the Products' innovator drug status under Applicable Medicaid Rebate Law.

(e) The Parties shall cooperate with respect to the Products, and to ensure that in the transition of price calculation responsibilities from HCS or its Affiliates to PURCHASER, all dates of service are accounted for.

2. Price Reporting and Certification.

During the Labeler Code 50458 Reporting Period:

(a) No later than [*****] prior to the applicable CMS reporting deadline, beginning with the month in which the Effective Date occurs, PURCHASER shall calculate and submit to HCS the Monthly Drug Data Reporting ("**DDR**") Submission (the "**Monthly DDR Submission**", as defined below) with respect to each Product bearing Labeler Code 50458, in the format required for submission into the CMS DDR system. For purposes of this Agreement, "**Monthly DDR Submission**" means, with respect to each Product bearing Labeler Code 50458 and for a given month, (i) monthly AMP and (ii) monthly AMP Units as defined under Applicable Medicaid Rebate Law.

(b) No later than [*****] prior to the applicable CMS reporting deadline, beginning with the quarter (as determined in accordance with the Johnson & Johnson Universal Calendar for the applicable fiscal year, attached for illustrative purposes as Exhibit C to the Purchase Agreement) in which the Effective Date occurs, PURCHASER shall calculate and submit to HCS the Quarterly DDR Submission (as defined below) with respect to each Product bearing Labeler Code 50458, in the format required for submission into the CMS DDR system. For purposes of this Agreement, "**Quarterly DDR Submission**" means, with respect to each Product bearing Labeler Code 50458 and for a given calendar quarter, (i) quarterly AMP, (ii) quarterly AMP Units, (iii) best price achievable, (iv) nominal price sales, and (v) customary prompt pay discounts.

(c) No later than [*****] prior to the applicable CMS reporting deadline, beginning with the month in which the Effective Date occurs, PURCHASER shall, with respect to each Product bearing Labeler Code 50458, delegate signing authority to HCS for purposes of DDR submissions, in the form of **Exhibit B** (the "**Medicaid Delegation of Signature Authority for Certification**"). PURCHASER shall provide HCS with a Medicaid Delegation of Signature Authority for Certification on a yearly basis, or as otherwise required, no later than [*****] prior to the expiration of the previous year's Medicaid Delegation of Signature Authority, until HCS is no longer required to make submissions under Applicable Medicaid Rebate Law with respect to the Products.

(d) PURCHASER agrees that it shall include with each Monthly DDR Submission or Quarterly DDR Submission a certification in the form of **Exhibit C** (the "**Medicaid Submission Certification**").

(e) Upon the timely receipt of a Monthly DDR Submission as described in Section 2(a), a Quarterly DDR Submission as described in Section 2(b), or a revision thereto as described in Section 3(b) and the accompanying Medicaid Submission Certification described in Section 2(d) from PURCHASER, HCS shall enter the information contained in the submission into the CMS DDR system by the deadline specified under Applicable Medicaid Rebate Law.

(f) To the extent reporting is required by the entity identified by the NDC labeler code, PURCHASER shall, no later than [*****] prior to the applicable reporting deadline and beginning with the quarter in which the Effective Date occurs, provide to HCS, in a format mutually agreed upon by the Parties, all data with respect to each Product bearing Labeler Code 50458 for such calendar quarter required by states to enable HCS to comply with HCS's state price reporting requirements under all applicable state Laws or state Medicaid supplemental rebate contracts, including, but not limited to, the Laws and contracts governing the programs listed in **Exhibit E**. HCS shall provide to PURCHASER suggested file formats, layouts, and certification forms for submission of such data as soon as reasonably practicable. HCS shall, in the timeframes required under applicable Law, report all required price information, whether required under contract or under state Law.

3. Revisions of Reported Information.

(a) HCS shall or shall cause its Affiliates to calculate, submit and certify to CMS any necessary revisions of Monthly DDR Submissions or Quarterly DDR Submissions previously calculated by HCS or its Affiliates relating to periods prior to the month and quarter in which the Effective Date occurs with respect to the Products bearing Labeler Code 50458, in each case as soon as reasonably practicable after HCS determines that submission of such revisions is necessary. HCS shall notify PURCHASER within [*****] of any submission by HCS or its Affiliates to CMS of any restatement of such Products' Baseline AMP as defined under Applicable Medicaid Rebate Law. Such notification shall include copies of the revised monthly or quarterly DDR submissions.

(b) PURCHASER shall calculate, submit and certify to HCS any necessary revisions of Monthly DDR Submissions or Quarterly DDR Submissions previously submitted by PURCHASER to HCS pursuant to Section 2(a) or 2(b), in each case as soon as reasonably practicable after PURCHASER determines that submission of such revisions is necessary. Each such revised submission shall be accompanied by a Medicaid Submission Certification, as described in Section 2(d).

(c) HCS shall or shall cause its Affiliates to calculate and submit to DVA any necessary revisions of FSS Submissions (including non-FAMPs or FCPs) previously calculated by HCS or its Affiliates with respect to the Products. HCS shall notify PURCHASER within [*****] of any submission by HCS or its Affiliates to DVA of any revision of an FSS Submission that impacts the 2018 Federal Ceiling Price. Such notification shall include copies of the revised FSS Submissions.

(d) PURCHASER shall calculate, submit and certify to HCS any necessary revisions of FSS Submissions previously submitted by PURCHASER to HCS pursuant to Section 6(d).

4. Medicaid Rebate Management.

(a) HCS shall notify CMS as appropriate once PURCHASER, as owner of the Products, will be calculating the information submitted through the DDR system with respect to the Products, and the differences in the Parties' methodologies for calculating such information may result in variances in the information reported.

(b) Based on Applicable Medicaid Rebate Law, and based on the Unit Rebate Amount confirmed against DDR, HCS shall process and pay each Medicaid Rebate or State Rebate claim for a Product sold bearing Labeler Code 50458.

(c) [*****] shall [*****] be financially responsible for Medicaid Rebates or State Rebates relating to Products bearing Labeler Code 50458 reimbursed by state Medicaid agencies for Fee-For-Service claims and with a date of dispense for a Managed Medicaid claim [*****]

(d) [*****] shall be financially responsible for Medicaid Rebates or State Rebates relating to Products reimbursed by state Medicaid agencies for Fee-For-Service claims and with a date of dispense for a Managed Medicaid claim [*****].

(e) HCS shall use commercially reasonable efforts to pay each PURCHASER Medicaid Rebate Claim within [*****] of postmark on the applicable Medicaid Rebate or State Rebate invoice, but in the event that interest is incurred for late payment of any PURCHASER Medicaid Rebate Claim, HCS shall collect such interest amount from PURCHASER; provided, however that if interest is incurred for late payment of any PURCHASER Medicaid Rebate Claim as a result of HCS's acts or omissions, then HCS shall be responsible for such interest amount. After the end of each applicable calendar quarter, HCS shall, or shall cause its Affiliates to submit to PURCHASER an invoice (each, an "**HCS Rebate Invoice**") specifying all PURCHASER Medicaid Rebate Claims paid by HCS pursuant to Section 4(a) during such calendar quarter. PURCHASER shall pay to HCS or an Affiliate of HCS designated by HCS in writing the amount set forth in each HCS Rebate Invoice not later than [*****] after receipt thereof. PURCHASER shall pay the amount set forth in each HCS Rebate Invoice in accordance with this Section 4(d) notwithstanding that PURCHASER may request and HCS shall dispute with CMS on PURCHASER's behalf any PURCHASER Medicaid Rebate Claim paid by HCS on behalf of PURCHASER and notwithstanding any provision in the Purchase Agreement or any other Transaction Document. HCS shall adjust an HCS Rebate Invoice for any amounts resolved through such dispute. HCS will provide invoice details approximately [*****] after the quarter close to supplement a PURCHASER Medicaid Rebate Claim. This will include NDC level summary by State, by program, and by quarter. PURCHASER may request claim level detail for any PURCHASER Medicaid Rebate Claim. HCS shall use

best efforts to facilitate the claim level detail request from PURCHASER to the applicable state agency.

(f) PURCHASER shall maintain all data with respect to the Products required to be maintained under Applicable Medicaid Rebate Law and shall provide that information to HCS in the event HCS requests the information in order to respond to any inquiry from CMS or any order, subpoena, or other judicial, administrative, or regulatory obligation relating to HCS's or its Affiliates' price reporting practices.

(g) In the event PURCHASER increases the price of the Products on or after the Effective Date, PURCHASER shall promptly reimburse Janssen for any resulting increase in Medicaid rebate liability for claims from the Effective Date through [*****].

5. Coverage Gap Discount Management.

(a) Promptly after receipt by HCS of a Medicare Coverage Gap Discount Program invoice (a "**Discount Program Invoice**") issued pursuant to Applicable Coverage Gap Discount Program Law that includes claims relating to the utilization of any Product bearing Labeler Code 50458, HCS shall pay such invoice. HCS shall, or shall cause its Affiliates to be financially responsible for such claims relating to Products billed through the 2Q2018 billing cycle as determined by CMS under the Coverage Gap Discount Program. PURCHASER shall be financially responsible for such claims related to Products billed with the 3Q2018 billing cycle as determined by CMS and thereafter under the Coverage Gap Discount Program (a "**PURCHASER Medicare Rebate Claim**"). HCS shall provide to PURCHASER a copy of such Discount Program Invoice related to a PURCHASER Medicare Rebate Claim with claims and information unrelated to the Products redacted.

(b) HCS shall, or shall cause its Affiliates to submit to PURCHASER an invoice (each, an "**HCS Discount Program Invoice**") specifying all Discount Program Invoice amounts with respect to a PURCHASER Medicare Rebate Claim. PURCHASER shall pay to HCS or an Affiliate of HCS designated by HCS in writing the amount set forth in each HCS Discount Program Invoice not later than [*****] after receipt thereof.

(c) PURCHASER shall maintain all data with respect to Products required to be maintained under Applicable Coverage Gap Discount Program Law and shall provide that information to HCS in the event HCS requests the information in order to respond to any inquiry from CMS or any order, subpoena, or other judicial, administrative, or regulatory obligation relating to HCS's participation in the Coverage Gap Discount Program.

6. FSS Management.

(a) HCS shall continue to maintain the Products on Janssen's FSS contract and shall otherwise administer all aspects of FSS contracting for the Products until PURCHASER receives approval from DVA to add the Products to PURCHASER's FSS.

HCS and PURCHASER will coordinate with the appropriate DVA contracting officers to remove the Products from Janssen's FSS and add them to PURCHASER's FSS as soon as reasonably practicable.

(b) HCS will continue to make Industrial Funding Fee ("**IFF**") payments for the Products on behalf of PURCHASER as long as the Products continue to be included on Janssen's FSS contract. Once the Products are removed from Janssen's FSS contract through the process described in 6(a), PURCHASER will assume responsibility for making the IFF payment for the Products. HCS shall be financially responsible for IFF payments for the Products on Janssen's FSS contract related to sales through [*****]. PURCHASER shall be financially responsible for IFF payments for the Product on Janssen's FSS contract related to sales beginning [*****]. HCS shall invoice PURCHASER for IFF payments made for Products purchased by FSS eligible entities beginning [*****] and PURCHASER shall pay to HCS all undisputed amounts set forth in each such invoice not later than [*****] after receipt thereof.

(c) HCS shall continue to pay wholesaler chargebacks related to purchases of the Products by FSS eligible entities off of Janssen's FSS after the Effective Date. HCS shall be financially responsible for all chargebacks for Products sold under Janssen's FSS contract through [*****], and PURCHASER shall be financially responsible for all chargebacks for Products sold under Janssen's FSS contract beginning [*****] (a "**PURCHASER FSS Chargeback**"). After the end of each calendar quarter, HCS shall submit to PURCHASER an invoice (each, an "**HCS FSS Chargeback Invoice**") specifying all PURCHASER FSS Chargebacks paid by HCS pursuant to this Section 6(c) during such calendar quarter. PURCHASER shall pay to HCS the amount set forth in each HCS FSS Chargeback Invoice not later than [*****] after receipt thereof. PURCHASER shall pay the amount set forth in each HCS FSS Chargeback Invoice in accordance with this Section 6(c) notwithstanding that PURCHASER may request and HCS shall dispute with the DVA on PURCHASER's behalf any PURCHASER FSS Chargeback paid by HCS on behalf of PURCHASER and notwithstanding any provision in the Purchase Agreement or any other Transaction Document. HCS shall adjust an HCS FSS Chargeback Invoice for any amounts resolved through such dispute.

(d) No later than [*****] prior to the applicable DVA reporting deadline, beginning with the quarter in which the Effective Date occurs and for so long as the Products are on Janssen's FSS, PURCHASER shall calculate and submit to HCS the quarterly non-FAMP, annual non-FAMP, and/or FCP (each, an "**FSS Submission**") as may be required by and in accordance with applicable Law, applicable guidance issued by DVA (collectively, the "**FSS Law**"), and PURCHASER's price reporting policies and procedures.

(e) PURCHASER agrees that it shall include with each FSS Submission a certification in the form of **Exhibit D** (the "**FSS Submission Certification**").

(f) HCS shall notify PURCHASER of the FSS tracking customer applicable to the Products on Janssen's FSS as soon as reasonably practicable after the Effective Date. For so long as the Products are listed on Janssen's FSS, PURCHASER shall notify HCS within [*****] of any change in customer pricing which would disturb the tracking customer ratio and/or pricing for the Products.

(g) In the event PURCHASER increases the price of the Products on or after the Effective Date, Purchaser shall promptly reimburse Janssen for any resulting increase in FSS chargeback liability for claims from the Effective Date through [*****].

7. TRICARE Retail Management.

(a) HCS and PURCHASER will coordinate with the appropriate persons at DHA to remove the Products from Janssen's TRICARE Program agreement and add them to PURCHASER's TRICARE Program agreement as soon as reasonably practicable consistent with the time frames listed in Section 7(b) below.

(b) Promptly after receipt by HCS of a Janssen TRICARE Program Demand Letter (a "**TRICARE Demand Letter**") issued pursuant to Applicable TRICARE Program Law that includes claims relating to the utilization of the Products under the TRICARE Program after the Effective Date, HCS shall pay such invoice. HCS shall, or shall cause its Affiliates to be financially responsible for such claims relating to Products dispensed and utilizing the TRICARE Program through [*****]. PURCHASER shall be financially responsible for such claims related to Products dispensed and utilizing the TRICARE Program beginning [*****] (a "**PURCHASER TRICARE Claim**"). HCS shall provide to PURCHASER a summary of PURCHASER TRICARE Claims from the DHA website with claims and information unrelated to the Products redacted.

(c) HCS shall, or shall cause its Affiliates to submit to PURCHASER an invoice (each, an "**HCS TRICARE Invoice**") specifying all TRICARE Demand Letter amounts with respect to PURCHASER TRICARE Claims. PURCHASER shall pay to HCS or an Affiliate of HCS designated by HCS in writing the amount set forth in each HCS TRICARE Invoice not later than [*****] after receipt thereof

8. PHS 340B Program.

(a) Within [*****] after the Effective Date, HCS shall provide PURCHASER with PHS 340B Program pricing for the Products for the quarter in which the Effective Date occurs for use by PURCHASER in connection with its obligations under the PHS 340B Program administered by the Health Resources and Services Administration pursuant to 42 U.S.C. § 256B (the "**PHS 340B Program**"). In addition, within [*****] prior to the end of the quarter in which the Effective Date occurs, HCS shall provide PURCHASER with PHS 340B Program pricing for the Products for the quarter following the quarter in which the Effective Date occurs for use by PURCHASER in connection with its obligations under the PHS 340B Program.

(b) Beginning with the second full quarter after the quarter in which the Effective Date occurs, and for so long as HCS processes 340B chargebacks for the Products, PURCHASER shall calculate and report the 340B price to HCS no later than [*****] prior to the start of such quarter.

(c) HCS shall be financially responsible for all chargebacks for Products bearing Labeler Code 50458 sold under the PHS 340B Program through [*****], and Purchaser shall be financially responsible for all chargebacks for Products sold under the PHS 340B Program beginning [*****]. The Parties shall use best efforts to cooperate and ensure appropriate and timely invoicing and payment of such PHS 340B chargebacks as between the Parties.

(d) In the event PURCHASER increases the price of the Products on or after the Effective Date, Purchaser shall promptly reimburse Janssen for any resulting increase in 340B chargeback liability for claims from the Effective Date through [*****].

9. IRS Annual Branded Prescription Drug Fee.

(a) As contemplated in § 9008 of the Patient Protection and Affordable Care Act, as amended by § 1404 of the Health Care and Education Reconciliation Act of 2010, 26 C.F.R. Parts 51 and 602, and/or any applicable guidance from the Internal Revenue Service ("**IRS**") (collectively, "**Branded Prescription Drug Fee Law**") the Parties acknowledge that HCS or its Affiliates shall incur IRS Branded Prescription Drug Fees related to the Products which shall be assessed at Janssen's rate for product under Labeler Code 50458. For clarity, such IRS Branded Prescription Drug Fees are assessed on sales in one year (the "**Sales Year**") and billed by the IRS to the manufacturer in the following year, with adjustments billed by the IRS to the manufacturer in the year thereafter. "IRS Branded Prescription Drug Fees" means fees incurred in accordance with Branded Prescription Drug Fee Law.

(b) [*****] shall [*****] be solely financially responsible for the IRS Branded Prescription Drug Fees associated with the sales of the Products under Labeler Code 50458 for all years up to and including the 2017 Sales Year. [*****] shall be solely financially responsible for the IRS Branded Prescription Drug Fees associated with sales of the Products under PURCHASER's labeler code.

(c) The Parties will share financial responsibility for the IRS Branded Prescription Drug Fees associated with sales of the Products bearing Labeler Code 50458 for the 2018 Sales Year as described herein. Each Party's financial responsibility shall be calculated based on [*****]. For the avoidance of doubt, and by way of example, it is agreed that if the Effective Date is [******],[*****] shall be financially responsible for [*****] of the fee for the 2018 Sales Year, and [*****] shall be financially responsible [*****] of the fee for the 2018 Sales Year. [*****] shall be solely financially responsible for the IRS Branded Prescription Drug Fees associated with the Products under Labeler Code 50458 for the 2019 Sales Year and thereafter. [*****] shall [*****] timely pay such

IRS Branded Prescription Drug Fees associated with the Products and shall promptly invoice [*****] for those fees for which [*****] is financially responsible as described herein (an "**IRS Branded Drug Fee Invoice**"). [*****] shall pay to [*****] as designated the IRS Branded Drug Fee Invoice not later than [*****] after receipt thereof.

10. Audit.

(a) PURCHASER shall, and shall cause its relevant Affiliates and Representatives to, permit HCS and its Representatives, at HCS's cost, at reasonable times and upon reasonable notice, to examine the Business Books and Records maintained by PURCHASER and such Affiliates and Representatives with respect to any and all Products to verify, the accuracy and completeness of any and all Monthly DDR Submissions, Quarterly DDR Submissions, and FSS Submissions submitted by PURCHASER to HCS under Section 2(a), 2(b), and 6(d) respectively, or revisions thereto under Section 3(b) and 3(d).

(b) HCS shall, and shall cause its relevant Affiliates and Representatives to, permit PURCHASER and its Representatives, at PURCHASER's cost, at reasonable times and upon reasonable notice, to examine the Business Books and Records maintained by HCS and such Affiliates and Representatives with respect to any and all Products to verify summary level detail used to determine the amounts payable by PURCHASER to HCS under this Agreement. For clarity, under this Section 10(b), PURCHASER may review the calculation of such chargebacks and rebates by examining the relevant calculated prices and units, but may not access the underlying calculation of those prices.

11. Additional Collaboration.

ARTICLE IIEach Party shall promptly provide to the other Party all data, materials and other information, and shall promptly take all such other actions, as may be reasonably requested by the other Party from time to time in order to perform its obligations hereunder and comply with all Laws applicable to the matters addressed in this Agreement.

*ARTICLE III*Each Party shall cooperate with the other Party's reasonable requests in responding to or resolving any complaint, investigation, inquiry or review initiated by a governmental agency, or otherwise relating to the Product or the services provided by either Party as described in this Agreement. Each Party shall cooperate with the reasonable request of any insurance company providing protection to either Party in connection with the foregoing.

12. Indemnity and Limitation of Liability.

(a) PURCHASER Indemnification. PURCHASER shall indemnify HCS, its Affiliates and its and their respective Representatives, and defend and hold each of them harmless, from and against any and all Losses incurred by any of them in connection with, arising from or occurring as a result of a claim or proceeding instituted by a third party in connection with (i) the breach by PURCHASER of this Agreement including, but not limited to, as a result of any material inaccuracy or omission in the Monthly DDR Submissions, Quarterly DDR Submissions, or FSS Submission made by PURCHASER to

HCS under Sections 2 or 6 or a revision thereto as described in Section 3 or any other submissions or information provided by PURCHASER to HCS hereunder, or any failure to provide such Monthly DDR Submissions, Quarterly DDR Submissions, or FSS Submissions in accordance with this Agreement, including any failure to provide such Monthly DDR Submissions, Quarterly DDR Submission, or FSS Submissions in accordance with the time periods set forth in Section 2, or 6, (ii) any fraud, intentional misconduct, gross negligence or violation of any Law of PURCHASER, its Affiliates, or its or their respective Representatives in connection with the performance of this Agreement, , or (iii) the enforcement by HCS of its rights under this Section 12(a), except, in each case ((i) through (ii)) for those Losses for which HCS has an obligation to indemnify PURCHASER pursuant to Section 12(b), as to which Losses each Party shall indemnify the other Party to the extent of its respective liability for such Losses.

(b) HCS Indemnification. HCS shall indemnify PURCHASER, its Affiliates and its and their respective Representatives, and defend and hold each of them harmless, from and against any and all Losses incurred by any of them in connection with, arising from or occurring as a result of a claim or proceeding instituted by a third party in connection with (i) the breach by HCS of this Agreement, including, but not limited to, as a result of any material inaccuracy or omission in the data or information provided by HCS to Purchaser or a revision thereto as described in Section 3 or any other submissions or information provided by HCS to Purchaser hereunder, or any failure to provide such data or information in accordance with this Agreement, including any failure to provide such data or information in accordance with the time periods set forth in Section 1 or elsewhere in this Agreement, or (ii) any fraud, intentional misconduct, gross negligence or violation of any Law of HCS, its Affiliates, or its or their respective Representatives in connection with the performance of this Agreement, or (iii) the enforcement by PURCHASER of its rights under this Section 12(b), except, in each case ((i) and (ii)) for those Losses for which PURCHASER has an obligation to indemnify HCS pursuant to Section 12(a), as to which Losses each Party shall indemnify the other Party to the extent of its respective liability for such Losses.

(c) Indemnification Procedure. All claims for indemnification under Sections 12(a) or 12(b) above shall be asserted and resolved pursuant to procedures equivalent to the indemnity procedures set forth in Sections 8.03 and 8.04 of the Purchase Agreement.

(d) NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, (I) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR LOST REVENUES OR PROFITS OR DAMAGES OR INDIRECT, INCIDENTAL, CONSEQUENTIAL OR MULTIPLIED DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR ANY LIABILITY RETAINED OR ASSUMED HEREUNDER UNLESS SUCH LOST REVENUES OR PROFITS OR DAMAGES ARE NOT BASED ON ANY SPECIAL CIRCUMSTANCES OF THE PARTY ENTITLED TO

INDEMNIFICATION AND ARE THE NATURAL, PROBABLE AND REASONABLY FORESEEABLE RESULT OF THE EVENT THAT GAVE RISE TO THE CLAIM FOR INDEMNIFICATION AND (II) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR PUNITIVE OR EXEMPLARY DAMAGES; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY OF SUCH LOST REVENUES OR PROFITS OR DAMAGES THAT ARE PAID OR REQUIRED TO BE PAID BY AN INDEMNIFIED PARTY TO AN UNRELATED THIRD PARTY.

13. Confidentiality.

(a) All Confidential Information received or obtained by a Party (the "**Receiving Party**") shall be held in confidence by the Receiving Party, which shall not either directly or indirectly disclose or use, except in connection with the performance of this Agreement, any Confidential Information without the prior written consent of the disclosing Party (the "**Disclosing Party**").

(b) For purposes of this Agreement, the term "**Confidential Information**" means any and all information or material, whether oral, visual, in writing or in any other form, that, at any time before, on or after the Effective Date, has been or is provided, communicated or otherwise made known to the Receiving Party by or on behalf of the Disclosing Party pursuant to this Agreement; any data, ideas, concepts or techniques contained therein; and any modifications thereof or derivations therefrom. The Parties acknowledge and agree that all Confidential Information shall be owned by the Disclosing Party with respect thereto. For the avoidance of doubt, without limitation of the foregoing, all pricing and sales data with respect to the Products provided by one Party to the other Party shall remain the Confidential Information of the Disclosing Party, and all information regarding Medicaid Rebates, State Rebates and Coverage Gap Discounts with respect to the Products provided to a Party by state Medicaid agencies, other state or governmental agencies or CMS shall remain the Confidential Information of the Party to which such information is provided by such agency or CMS, as the case may be.

(c) The foregoing obligations of confidentiality and non-use shall not apply to information that the Receiving Party must disclose pursuant to this Agreement or to applicable Law, provided that the Receiving Party provides the Disclosing Party with reasonable notice of the Receiving Party's intent to disclose such information.

14. Compliance with Applicable Law.

Each Party shall perform its obligations under this Agreement in accordance with applicable Law, including, but not limited to, Applicable Medicaid Rebate Law and Applicable Coverage Gap Discount Program Law.

15. Transfer of Product.

In the event that PURCHASER engages in a transaction (e.g., sale of commercialization rights for the Products or transfer of marketing rights for the Products) with a third party that causes transactional data related to sales of the Products to be received by the third party during the term of this Agreement, the terms of such transaction shall include a requirement that the third party execute an agreement with HCS in substantially the form of this Agreement.

16. Term.

This Agreement shall commence on the Effective Date, and shall remain in full force and effect until [*****] after the expiration date of the last lot of Product bearing Labeler Code 50458 (which date HCS shall communicate to PURCHASER as soon as reasonably practicable), unless earlier terminated by mutual agreement of the Parties, which shall be evidenced in writing. The expiration or earlier termination of this Agreement shall be without prejudice to any rights or obligations of the Parties that may have accrued prior to such expiration or termination, and the provisions of Sections 3, 4, 10, 11, 12, 13, 17(b) and 17(c) shall survive the expiration or termination of this Agreement.

17. General Provisions.

(a) Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any term or other provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid, illegal or unenforceable, (i) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (ii) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity, illegality or unenforceability, nor shall such invalidity, illegality or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

(b) Law; Dispute Resolution. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law, principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction. The Parties consent to the exclusive jurisdiction of the Federal and State courts located in the State of New York for the resolution of all disputes or controversies between the Parties which, pursuant to applicable Law, are not subject to the provisions of Section 10.10 of the Purchase Agreement. Each of the Parties (i) consents to the exclusive jurisdiction of each such court in any suit, action or proceeding relating to or arising out of this Agreement or transactions contemplated hereby; (ii) waives any objection that it may have to the laying of venue in any such suit, action or proceeding in any such court; and (iii) agrees that service of any court paper may be made in such manner as may be provided under applicable Laws or court rules governing service of process.

THE PARTIES HEREBY IRREVOCABLY WAIVE, AND AGREE TO CAUSE THEIR RESPECTIVE AFFILIATES TO WAIVE, THE RIGHT TO TRIAL BY JURY IN ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY RELATED AGREEMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREBY. Any dispute, controversy or claim arising out of or related to this Agreement, or the interpretation, application, breach, termination or validity thereof, including any claim of inducement by fraud or otherwise, will be submitted to arbitration and before submission to arbitration will be first mediated through non-binding mediation, in each case in accordance with the arbitration and mediation procedures set forth in Section 10.10 of the Purchase Agreement.

(c) Notices. All notices, requests, demands, waivers and other communications required or permitted to be given under this Agreement shall be in writing and sent by personal delivery, mailed by registered or certified mail, return receipt requested, postage prepaid, sent by next-day or overnight mail or delivery, or sent by facsimile transmission, and shall be sent to:

if to HCS, to:
[*****]
425 Hoes Lane
Piscataway, NJ 08855

if to PURCHASER, to:
[ ]
Attn: Legal Department

or, in each case, at such other address as may be specified in writing to the other Party pursuant to the notice procedure set forth herein.

All such notices, requests, demands, waivers and other communications shall be deemed to have been received if by personal delivery, on the day after such delivery, if by certified or registered mail, on the third Business Day after the mailing thereof, if by next-day or overnight mail or delivery, on the day delivered, if by facsimile transmission, on the next day following the day on which such facsimile transmission was sent, provided that a copy is also sent by certified or registered mail.

(d) Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective heirs, successors and permitted assigns.

(e) Assignment. Neither Party to this Agreement may assign any of its rights or obligations under this Agreement, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets, without the prior written consent of the other Party, except that (i) HCS may, without such consent, assign its rights or obligations to an Affiliate, (ii) PURCHASER may, without such consent, assign its rights hereunder, in whole or in part, to one or more of its Affiliates, and (iii) PURCHASER

may, without such consent, assign all of its rights under this Agreement to one or more Persons acquiring all or a material portion of the business or assets of PURCHASER, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets; provided, however, that no such assignment by a Party shall relieve such Party of any of its obligations hereunder. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 17(e) shall be null and void.

(f) No Third Party Beneficiaries. Nothing in this Agreement shall confer any rights upon any person or entity other than the Parties hereto and their respective heirs, successors and permitted assigns.

(g) Amendment and Waivers. Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (i) in the case of an amendment, by PURCHASER and HCS and (ii) in the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by either Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

(h) Force Majeure. Neither Party shall be held liable for any delay or failure in performance of any part of this Agreement from any cause beyond its reasonable control and without its fault or negligence, including, but not limited to, acts of God, acts of civil or military authority, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, hurricanes, tornadoes, nuclear accidents, floods, strikes and power blackouts. Upon the occurrence of a condition described in this Section 17(h), the Party whose performance is prevented shall give written notice to the other Party, and the Parties shall promptly confer in good faith to agree upon equitable, reasonable action to minimize the impact on both Parties of such conditions.

(i) Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that both Parties need not sign the same counterpart. This Agreement, following its execution, may be delivered via telecopier machine or other form of electronic delivery, which shall constitute delivery of an execution original for all purposes.

(j) No Joint Venture. Each Party is an independent contractor under this Agreement. Nothing contained in this Agreement shall be construed as creating a partnership, joint venture or agency relationship between the Parties or as granting to either Party the authority to bind or contract any obligation in the name of or on the account of the other Party, or to make any statements, representations, guarantees or warranties on behalf of the other Party. All persons employed by a Party shall be employees of such

Party and not of the other Party and all costs and obligations incurred by reason of any such employment shall be for the account and expense of such Party.

(k) Subcontracting. PURCHASER shall remain responsible and liable for the performance by any subcontractor of PURCHASER's obligations under this Agreement and such subcontracting shall not relieve PURCHASER of any liability or obligation under this Agreement, except to the extent satisfactorily performed by such permitted subcontractor.

(l) Purchase Agreement. Nothing contained in the Agreement is intended or shall be construed to amend or modify in any respect, or constitute a waiver of, any of the rights and obligations of the Parties under the Purchase Agreement.

(m) Entire Agreement. This Agreement, together with the Exhibits and Schedules expressly contemplated hereby and attached hereto (which are hereby incorporated by reference), and the other agreements and certificates delivered in connection herewith (including the Purchase Agreement, the Transaction Documents and the Confidentiality Agreement), contains the entire agreement between the Parties with respect to the transactions contemplated hereby and supersedes all prior agreements or understandings between the Parties. Before signing this Agreement, the Parties have had numerous conversations, including preliminary discussions, formal negotiations and informal conversations at meals and social occasions, and have generated correspondence and other writings, in which the Parties discussed the transactions contemplated hereby and their aspirations for success. In such conversations and writings, individuals representing the Parties may have expressed their judgments and beliefs concerning the intentions, capabilities and practices of the Parties, and may have forecasted future events. The Parties recognize that such conversations and writings often involve an effort by both sides to be positive and optimistic about the prospects for the transaction. However, it is also recognized that all business transactions contain an element of risk, as do the transactions contemplated hereby, and that it is normal business practice to limit the legal obligations of contracting Parties to only those promises and representations which are essential to their transaction so as to provide certainty as to their respective future rights and remedies. Accordingly, other than the Confidentiality Agreement entered into between the Parties, the Transaction Documents are intended to define the full extent of the legally enforceable undertakings and representations of the Parties, and no promise or representation, written or oral, which is not set forth explicitly in such agreements is intended by either Party to be legally binding. Each of the Parties acknowledges that, in deciding to enter into this Agreement and the other Transaction Documents and to consummate the transactions contemplated hereby, none of them has relied upon any statements or representations, written or oral, other than those explicitly set forth herein or therein.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date first above written.

Johnson & Johnson Health Care Systems Inc.

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date first above written.

Vivus, Inc.

By: _____
Name:
Title:

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

## EXHIBIT A

List of Products by NDC

| NDC- 11 | Description |
|---|---|
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |

## EXHIBIT B

Form of Delegation of Signature Authority for Certification of
Monthly & Quarterly Medicaid Pricing Calculations

**Company Name: PURCHASER**

**Labeler Code(s): [insert NDCs]**

Upon verification of the conditions listed below, I hereby directly delegate to [*****], JJHCS authority to electronically certify the Medicaid AMP and Best Price calculations for the legal entity and labeler code/NDCs identified above in the Drug Data Reporting for Medicaid (DDR) system maintained by the Centers for Medicare and Medicaid Services (CMS). This delegation is to be executed strictly in accordance with the following conditions:

1. On a monthly and quarterly basis, subsequent to receipt of approved pricing data together with an executed Medicaid Pricing Data Approval template from **[insert names who will sign the Medicaid Pricing Data Approval Template]** for the designated period;

2. Only for those labeler codes/NDCs over which I have responsibility and have delegated my signature authority;

3. Only upon the good faith belief that there are no discrepancies in the approved pricing being reported.

4. In the event that [*****] is not available, this delegation directly transfers to [*****] subject to the above conditions as well.

5. This delegation is valid for 12 months from the date of its execution, except to the extent that the designated certifier or approver are no longer in their current positions, in which case a new delegation will be required to be executed.

6. In the event that any of the above conditions are not met in any month or quarter, this delegation is ineffective absent further written direction from me. For example, this delegation will be ineffective in the event that approved calculations are received from an individual other than the named individual above.

**Name of CEO, CFO or Authorizing Official**: **PURCHASER**

_____ _____

**Signature**

**Title:**
**Date Authorized: [●]** **Date Authorization Terminates: [●]**

## EXHIBIT C

Form of Medicaid Submission Certification

Medicaid Pricing Data Approval Template

**Manufacturer Name:** _____

**Labeler Code(s):** 50458 **(Pancreaze)**
(If Labeler Code(s) are shared, itemize NDC#s at the 9 digit level at the bottom of, or as an attachment to, this Approval Template.)

Period Approved: **Month YYYY or Quarter YYYY**

I hereby certify, to the best of my knowledge, the data being sent to HCS with this submission is complete and accurate at the time of this submission, and was prepared in accordance with PURCHASER's good faith, reasonable efforts based on existing guidance from CMS and PURCHASER's reasonable assumptions regarding the provisions of section 1927 of the Social Security Act, the National Medicaid Drug Rebate Agreement, and applicable federal regulations. I understand that HCS must certify to CMS that this submission is complete and accurate at the time of this submission, and was prepared in accordance with the manufacturer's good faith, reasonable efforts based on existing guidance from CMS and the manufacturer's reasonable assumptions regarding the provisions of section 1927 of the Social Security Act, the National Medicaid Drug Rebate Agreement, and applicable federal regulations. I understand that HCS is relying on this certification in making its certification to CMS and that the information contained in this submission may be used for Medicaid rebate and payment purposes and that civil monetary penalties and/or termination from the Medicaid Rebate Program may be enforced if the information provided is found to be misrepresented. I further certify that I am authorized to submit this information.

_____
Signature of PURCHASER Employee or Officer
Authorized to Certify PURCHASER Data to CMS

## EXHIBIT D

FSS Submission Certification

Period Approved: **Quarter YYYY or Year YYYY**

I hereby certify, to the best of my knowledge, the data being sent to HCS with this submission is complete and accurate at the time of this submission, and was prepared in accordance with PURCHASER's good faith, reasonable efforts based on the FSS Law as defined herein. I understand that HCS must certify to DVA that this submission is accurate and complete at the time of this submission, and was prepared in accordance with the manufacturer's good faith, reasonable efforts based on the FSS Law. I understand that HCS is relying on this certification in making its certification to DVA and that the information contained in this submission may be used for FSS pricing purposes and that civil monetary penalties and/or termination from the FSS Program may be enforced if the information provided is found to be misrepresented. I further certify that I am authorized to submit this information.

_____

Signature of PURCHASER Employee or Officer
Authorized to Certify PURCHASER Data to DVA

## EXHIBIT E

Laws and Contracts Governing State Price Reporting Requirements

Vermont Prescription Drug Price Disclosure and Certification Law (33 V.S.A. § 2010)
New Mexico Reporting Prescription Drug Information Act (N.M. § Ann. Sec. 27-2E-1)
New York EPIC
Pennsylvania PACE
Texas Medicaid
Louisiana Senate Bill No. 59, Disclosure of Prescription Drug Price Information
California Senate Bill No. 17 (Drug Price Transparency)

**EXHIBIT G**

# BILL OF SALE AND ASSIGNMENT AND ASSUMPTION AGREEMENT

THIS BILL OF SALE AND ASSIGNMENT AND ASSUMPTION AGREEMENT (this "Agreement") is made and entered into as of [ ● ], by and among Janssen Pharmaceuticals, Inc., a Pennsylvania corporation ("Janssen"), JOM Pharmaceutical Services, Inc., a Delaware corporation (together with Janssen, the "Sellers"), and Vivus, Inc., a Delaware corporation ("Purchaser").

**W I T N E S S E T H :**

Janssen and Purchaser are parties to that certain Asset Purchase Agreement, dated as of [•] (the "Purchase Agreement"), pursuant to which (a) Janssen has agreed to, and to cause its Divesting Entities to, sell, convey, assign and transfer to Purchaser, and Purchaser has agreed to, or cause its Affiliates to, purchase, acquire and accept from Janssen and its Divesting Entities, Janssen's and its Divesting Entities' rights, titles and interests in, to or under the Purchased Assets, and (b) Janssen has agreed to, and to cause its Divesting Entities to, sell, convey, assign and transfer to Purchaser, and Purchaser has agreed to accept and assume, the Assumed Liabilities. All capitalized terms used but not defined herein shall have the meanings assigned to them in the Purchase Agreement, unless they are specifically otherwise defined herein.

**NOW, THEREFORE**, for good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged by Sellers, and in accordance with the terms and conditions of the Purchase Agreement, Sellers hereby agree as follows:

1. Bill of Sale of Purchased Assets. Sellers do hereby irrevocably sell, convey, assign and transfer to Purchaser and its successors and assigns, all of Sellers' rights, title, and interests in, to or under the Purchased Assets effective at the Closing pursuant to the Purchase Agreement free and clear of any and all Liens other than Permitted Liens.

2. Assignment and Assumption. Sellers do hereby sell, convey, assign and transfer to Purchaser and its successors and assigns, all of Sellers' rights, titles, interests in, obligations and liabilities to and under the Assumed Liabilities effective at the Closing pursuant to the Purchase Agreement. Purchaser hereby accepts the foregoing assignment and transfer and agrees to accept, assume and undertake, and timely satisfy and discharge when due, Sellers' obligations, liabilities and responsibilities under or pursuant to such Assumed Liabilities arising from and after the date hereof.

3. Miscellaneous. This Agreement is executed and delivered pursuant to, and is given to further evidence (and give immediate effect to) the transfers and assignments contemplated by the Purchase Agreement upon the terms and conditions specified therein. In the event that any provision of this Agreement shall be construed to conflict with a provision in the Purchase Agreement, the provision in the Purchase Agreement shall control. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of such counterparts together constitute one and the same instrument. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

This Agreement and the rights and obligations of the parties hereunder shall be construed in accordance with and governed by the laws of the State of New York, without regard to its conflict of laws principles.

*[Remainder of Page Intentionally Blank]*

**IN WITNESS WHEREOF**, the undersigned has, by its duly authorized representative, executed this Bill of Sale and Assignment and Assumption Agreement as of the day and year first above written.

**JANSSEN PHARMACEUTICALS, INC.**

By: _____
Name:
Title:

*[Signature Page to Bill of Sale and Assignment and Assumption Agreement]*

**JOM PHARMACEUTICAL SERVICES, INC.**

By: _____
Name:
Title:

*[Signature Page to Bill of Sale and Assignment and Assumption Agreement]*

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

**PURCHASER:**

**VIVUS, INC.**

By: _____
Name: John P. Amos
Title: Chief Executive Officer

*[Signature Page to Bill of Sale and Assignment and Assumption Agreement]*

**EXHIBIT H**

# TRADEMARK ASSIGNMENT AGREEMENT

THIS TRADEMARK ASSIGNMENT AGREEMENT (this "Assignment") is dated as of [●] ("Effective Date"), and is made from Johnson & Johnson, a New Jersey corporation ("Assignor"), to Vivus, Inc., a Delaware corporation ("Assignee").

## W I T N E S S E T H :

**WHEREAS**, Assignor is the owner of those certain trademark registrations set forth in the attached Schedule A (the "Trademarks"); and

**WHEREAS**, pursuant to the Asset Purchase Agreement dated [●], between Janssen Pharmaceuticals, Inc. ("Seller"), a subsidiary of the Assignor, and Assignee (the "Purchase Agreement"), Assignee has agreed to acquire, and Seller has agreed to sell, convey, assign, deliver and transfer to Assignee, all of Seller's and the Divesting Entities' (as defined in the Purchase Agreement) rights, title and interests in, to and under the Trademarks.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. Assignment of Rights. Effective upon the Effective Date, Assignor, a Divesting Entity, hereby sells, assigns, transfers, conveys and delivers to Assignee all of its rights, title and interests in, to and under (a) the Trademarks, (b) the goodwill associated with the use of and symbolized by the Trademarks, (c) all applications and registrations for the Trademarks, and (d) any and all rights, benefits, privileges and proceeds under the Trademarks throughout the world, including, without limitation, (i) any and all claims by Assignor or any Divesting Entity against any third party for past, present or future infringement, dilution, misappropriation, misuse or other violation of any of the Trademarks, (ii) the exclusive right to apply for and maintain all registrations, renewals and/or extensions thereof, and (iii) the exclusive right to grant licenses or other interests therein.

2. Recordation. Effective upon the Effective Date, Assignee shall be responsible for and shall pay all costs relating to the registration, maintenance and prosecution of the Trademarks, including without limitation payment of any associated fees therefor, for the notarization, authentication, legalization or consularization of the signatures hereof, and for the recording of such assignment documents with the appropriate governmental authorities. Assignor agrees that Assignee shall have the rights to register and record its rights in the Trademarks, in its name, in the United States Patent and Trademark Office or the Canadian Intellectual Property Office.

3. Attorney. Assignor hereby appoints Assignee as Assignor's and the Divested Entities' true and lawful attorney in fact for the sole purpose of this Assignment, with full power of substitution in Assignor's or any Divested Entity's name and stead, to take any and all steps,

including proceedings at law, in equity or otherwise, to execute, acknowledge and deliver any and all instruments and assurances necessary or expedient in order to vest or perfect the aforesaid rights and causes of action more effectively in Assignee or to protect the same or to enforce any claim or right of any kind with respect thereto. This includes, but is not limited to, any rights with respect to the Trademarks that may have accrued in Assignor's or any Divested Entity's favor from the respective date of first creation of any of the Trademarks to the date of this Assignment.

4. No Alteration. Each of Assignor and Assignee hereby acknowledges and agrees that none of the representations, warranties, covenants, rights or remedies of any party under the Purchase Agreement shall be deemed to be enlarged, modified or altered in any way by the execution and acceptance of this instrument.

5. Further Assurances. Assignor further agrees that Assignor will, without demanding any further consideration therefor, at the request but at the expense of Assignee, do all lawful and just acts, including without limitation the execution and acknowledgment of instruments, that may be or become necessary to effect or formalize the transfer of the Trademarks.

6. Miscellaneous. This Assignment is executed and delivered pursuant to, and is in accordance with, the Purchase Agreement. In the event that any provision of this Assignment shall be construed to conflict with a provision in the Purchase Agreement, the provision in the Purchase Agreement shall control. This Assignment may be executed in any number of counterparts, each of which shall be an original, but all of such counterparts together constitute one and the same instrument. This Assignment shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns. This Assignment and the rights and obligations of the parties hereunder shall be construed in accordance with and governed by the laws of the State of New York, without regard to conflict of laws principles.

*[Remainder of the page intentionally left blank; signature pages follow.]*

**IN WITNESS WHEREOF**, the parties have executed, made and entered into this Assignment as of the date first set forth above.

**JOHNSON & JOHNSON**

By: _____
Name:
Title:

*[Signature Page to Trademark Assignment Agreement]*

**IN WITNESS WHEREOF**, the parties have executed, made and entered into this Assignment as of the date first set forth above.

**VIVUS, INC.**

By: _____
Name:
Title:

*[Signature Page to Trademark Assignment Agreement]*

**EXHIBIT I**

# OFFICER'S CERTIFICATE
# OF
# JANSSEN PHARMACEUTICALS, INC.

[●]

This certificate is being delivered pursuant to Section 7.01(c) of that certain Asset Purchase Agreement, dated [●], by and between Vivus, Inc., a Delaware corporation ("Purchaser"), and Janssen Pharmaceuticals, Inc., a Pennsylvania corporation ("Seller") (the "Purchase Agreement").

All capitalized terms used herein shall have the meanings assigned to them in the Purchase Agreement unless they are specifically otherwise defined herein.

The undersigned, [●], in [●] capacity as [●] of the Seller, and not in [●] personal capacity and without personal liability, hereby certifies that:

1. The representations and warranties of Seller contained in the Purchase Agreement (other than the Seller Fundamental Representations) were and are true and correct (without giving effect to any references to "material," "materially," "Material Adverse Effect," "material adverse effect" or other similar materiality qualifications contained or incorporated in any such representation or warranty) on and as of the Effective Date and as of the date hereof (other than representations and warranties made as of a specified date, which are true and correct as of the date specified), except for such failures to be true and correct that do not, individually or in the aggregate, have a Material Adverse Effect and the Seller Fundamental Representations were and are true and correct in all material respects on and as of the Effective Date and as of the date hereof (other than representations and warranties made as of a specified date, which are true and correct in all material respects as of the date specified).

2. Seller has performed and complied in all material respects with all of its covenants and agreements under the Purchase Agreement and the other Transaction Documents to be complied with and performed by Seller at or before the Closing.

*[Signatures on following page]*

**IN WITNESS WHEREOF**, I cause this certificate to be executed as of the date first written above.

_____

Name:
Title:

*[Signature Page to Seller's Officer's Certificate]*

**EXHIBIT J**

**OFFICER'S CERTIFICATE**
**OF**
**VIVUS, INC.**

[●]

This certificate is being delivered pursuant to Section 7.02(c) of that certain Asset Purchase Agreement, dated [●], by and between Vivus, Inc., a Delaware corporation ("Purchaser"), and Janssen Pharmaceuticals, Inc., a Pennsylvania corporation ("Seller") (the "Purchase Agreement").

All capitalized terms used herein shall have the meanings assigned to them in the Purchase Agreement unless they are specifically otherwise defined herein.

The undersigned, [●], in [●] capacity as [●] of the Purchaser, and not in [●] personal capacity and without personal liability, hereby certifies that:

3. The representations and warranties of Purchaser contained in the Purchase Agreement (other than the Purchaser Fundamental Representations) were and are true and correct (without giving effect to any references to "material," "materially," "Purchaser Material Adverse Effect," "material adverse effect" or other similar materiality qualifications contained or incorporated in any such representation or warranty) on and as of the Effective Date and as of the date hereof (other than representations and warranties made as of a specified date, which are true and correct as of the date specified), except for such failures to be true and correct that do not, individually or in the aggregate, have a Purchaser Material Adverse Effect and the Purchaser Fundamental Representations were and are true and correct in all material respects on and as of the Effective Date and as of the date hereof (other than representations and warranties made as of a specified date, which are true and correct in all material respects as of the date specified).

4. Purchaser has performed and complied in all material respects with all of its covenants and agreements under the Purchase Agreement and the other Transaction Documents to be complied with and performed by Purchaser at or before the Closing.

*[Signatures on following page]*

**IN WITNESS WHEREOF**, I cause this certificate to be executed as of the date first written above.

_____

Name:
Title:

*[Signature Page to Purchaser's Officer's Certificate]*

**EXHIBIT K**

# SECRETARY'S CERTIFICATE
# OF
# VIVUS, INC.

[●]

The undersigned, [●], a duly authorized officer of Vivus, Inc., a Delaware corporation (the "Company"), hereby certifies in [●] capacity as officer and not in [●] personal capacity and without personal liability, to Janssen Pharmaceuticals, Inc. ("Seller") as follows:

1. The undersigned is the Secretary of the Company and as such the undersigned is personally familiar with the Company's affairs, records and seal.

2. Attached hereto as Exhibit A is a true, complete and correct copy of the Company's Certificate of Incorporation and all amendments thereto, certified as of [●] by the Secretary of State of the State of Delaware. There have been no further amendments to said Certificate of Incorporation since the said date, and said Certificate of Incorporation is in full force and effect as of the date hereof.

3. Attached here to as Exhibit B is a true, complete and correct copy of the Company's by-laws and all amendments thereto as of [●]. There have been no further amendments to said by-laws since said date, and said by-laws are in full force and effect as of the date hereof.

4. Attached hereto as Exhibit C is a true, complete and correct copy of the resolutions of the board of directors of the Company authorizing the Company to enter into that Asset Purchase Agreement by and between the Company and Seller (the "Purchase Agreement") and the other Transaction Documents (such term as defined in the Purchase Agreement) and to consummate the Transactions (such term as defined in the Purchase Agreement).

*[Signatures on following page]*

**IN WITNESS WHEREOF**, I cause this certificate to be executed as of the date first written above.

**VIVUS, INC.**

By: _____
Name:
Title: Secretary

*[Signature Page to Purchaser's Secretary's Certificate]*

## Exhibit A

Certificate of Incorporation

**[*****] INDICATES MATERIAL THAT WAS OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT WAS REQUESTED. ALL SUCH OMITTED MATERIAL WAS FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.**

## Exhibit B

By-laws

## Exhibit C

Resolution of the Board of Directors

**Exhibit 3.2**

# AMENDED AND RESTATED BYLAWS OF

# VIVUS, INC.

(as amended on February 20, 2013, April 26, 2013, May 9, 2013, July 18, 2013 and September 15, 2015)

AMENDED AND RESTATED BYLAWS OF

VIVUS, Inc.

(a Delaware corporation)

TABLE OF CONTENTS

ARTICLE I
CORPORATE OFFICES

1.1 REGISTERED OFFICE

The registered office of the corporation shall be fixed in the certificate of incorporation of the corporation.

1.2 OTHER OFFICES

The board of directors may at any time establish branch or subordinate offices at any place or places where the corporation is qualified to do business.

ARTICLE II
MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at any place within or outside the State of Delaware designated by the board of directors. In the absence of any such designation, stockholders' meetings shall be held at the principal executive office of the corporation.

2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held each year on a date and at a time designated by the board of directors. In the absence of such designation, the annual meeting of stockholders shall be held on the third Tuesday of May in each year at 10:00 a.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day. At the meeting, directors shall be elected, and any other proper business may be transacted.

2.3 SPECIAL MEETING

A special meeting of the stockholders may be called at any time by the board of directors, the chairman of the board, or the chief executive officer or president (in the absence of a chief executive officer) but such special meetings may not be called by any other person or persons.

No business may be transacted at such special meeting other than the business specified in the notice to stockholders sent by the corporation in connection with such special meeting. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the board of directors may be held.

2.4 ADVANCE NOTICE PROCEDURES

(i) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be: (A) specified in the notice of meeting (or any supplement thereto)

given by or at the direction of the board of directors, (B) otherwise properly brought before the meeting by or at the direction of the board of directors, or (C) otherwise properly brought before the meeting by a stockholder. For business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation (A) not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting, or (B) not less than the later of the close of business on the forty-fifth (45th) day nor earlier than the close of business on the seventy-fifth (75th) day prior to the first anniversary of the date on which the corporation first sent or gave its proxy statement to stockholders for the preceding year's annual meeting, whichever period described in clause (A) or (B) of this sentence first occurs; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting is more than thirty (30) days before or more than sixty (60) days after the anniversary date of the previous year's annual meeting, notice by the stockholder to be timely must be so received not earlier than the close of business on the one hundred twentieth (120th) day prior to the annual meeting and not later than the close of business on the later of (x) the ninetieth (90th) day prior to the annual meeting and (y) the tenth (10) day following the date on which public announcement of the date of such meeting is first made. For purposes of this Section 2.2, a "public announcement" will mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission, or in a notice pursuant to the applicable rules of an exchange on which the securities of the corporation are listed. In no event will the public announcement of an adjournment of a stockholders meeting commence a new time period for the giving of a stockholder's notice as described above. A stockholder's notice to the secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting: (a) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (b) the name and address, as they appear on the corporation's books, of the stockholder proposing such business, (c) the class and number of shares of the corporation that are beneficially owned by the stockholder, (d) any material interest of the stockholder in such business, and (e) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the " 1934 Act "), in the stockholder's capacity as a proponent to a stockholder proposal. Notwithstanding the foregoing, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholder's meeting, stockholders must provide notice as required by the regulations promulgated under the 1934 Act. Notwithstanding anything in these bylaws to the contrary, no business shall be conducted at any annual meeting except in accordance with the procedures set forth in this paragraph (i). The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the meeting that business was not properly brought before the meeting and in accordance with the provisions of this paragraph (i), and, if the chairperson should so determine, he or she shall so declare at the meeting that any such business not properly brought before the meeting shall not be transacted.

(ii) Only persons who are nominated in accordance with the procedures set forth in this paragraph (ii) shall be eligible for election as directors. Nominations of persons for election to the board of directors of the corporation may be made at a meeting of stockholders by or at the

direction of the board of directors or by any stockholder of the corporation entitled to vote in the election of directors at the meeting who complies with the notice procedures set forth in this paragraph (ii). Such nominations, other than those made by or at the direction of the board of directors, shall be made pursuant to timely notice in writing to the secretary of the corporation in accordance with the provisions of paragraph (i) of this Section 2.4. Such stockholder's notice shall set forth (a) as to each person, if any, whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of such person, (B) the principal occupation or employment of such person, (C) the class and number of shares of the corporation that are beneficially owned by such person, (D) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, and (E) any other information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A under the 1934 Act (including without limitation such person's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and (b) as to such stockholder giving notice, the information required to be provided pursuant to paragraph (i) of this Section 2.4. At the request of the board of directors, any person nominated by a stockholder for election as a director shall furnish to the secretary of the corporation that information required to be set forth in the stockholder's notice of nomination which pertains to the nominee. No person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this paragraph (ii). The chairperson of the meeting shall, if the facts warrant, determine and declare at the meeting that a nomination was not made in accordance with the procedures prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the meeting, and the defective nomination shall be disregarded.

These provisions shall not prevent the consideration and approval or disapproval at an annual meeting of reports of officers, directors and committees of the board of directors, but in connection therewith no new business shall be acted upon at any such meeting unless stated, filed and received as herein provided. Notwithstanding anything in these bylaws to the contrary, no business brought before a meeting by a stockholder shall be conducted at an annual meeting except in accordance with procedures set forth in this Section 2.4.

## 2.5 NOTICE OF STOCKHOLDERS' MEETINGS

Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the written notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting.

2.6 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE

Written notice of any meeting of stockholders shall be given either personally or by first-class mail or by telegraphic or other written communication. Notices not personally delivered shall be sent charges prepaid and shall be addressed to the stockholder at the address of that stockholder appearing on the books of the corporation or given by the stockholder to the corporation for the purpose of notice. Notice shall be deemed to have been given at the time when delivered personally or deposited in the mail or sent by telegram or other means of written communication.

An affidavit of the mailing or other means of giving any notice of any stockholders' meeting, executed by the secretary, assistant secretary or any transfer agent of the corporation giving the notice, shall be prima facie evidence of the giving of such notice.

2.7 QUORUM

The holders of a majority in voting power of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by applicable law, the certificate of incorporation or these bylaws. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairman of the meeting or (ii) the holders of a majority of the voting power of the shares entitled to vote, who are present in person or represented by proxy, shall have power to adjourn the meeting. The Board of Directors shall also have the power to authorize the chairman of the meeting to adjourn the meeting, whether or not a quorum is present. If a quorum be initially present, the stockholders may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

Except as otherwise provided by the certificate of incorporation, directors shall be elected by a plurality of the votes cast by stockholders present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Except as otherwise provided by applicable law, the certificate of incorporation or these bylaws, every matter other than the election of directors shall be decided by the affirmative vote of a majority of the votes cast by stockholders present in person or represented by proxy at the meeting and entitled to vote on such matter.

2.8 ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time and place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.9 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners, and to voting trusts and other voting agreements).

Except as may be otherwise provided in the articles of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder and stockholders shall not be entitled to cumulate their votes in the election of directors of with respect to any matter submitted to a vote of the stockholders.

Notwithstanding the foregoing, if the stockholders of the corporation are entitled, pursuant to Sections 2115 and 301.5 of the California Corporations Code, to cumulate their votes in the election of directors, each such stockholder shall be entitled to cumulate votes (i.e., cast for any candidate a number of votes greater than the number of votes that such stockholder normally is entitled to cast) only if the candidates' names have been properly placed in nomination (in accordance with these bylaws) prior to commencement of the voting, and the stockholder requesting cumulative voting has given notice prior to commencement of the voting of the stockholder's intention to cumulate votes. If cumulative voting is properly requested, each holder of stock, or of any class or classes or of a series or series thereof, who elects to cumulate votes shall be entitled to as many votes as equals the number of votes that (absent this provision as to cumulative voting) he or she would be entitled to cast for the election of directors with respect to his or her shares of stock multiplied by the number of directors to be elected by him, and he or she may cast all of such votes for a single director or may distribute them among the number to be voted for, or for any two or more of them, as he or she may see fit.

2.10 WAIVER OF NOTICE

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice unless so required by the certificate of incorporation or these bylaws.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING

For purposes of determining the stockholders entitled to notice of any meeting or to vote thereat, the board of directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which shall not be more than sixty (60) days nor less than ten (10) days before the date of any such meeting, and in such event only stockholders of record on the date so fixed are entitled to notice and to

vote, notwithstanding any transfer of any shares on the books of the corporation after the record date.

If the board of directors does not so fix a record date, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the business day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting unless the board of directors fixes a new record date for the adjourned meeting, but the board of directors shall fix a new record date if the meeting is adjourned for more than thirty (30) days from the date set for the original meeting.

The record date for any other purpose shall be as provided in Section 8.1 of these bylaws.

2.12 PROXIES

Every person entitled to vote for directors, or on any other matter, shall have the right to do so either in person or by one or more agents authorized by a written proxy signed by the person and filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, telegraphic transmission, telefacsimile or otherwise) by the stockholder or the stockholder's attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

2.13 ORGANIZATION

The president, or in the absence of the president, the chairman of the board, or, in the absence of the president and the chairman of the board, one of the corporation's vice presidents, shall call the meeting of the stockholders to order, and shall act as chairman of the meeting. In the absence of the president, the chairman of the board, and all of the vice presidents, the stockholders shall appoint a chairman for such meeting. The chairman of any meeting of stockholders shall determine the order of business and the procedures at the meeting, including such matters as the regulation of the manner of voting and the conduct of business. The secretary of the corporation shall act as secretary of all meetings of the stockholders, but in the absence of the secretary at any meeting of the stockholders, the chairman of the meeting may appoint any person to act as secretary of the meeting.

2.14 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to

the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

## ARTICLE III
## DIRECTORS

### 3.1 POWERS

Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation and these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the board of directors.

### 3.2 NUMBER OF DIRECTORS

The number of directors that shall constitute the whole board of directors shall be determined from time to time by resolution of the board of directors, but in no event shall be less than three (3).

No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

### 3.3 ELECTION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Each director, including a director elected or appointed to fill a vacancy, shall hold office until the expiration of the term for which elected and until a successor has been elected and qualified.

### 3.4 RESIGNATION AND VACANCIES

Any director may resign effective on giving written notice to the chairman of the board, the president, the secretary or the board of directors, unless the notice specifies a later time for that resignation to become effective. If the resignation of a director is effective at a future time, the board of directors may elect a successor to take office when the resignation becomes effective.

Vacancies in the board of directors may be filled by a majority of the remaining directors, even if less than a quorum, or by a sole remaining director; however, a vacancy created by the removal of a director by the vote of the stockholders or by court order may be filled only by the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present (which shares voting affirmatively also constitute a majority of the required quorum). Each director so elected shall hold office until the next annual meeting of the stockholders and until a successor has been elected and qualified.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(i) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(ii) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten (10) percent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

Regular meetings of the board of directors may be held at any place within or outside the State of Delaware that has been designated from time to time by resolution of the board. In the absence of such a designation, regular meetings shall be held at the principal executive office of the corporation. Special meetings of the board may be held at any place within or outside the State of Delaware that has been designated in the notice of the meeting or, if not stated in the notice or if there is no notice, at the principal executive office of the corporation.

Any meeting, regular or special, may be held by conference telephone or similar communication equipment, so long as all directors participating in the meeting can hear one another; and all such directors shall be deemed to be present in person at the meeting.

3.6 REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice if the times of such meetings are fixed by the board of directors. If any regular meeting day shall fall on a legal holiday, then the meeting shall be held next succeeding full business day.

3.7 SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairman of the board, the president, any vice president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail or telegram, charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered personally or by telephone or telegram, it shall be delivered personally or by telephone or to the telegraph company at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

3.8 QUORUM

A majority of the authorized number of directors shall constitute a quorum for the transaction of business, except to adjourn as provided in Section 3.10 of these bylaws. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the board of directors, subject to the provisions of the certificate of incorporation and other applicable law.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 WAIVER OF NOTICE

Notice of a meeting need not be given to any director (i) who signs a waiver of notice or a consent to holding the meeting or an approval of the minutes thereof, whether before or after the meeting, or (ii) who attends the meeting without protesting, prior thereto or at its commencement, the lack of notice to such directors. All such waivers, consents, and approvals shall be filed with the corporate records or made part of the minutes of the meeting. A waiver of notice need not specify the purpose of any regular or special meeting of the board of directors.

3.10 ADJOURNMENT

A majority of the directors present, whether or not constituting a quorum, may adjourn any meeting to another time and place.

3.11 NOTICE OF ADJOURNMENT

Notice of the time and place of holding an adjourned meeting need not be given unless the meeting is adjourned for more than twenty-four (24) hours. If the meeting is adjourned for more

than twenty-four (24) hours, then notice of the time and place of the adjourned meeting shall be given before the adjourned meeting takes place, in the manner specified in Section 3.7 of these bylaws, to the directors who were not present at the time of the adjournment.

3.12 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Any action required or permitted to be taken by the board of directors may be taken without a meeting, provided that all members of the board individually or collectively consent in writing to that action. Such action by written consent shall have the same force and effect as a unanimous vote of the board of directors. Such written consent and any counterparts thereof shall be filed with the minutes of the proceedings of the board.

3.13 FEES AND COMPENSATION OF DIRECTORS

Directors and members of committees may receive such compensation, if any, for their services and such reimbursement of expenses as may be fixed or determined by resolution of the board of directors. This Section 3.13 shall not be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee or otherwise and receiving compensation for those services.

3.14 APPROVAL OF LOANS TO OFFICERS

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or any of its subsidiaries, including any officer or employee who is a director of the corporation or any of its subsidiaries, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the board of directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing contained in this section shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

ARTICLE IV
COMMITTEES

4.1 COMMITTEES OF DIRECTORS

The board of directors may, by resolution adopted by a majority of the authorized number of directors, designate one (1) or more committees, each consisting of two or more directors, to serve at the pleasure of the board. The board may designate one (1) or more directors as alternate members of any committee, who may replace any absent member at any meeting of the committee. The appointment of members or alternate members of a committee requires the vote of a majority of the authorized number of directors. Any committee, to the extent provided in the resolution of the board, shall have and may exercise all the powers and authority of the board, but no such committee shall have the power of authority to:

(a) amend the certificate of incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted

by the board of directors as provided in Section 151(a) of the General Corporation Law of Delaware, fix the designations and any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the corporation or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the corporation);

(b) adopt an agreement of merger or consolidation under Sections 251 or 252 of the General Corporation Law of Delaware;

(c) recommend to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets;

(d) recommend to the stockholders a dissolution of the corporation or a revocation of a dissolution; or

(e) amend the bylaws of the corporation; and, unless the board resolution establishing the committee, the bylaws or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the General Corporation Law of Delaware.

4.2 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Article III of these bylaws, Section 3.5 (place of meetings), Section 3.6 (regular meetings), Section 3.7 (special meetings and notice), Section 3.8 (quorum), Section 3.9 (waiver of notice), Section 3.10 (adjournment), Section 3.11 (notice of adjournment), and Section 3.12 (action without meeting), with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the board of directors, and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

4.3 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

## ARTICLE V
## OFFICERS

5.1 OFFICERS

The officers of the corporation shall be a president, a secretary, and a chief financial officer. The corporation may also have, at the discretion of the board of directors, a chairman of the board,

one or more vice presidents, one or more assistant secretaries, one or more assistant treasurers, and such other officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws. Any number of offices may be held by the same person.

5.2 ELECTION OF OFFICERS

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or Section 5.5 of these bylaws, shall be chosen by the board, subject to the rights, if any, of an officer under any contract of employment.

5.3 SUBORDINATE OFFICERS

The board of directors may appoint, or may empower the president to appoint, such other officers as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by the board of directors at any regular or special meeting of the board or, except in case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 VACANCIES IN OFFICES

A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these bylaws for regular appointments to that office.

5.6 CHAIRMAN OF THE BOARD

The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise and perform such other powers and duties as may from time to time be assigned to him by the board of directors or as may be prescribed by these bylaws. If there is no president, then the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these bylaws.

5.7 PRESIDENT

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, if there be such an officer, the president shall be the chief executive

officer of the corporation and shall, subject to the control of the board of directors, have general supervision, direction, and control of the business and the officers of the corporation. He shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the board of directors. He shall have the general powers and duties of management usually vested in the office of president of a corporation, and shall have such other powers and duties as may be prescribed by the board of directors or these bylaws.

5.8 VICE PRESIDENTS

In the absence or disability of the president, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the board of directors, these bylaws, the president or the chairman of the board.

5.9 SECRETARY

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the board of directors may direct, a book of minutes of all meetings and actions of directors, committees of directors and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors required to be given by law or by these bylaws. He shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these bylaws.

5.10 CHIEF FINANCIAL OFFICER

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings, and shares. The books of account shall at all reasonable times be open to inspection by any director.

The chief financial officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositaries as may be designated by the board of directors.

He shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his transactions as chief financial officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

## ARTICLE VI
## INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES, AND OTHER AGENTS

### 6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware as the same now exists or may hereafter be amended, indemnify any person against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was a director or officer of the corporation. For purposes of this Section 6.1, a "director" or "officer" of the corporation shall mean any person (i) who is or was a director or officer of the corporation, (ii) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

The corporation shall be required to indemnify a director or officer in connection with an action, suit, or proceeding (or part thereof) initiated by such director or officer only if the initiation of such action, suit, or proceeding (or part thereof) by the director or officer was authorized by the Board of Directors of the corporation.

The corporation shall pay the expenses (including attorney's fees) incurred by a director or officer of the corporation entitled to indemnification hereunder in defending any action, suit or proceeding referred to in this Section 6.1 in advance of its final disposition; provided, however, that payment of expenses incurred by a director or officer of the corporation in advance of the final disposition of such action, suit or proceeding shall be made only upon receipt of an undertaking by the director or officer to repay all amounts advanced if it should ultimately be determined that the director of officer is not entitled to be indemnified under this Section 6.1 or otherwise.

The rights conferred on any person by this Article shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the corporation's Certificate of Incorporation, these bylaws, agreement, vote of the stockholders or disinterested directors or otherwise.

Any repeal or modification of the foregoing provisions of this Article shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

6.2 INDEMNIFICATION OF OTHERS

The corporation shall have the power, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware as the same now exists or may hereafter be amended, to indemnify any person (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding, in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was an employee or agent of the corporation. For purposes of this Section 6.2, an "employee" or "agent" of the corporation (other than a director or officer) shall mean any person (i) who is or was an employee or agent of the corporation, (ii) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.3 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the General Corporation Law of Delaware.

## ARTICLE VII
## RECORDS AND REPORTS

7.1 MAINTENANCE AND INSPECTION OF RECORDS

The corporation shall, either at its principal executive office or at such place or places as designated by the board of directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books and other records of its business and properties.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

7.2 INSPECTION BY DIRECTORS

Any director shall have the right to examine (and to make copies of) the corporation's stock ledger, a list of its stockholders and its other books and records for a purpose reasonably related to his or her position as a director.

7.3 ANNUAL STATEMENT TO STOCKHOLDERS

The board of directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

7.4 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairman of the board, if any, the president, any vice president, the chief financial officer, the secretary or any assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, represent and exercise on behalf of this corporation all rights incident to any and all shares of the stock of any other corporation or corporations standing in the name of this corporation. The authority herein granted may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

7.5 CERTIFICATION AND INSPECTION OF BYLAWS

The original or a copy of these bylaws, as amended or otherwise altered to date, certified by the secretary, shall be kept at the corporation's principal executive office and shall be open to inspection by the stockholders of the corporation, at all reasonable times during office hours.

## ARTICLE VIII
## GENERAL MATTERS

8.1 RECORD DATE FOR PURPOSES OTHER THAN NOTICE AND VOTING

For purposes of determining the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any other lawful action (other than action by stockholders by written consent without a meeting), the board of directors may fix, in advance, a record date, which shall not be more than sixty (60) days before any such action. In that case, only stockholders of record at the close of business on the date so fixed are entitled to receive the dividend, distribution or allotment of rights, or to exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date so fixed, except as otherwise provided in the General Corporation Law of Delaware.

If the board of directors does not so fix a record date, then the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board adopts the applicable resolution.

## 8.2 CHECKS; DRAFTS; EVIDENCES OF INDEBTEDNESS

From time to time, the board of directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

## 8.3 CORPORATE CONTRACTS AND INSTRUMENTS: HOW EXECUTED

The board of directors, except as otherwise provided in these bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

## 8.4 STOCK CERTIFICATES; TRANSFER; PARTLY PAID SHARES

The shares of the corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and, upon request, every holder of uncertificated shares, shall be entitled to have a certificate signed by, or in the name of the corporation by, the chairman or vice-chairman of the board of directors, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

Certificates for shares shall be of such form and device as the board of directors may designate and shall state the name of the record holder of the shares represented thereby; its number; date of issuance; the number of shares for which it is issued; a summary statement or reference to the powers, designations, preferences or other special rights of such stock and the qualifications, limitations or restrictions of such preferences and/or rights, if any; a statement or summary of liens, if any; a conspicuous notice of restrictions upon transfer or registration of transfer, if any; a statement as to any applicable voting trust agreement; if the shares be assessable, or, if assessments are collectible by personal action, a plain statement of such facts.

Upon surrender to the secretary or transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, or upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.5 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.6 LOST CERTIFICATES

Except as provided in this Section 8.6, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The board of directors may, in case any share certificate or certificate for any other security is lost, stolen or destroyed, authorize the issuance of replacement certificates on such terms and conditions as the board may require; the board may require indemnification of the corporation secured by a bond or other adequate security sufficient to protect the corporation against any claim that may be made against it, including any expense or liability, on account of the alleged loss, theft or destruction of the certificate or the issuance of the replacement certificate.

8.7 TRANSFER AGENTS AND REGISTRARS

The board of directors may appoint one or more transfer agents or transfer clerks, and one or more registrars, each of which shall be an incorporated bank or trust company — either domestic or foreign, who shall be appointed at such times and places as the requirements of the corporation may necessitate and the board of directors may designate.

8.8 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the General Corporation Law of Delaware shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the

plural, the plural number includes the singular, and the term “person” includes both a corporation and a natural person.

## ARTICLE IX
## AMENDMENTS

The original or other bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote or by the board of directors of the corporation. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

Whenever an amendment or new bylaw is adopted, it shall be copied in the book of bylaws with the original bylaws, in the appropriate place. If any bylaw is repealed, the fact of repeal with the date of the meeting at which the repeal was enacted or the filing of the operative written consent(s) shall be stated in said book.

Exhibit 4.9

**WARRANTS – DATA TABLE**

| **Holder** | **Number of Shares** |
|---|---|
| John Amos | 995,000 |
| David Arnaud | 25,000 |
| Maurice Bilyea | 10,000 |
| Sean Maniaci | 25,000 |
| Jean-Marie Canan | 100,000 |
| Scott Oehrlein | 239,000 |
| Kenneth Suh | 2,151,000 |
| John Vetesse | 25,000 |
| **Total** | **3,570,000** |

**FORM OF WARRANT**

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"). THIS WARRANT AND SUCH SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO DISTRIBUTION OR RESALE AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, OR OTHERWISE TRANSFERRED, OTHER THAN IN ACCORDANCE WITH SECTION 10 HEREOF, EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS OR UNLESS SOLD PURSUANT TO RULE 144 UNDER THE ACT.

THIS WARRANT, AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT, ARE SUBJECT TO RESTRICTIONS ON TRANSFER AND OTHER PROVISIONS SET FORTH IN THIS WARRANT.

**VIVUS, INC.**
**WARRANT TO PURCHASE SHARES OF COMMON STOCK**

Original Issue Date: April 30, 2018

Void After: 5 PM Pacific Time on April 29, 2025

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, this warrant ("Warrant") is issued to [__] (the "Holder") by VIVUS, Inc., a Delaware corporation (the "Company"). This Warrant is being issued in connection with that certain Stock Purchase Agreement, dated as of the date of this Warrant, by and among the Company, the Holder, Willow Biopharma Inc., a business corporation formed under the laws of Canada, and the other sellers party thereto, and may be transferred by the Holder only in accordance with the provisions of Section 10 hereof.

1. Purchase of Shares.

(a) Number of Shares. Subject to the terms and conditions set forth herein, the Holder is entitled, upon surrender of this Warrant at the principal office of the Company (or at such other place as the Company shall notify the Holder in writing) at any time and from time to time prior to the Expiration Date (as defined below), to purchase from the Company up to [__] fully paid and nonassessable shares of the Company's common stock, par value $0.001 per share (the "Common Stock") at any time and from time to time, subject to the exercise provisions set

forth in Section 2 below (such number of shares of Common Stock, as it may be adjusted from time to time pursuant to Section 7 below, the "Warrant Shares").

(b) Exercise Price. The exercise price for the shares of Common Stock issuable pursuant to this Section 1 (the "Shares") shall be $0.37 per Share (the "Exercise Price"). The number of Shares and the Exercise Price shall be subject to adjustment pursuant to Section 7 hereof.

2. Exercisability, Exercise Period.

(a) Exercisability. The Warrant Shares shall be fully vested and exercisable as of the date of this Warrant. The Holder may purchase, pursuant to the terms hereof, up to all of the Warrant Shares at any time and from time to time prior to the Expiration Date.

(b) Exercise Period. Notwithstanding the foregoing, this Warrant shall no longer be exercisable and shall become null and void upon the earliest to occur of (i) the seventh ($7^{th}$) anniversary of the date of this Warrant or (ii) subject to the provisions of Section 2(d) and Section 2(e) below, the consummation of a Corporate Transaction. In the event of a Corporate Transaction, the Company shall notify the Holder in writing at least ten (10) days prior to the anticipated consummation of such Corporate Transaction. The date of the expiration of this Warrant pursuant to this Section 2(b) is referred to herein as the "Expiration Date".

(c) A "Corporate Transaction" shall mean any of: (A) the closing of the sale, transfer or other disposition of all or substantially all of the Company's assets to an unaffiliated third party purchaser, (B) the consummation of the merger or consolidation of the Company with or into another entity (except a merger or consolidation in which the holders of capital stock of the Company immediately prior to such merger or consolidation continue to hold at least fifty percent (50%) of the voting power of the capital stock of the Company or the surviving or acquiring entity), (C) the closing of the transfer (whether by merger, consolidation or otherwise), in one transaction or a series of related transactions, to an unaffiliated third party purchaser, including the Affiliates of such purchaser (other than an underwriter of the Company's securities), of the Company's securities if, after such closing, such person or group of affiliated persons would hold fifty percent (50%) or more of the outstanding voting stock of the Company (or the surviving or acquiring entity), (D) a liquidation, dissolution or winding up of the Company (a "Liquidation Event"); *provided*, *however*, that a transaction shall not constitute a Liquidation Event if its sole purpose is to change the state of the Company's incorporation, change the Company's legal form, or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately prior to such transaction, (E) the exclusive license of all or substantially all of the Company's intellectual property, or (F) an initial underwritten public offering of the Company's equity securities.

(d) If upon the consummation of a Corporate Transaction, the acquiring, successor or surviving entity expressly assumes the obligations of the Company pursuant to this Warrant, then from and after the closing of such Corporate Transaction, this Warrant shall thereafter be exercisable for the greatest amount of securities, cash and property to which such Holder would actually have been entitled as an equity holder upon the closing of such Corporate Transaction if such Holder had exercised the rights represented by this Warrant immediately prior to the record date (if any) for, or, if no such record date has been determined by the Board of Directors, the closing of, the Corporate Transaction, subject to adjustments (subsequent to such closing) as nearly equivalent as possible to the adjustments provided for in Section 7, and the Exercise Price shall be adjusted accordingly.

(e) If the acquiring, successor or surviving entity does not assume this Warrant in connection with a Corporate Transaction, then the Company shall include that information in its notice to the Holder referred to in Section 2(b). In such event, notwithstanding any other provision of this Warrant to the contrary, Holder may immediately exercise this Warrant in full as provided herein, with such exercise effective immediately prior to the closing of such Corporate Transaction. If the Holder fails to exercise this Warrant, in whole or in part, then this Warrant (or the unexercised portion thereof) will automatically terminate and be cancelled as of the consummation of the Corporate Transaction, and the Holder shall become entitled to receive a cash payment, in exchange for such cancellation (which shall be treated for tax purposes as if the Holder had sold the Warrant, rather than an exercise of the Warrant followed by a sale of the Warrant Shares), in an amount equal to the difference between (A) the fair market value per share of the consideration payable to holders of the Company's shares of Common Stock pursuant to such Corporate Transaction multiplied by the number of Warrant Shares for which this Warrant is then exercisable, and (B) the aggregate Exercise Price of the Warrant Shares subject to this Warrant, subject to the other terms and conditions of such Corporate Transaction (such as indemnification obligations, escrows and purchase price adjustments) applicable in such Corporate Transaction. In the event of a Corporate Transaction pursuant to which this Warrant is exercised or deemed exercised pursuant to this Section 2(e), the Holder must execute and deliver to the Company any definitive purchase agreement (or joinder thereto) executed by other holders of Common Stock.

3. Method of Exercise.

(a) At any time and from time to time while this Warrant remains outstanding and exercisable in accordance with Section 2 above, the Holder may exercise, in whole or in part, the purchase rights evidenced hereby with respect to any Warrant Shares. Such exercise shall be effected by:

(i) the surrender of the Warrant, together with a duly executed copy of the Notice of Exercise attached hereto as Exhibit A, to the Secretary of the Company at its principal office (or at such other place as the Company shall notify the Holder in writing); and

(ii) the payment to the Company of an amount equal to the aggregate Exercise Price for the number of Warrant Shares being purchased, which amount shall be payable (at the Holder's discretion) by (A) a check payable to the Company's order, (B) wire transfer of funds to the Company, (C) cancellation of indebtedness of the Company to the Holder, (D) net exercise as provided in Section 4 hereof, or (E) any combination of the foregoing.

(b) Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant is surrendered to the Company as provided in Section 3(a) above; *provided, that*, upon the exercise of this Warrant in connection with a Corporate Transaction, the exercise and payment may be contingent upon (and be deemed to occur as of immediately prior to) the consummation of such Corporate Transaction. At such time, the person or persons in whose name or names any certificate for Warrant Shares shall be issuable upon such exercise as provided in Section 3(c) below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificate.

(c) As soon as practicable after the exercise of the Warrant Shares, in whole or in part, the Company at its expense will cause to be issued in the name of, and delivered to, the Holder, or as such Holder may direct:

(i) a certificate or certificates for the number of Warrant Shares to which such Holder shall be entitled, and

(ii) in case such exercise is in part only, a new warrant or warrants (dated the date of this Warrant) having the same terms and conditions as this Warrant, except that the number of Warrant Shares shall be reduced to reflect such partial exercise.

4. Net Exercise. In lieu of exercising this Warrant for cash, the Holder may elect to receive shares equal to the value of this Warrant (or the portion thereof being exercised) by surrender of this Warrant at the principal office of the Company together with notice of such election (a "Net Exercise"). A Holder who Net Exercises shall have the rights described in Sections 3(b) and 3(c) hereof, and the Company shall issue to such Holder a number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Holder pursuant to the applicable net exercise of this Warrant effected pursuant to this Section 4.

Y = The number of Warrant Shares purchasable under this Warrant at the time of such net exercise (as such number may have been adjusted pursuant to Section 7 prior to the time of such net exercise) or, if only a portion of the Warrant Shares are being purchased pursuant to such net exercise, such portion of the Warrant Shares.

A = The fair market value of one (1) Share on the date of such calculation.

B = The Exercise Price (as it may have been adjusted pursuant to Section 7 prior to the time such exercise is deemed to have occurred).

For purposes of this Section 4: (a) if the net exercise is not occurring in connection with a Corporate Transaction and the Shares are traded at the time of applicable net exercise on the over-the-counter market, an exchange or an electronic securities market, the fair market value of a Share shall mean the average of the closing prices of the Shares quoted in the over-the-counter market in which the Shares are traded or the closing price quoted on any exchange or electronic securities market on which the Shares are listed, whichever is applicable, for the thirty (30) trading days prior to the date of determination of fair market value (or such shorter period of time during which such Shares were traded over-the-counter or on such exchange or market); (b) if such net exercise is occurring in connection with a Corporate Transaction, then the fair market value per Share shall be the per share price being offered or provided to holders of Shares in such Corporate Transaction; and (c) if such net exercise is not occurring in connection with a Corporate Transaction and the Shares are not traded on the over-the-counter market, an exchange or an electronic securities market, the fair market value shall be the price per Share that the Company could obtain from a willing unaffiliated buyer for Shares sold by the Company from authorized but unissued Shares, as such prices shall be determined reasonably and in good faith by the Company's Board of Directors, in each case, without deduction for (I) liquidity considerations, (II) minority shareholder status, or (III) any liquidation or other preference or any right of redemption in favor of any other equity securities of the Company; *provided, however,* that, in the case of this clause (c), the Holder may dispute such valuation, in which event the fair market value of a Share shall be determined by an accounting firm of nationally recognized reputation to be mutually agreed upon by the Holder and the Company (it being understood that the Holder and the Company shall use their best efforts to agree upon such accounting firm, and, if such agreement is not reached within thirty (30) days, shall cause such an accounting firm to be appointed by the order of a court of competent jurisdiction or arbitrator).

5. Representations and Warranties of the Company. In connection with the transactions provided for herein, the Company hereby represents and warrants to the Holder that:

(a) Organization, Good Standing, and Qualification. The Company is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as now conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a material adverse effect on its business or properties.

(b) Authorization. All corporate action has been taken on the part of the Company, its officers, directors, and stockholders necessary for the authorization, execution and delivery of this Warrant. This Warrant constitutes the Company's valid and legally binding obligation, enforceable in accordance with its terms, except as may be limited by (i) applicable bankruptcy, insolvency, reorganization, or similar laws relating to or affecting the enforcement of creditors' rights and (ii) laws relating to the availability of specific performance, injunctive relief

or other equitable remedies. The issuance of this Warrant will not be subject to preemptive rights of any stockholders of the Company. The Company has authorized sufficient shares of Common Stock to allow for the exercise of this Warrant.

(c) Common Stock. The Shares, when issued, sold, and delivered in accordance with the terms of the Warrant for the consideration expressed herein, will be duly and validly issued, fully paid, nonassessable and free and clear of all preemptive rights of any stockholders of the Company, and based in part upon the representations and warranties of the Holders in this Warrant, will be issued in compliance with all applicable federal and state securities laws.

6. Representations and Warranties of the Holder. In connection with the transactions provided for herein, the Holder hereby represents and warrants to the Company that:

(a) Authorization. Holder represents that it has full power and authority to enter into this Warrant. This Warrant constitutes the Holder's valid and legally binding obligation, enforceable in accordance with its terms, except as may be limited by (i) applicable bankruptcy, insolvency, reorganization, or similar laws relating to or affecting the enforcement of creditors' rights and (ii) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(b) Purchase Entirely for Own Account. The Holder acknowledges that this Warrant is entered into by the Holder in reliance upon such Holder's representation to the Company that the Warrant and the Shares (collectively, the "Securities") will be acquired for investment for the Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Holder has no present intention of selling, granting any participation in or otherwise distributing the same. By acknowledging this Warrant, the Holder further represents that the Holder does not have any contract, undertaking, agreement, or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to the Securities.

(c) Disclosure of Information. The Holder acknowledges that it has received all the information it considers necessary or appropriate for deciding whether to acquire the Securities. The Holder further represents that it has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Securities.

(d) Investment Experience. The Holder is an investor in securities and acknowledges that it is able to fend for itself, can bear the economic risk of its investment, and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in the Securities. If other than an individual, the Holder also represents it has not been organized solely for the purpose of acquiring the Securities.

(e) Accredited Investor. The Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, as presently in effect, as promulgated by the Securities and Exchange Commission (the "SEC") under the Act.

(f) Restricted Securities. The Holder understands that the Securities are characterized as "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such securities may be resold without registration under the Act, only in certain limited circumstances. In this connection, the Holder represents that it is familiar with Rule 144, as presently in effect, as promulgated by the SEC under the Act ("Rule 144"), and understands the resale limitations imposed thereby and by the Act.

(g) Legends. It is understood that the Securities may bear the following legend:

> "THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SUCH ACT."

7. Adjustment of Exercise Price and Number of Shares. The number and kind of Shares purchasable upon exercise of this Warrant and the Exercise Price therefor shall be subject to adjustment from time to time as follows. Any adjustment made pursuant to this Section 7 shall become effective immediately after the effective date of such event, but shall be retroactive to the record date, if any is fixed, for such event.

(a) Subdivisions, Combinations and Other Issuances. If the Company shall at any time after the issuance but prior to the Expiration Date subdivide its Common Stock, by split-up, reverse split-up or otherwise, or combine its Common Stock, or issue additional shares of its preferred stock or Common Stock as a dividend with respect to any shares of its Common Stock, or otherwise declares a stock dividend or makes any distribution in respect of its preferred stock or Common Stock, then the number of Shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of such subdivision or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise Price payable per share, but the aggregate Exercise Price payable for the total number of Shares purchasable under this Warrant (as adjusted) shall remain the same. Any adjustment under this Section 7(a) shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend. Notwithstanding the

foregoing, if the Company declares any dividend or makes any distribution on the Common Stock, in each case, that is not in Common Stock or other equity securities (or equivalent securities) ("Common Securities"), then, at the election of the Holder and in lieu thereof, the Company will pay the Holder, as a dilution fee, an amount per the unexercised portion of the Warrant not less than the amount which would have been paid to the Holder had the Warrant been fully exercised immediately prior to the record or effective date of such of subdivision.

(b) Reclassification, Reorganization and Consolidation. In case of any reclassification, capital reorganization or change affecting the Common Stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 7(a) above), then, as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall have the right at any time prior to the Expiration Date to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and other securities or property receivable by holders of Common Stock in their capacities as such in connection with such reclassification, reorganization or change. In any such case, appropriate provisions shall be made with respect to the rights and interest of the Holder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price per Share payable hereunder, but the aggregate Exercise Price payable for the total number of Shares purchasable under this Warrant (as adjusted) shall remain the same.

(c) Notice of Adjustment. When any adjustment is required to be made in the number or kind of shares purchasable upon exercise of the Warrant, or in the Exercise Price, the Company shall promptly, notify the in writing Holder of such event and of the number of Shares or other securities or property thereafter purchasable upon exercise of this Warrant.

(d) No Change Necessary. The form of this Warrant need not be changed because of any adjustment in the Exercise Price or in the number of Warrant Shares. A Warrant issued after any adjustment or any partial exercise or upon replacement may continue to express the same Exercise Price and the same number of Warrant Shares (appropriately reduced in the case of partial exercise) as are stated on this Warrant as initially issued, and that Exercise Price and that number of Warrant Shares shall be considered to have been so changed as of the close of business on the date of adjustment.

8. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant, but in lieu of such fractional shares the Company shall make a cash payment therefor to the Holder on the basis of the Exercise Price then in effect.

9. No Stockholder Rights or Liabilities. Prior to exercise of this Warrant, the Holder shall not be entitled to any rights of a stockholder with respect to the Shares, including (without limitation) the right to vote such Shares or receive dividends or other distributions thereon.

10. Transfer of Warrant. Subject to compliance with applicable federal and state securities laws and any other contractual restrictions between the Company and the Holder contained herein, this Warrant and all rights hereunder are transferable in whole or in part by the Holder to any person or entity upon written notice to the Company. This Agreement will be binding upon, and inure to the benefit of, the successors and permitted assigns of the parties. Within a reasonable time after the Company's counterexecution of an executed Assignment Form in the form attached hereto as Exhibit B, the transfer shall be recorded on the books of the Company upon the surrender of this Warrant, properly endorsed, to the Company at its principal offices (or at such other place as the Company shall notify the Holder in writing), and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer. In the event of a partial transfer, the Company shall issue to the new holders one (1) or more appropriate new warrants.

11. Governing Law. This Warrant shall be governed by, and construed under, the laws of the State of Delaware, as such laws are applied to agreements among Delaware residents, made and to be performed entirely within the State of Delaware.

12. Successors and Assigns. The terms and provisions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holders hereof and their respective successors and assigns.

13. Titles and Subtitles. The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant.

14. Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the respective parties at the addresses shown on the signature page(s) attached hereto (or at such other addresses as shall be specified by notice given in accordance with this Section 14).

15. Finder's Fee. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. The Holder agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Holder or any of its officers, members, employees or representatives is responsible. The Company agrees to indemnify and hold harmless the Holder from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

16. Replacement of Warrant. If this Warrant or any certificate or certificates representing the Warrant Shares have been lost, stolen, destroyed or mutilated, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant or such certificates, replacement warrants or certificates, but only upon receipt of evidence, from Holder, reasonably satisfactory to the Company of such loss, theft or destruction and customary and reasonable indemnity, if requested. Holders seeking such new warrants or certificates under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a replacement warrant or certificate is requested as a result of a mutilation of this Warrant or certificates representing the Warrant Shares, then the Holder shall deliver such mutilated Warrant or certificate to the Company as a condition precedent to the Company's obligation to issue the replacement warrant or certificate.

17. Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Warrant, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

18. Entire Agreement; Amendments and Waivers. This Warrant and any other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. Nonetheless, any term of this Warrant may be amended and the observance of any term of this Warrant may be waived (either generally or in a particular instance and either retroactively or prospectively), with the written consent of the Company and the holder(s) thereof.

19. Severability. If any provision of this Warrant is held to be unenforceable under applicable law, such provision shall be excluded from this Warrant and the balance of the Warrant shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

"Affiliate" means any other party directly or indirectly Controlling, Controlled by, or Under Common Control with, a party. "Control" (including, with correlative meanings, the terms "Controlling," "Controlled by" and "Under Common Control with") means, as applied to any party, the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such party, whether through the ownership of voting securities or other equity interests, by contract, through membership or otherwise.

In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to Shares acquired through the exercise of this Warrant (and the Shares or securities of every other person subject to the foregoing restriction) until the end of such period.

20. Counterparts. This Warrant may be executed in counterparts (which may be PDF scans of the applicable signatures), each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

*(Remainder of page intentionally left blank)*

IN WITNESS WHEREOF, the parties have executed this Warrant as of the date first written above.

VIVUS, INC.

By:

ACKNOWLEDGED AND AGREED:

By:
Name:

Address:

_____

_____

_____

**EXHIBIT A**

**NOTICE OF EXERCISE**

**VIVUS, INC.**
Attention: Corporate Secretary

The undersigned hereby elects to purchase, pursuant to the provisions of the Warrant, as follows:

q _____ shares of Common Stock pursuant to the terms of the attached Warrant, and tenders herewith payment in cash of the Exercise Price of such Shares in full, together with all applicable transfer taxes, if any.

q Net Exercise the attached Warrant with respect to _____ Warrant Shares.

The undersigned hereby represents and warrants that the Representations and Warranties in Section 6 of the Warrant are true and correct as of the date hereof.

**HOLDER:**

Date:_____ By:

Address:

Name in which shares should be registered:

**EXHIBIT B**

**ASSIGNMENT FORM**

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

**For Value Received**, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name:

(Please Print)

Address:

(Please Print)

Dated: _____

Holder's
Signature:

Holder's
Address:

Acknowledged and Agreed (if required):

VIVUS, INC.

By _
Name:
Title:

**NOTE**: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant. Officers of corporations and those acting in a fiduciary or other representative capacity should provide proper evidence of authority to assign the foregoing Warrant.

**Exhibit 10.3**

# PURCHASE AGREEMENT

**dated April 30, 2018**

**among**

**VIVUS, INC.**

**and**

**THE PURCHASERS NAMED HEREIN**

**10.375% SENIOR SECURED NOTES DUE 2024**

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**PURCHASE AGREEMENT**

April 30, 2018

To the Purchasers named in Schedule 1

Ladies and Gentlemen:

VIVUS, Inc., a Delaware corporation (the "Issuer"), hereby covenants and agrees with you as follows:

ARTICLE I

INTRODUCTORY

Section 1.1 Introductory. The Issuer proposes, subject to the terms and conditions stated herein, to issue and sell to the purchasers named in Schedule 1 (each a "Purchaser" and, collectively, the "Purchasers") (a) on the Initial Closing Date, the Original Notes and the Warrants, and (b) on the Subsequent Closing Date, the Additional Notes. The principal amounts of Notes to be purchased by the Purchasers pursuant to this Purchase Agreement, and the number of shares of the Issuer's Common Stock that may be purchased pursuant to the Warrants, are set forth opposite the Purchasers' names in Schedule 1. The Notes to be sold to the Purchasers are to be issued on the applicable Closing Date pursuant to, and subject to the terms and conditions of, the Indenture.

The Notes, the Guarantees and the Warrants will be offered and sold to the Purchasers in transactions exempt from or not subject to the registration requirements of the Securities Act, in reliance upon exemptions from registration thereunder provided by Section 4(a)(2) of the Securities Act or Regulation D of the Securities Act or outside of the United States in reliance upon Regulation S under the Securities Act.

ARTICLE II

RULES OF CONSTRUCTION AND DEFINED TERMS

Section 2.1 Rules of Construction and Defined Terms. The rules of construction set forth in Annex A shall apply to this Purchase Agreement and are hereby incorporated by reference into this Purchase Agreement as if set forth fully in this Purchase Agreement. Capitalized terms used but not otherwise defined in this Purchase Agreement shall have the respective meanings given to such terms in Annex A, which is hereby incorporated by reference into this Purchase Agreement as if set forth fully in this Purchase Agreement.

ARTICLE III

SALE AND PURCHASE OF NOTES AND WARRANTS; CLOSINGS; ALLOCATION OF PURCHASE PRICE

Section 3.1 Closings. The closing of the purchase and sale of the Original Notes and the Warrants shall be at or before 10:00 a.m. New York City time on the Business Day after all of the conditions to closing specified in Article VI are either satisfied or waived (other than

conditions that, by their nature, are to be satisfied on the day of such closing) (the "Initial Closing Date"), or such other day as determined by mutual agreement of the parties hereto.

Section 3.2 Sale and Purchase of Notes and Warrants; Closings. On the basis of the representations and warranties contained in, and subject to the terms and conditions of, this Purchase Agreement and the Indenture, the Issuer will issue and sell to each Purchaser, and each Purchaser will purchase, (a) on the Initial Closing Date, the principal amount of Original Notes, and a Warrant to purchase the number of shares of Common Stock of the Issuer set forth opposite such Purchaser's name in Schedule 1, and (b) on a date selected by the Issuer in accordance with Section 2.01(c) of the Indenture (the "Subsequent Closing Date") and subject to the conditions set forth herein and therein, the principal amount of Additional Notes set forth opposite such Purchaser's name in Schedule 1. It is acknowledged and agreed that Additional Notes shall not be issued, and the Subsequent Closing Date shall not occur, if the conditions set forth in Section 2.01(c) of the Indenture (without giving effect to any amendments thereof after the Initial Closing Date) are not capable of being satisfied. Each Purchaser will purchase the applicable principal amount of Original Notes, and the Warrants to purchase the number of shares of Common Stock of the Issuer, set forth in Schedule 1 on the Initial Closing Date at a purchase price equal to 99% of the principal amount of the Original Notes (the "Initial Closing Purchase Price"), and each Purchaser will purchase the applicable principal amount of Additional Notes set forth in Schedule 1 on the Subsequent Closing Date at a purchase price equal to 100% of the principal amount of such Additional Notes, plus accrued and unpaid interest on such Additional Notes from the Initial Closing Date or, if interest has already been paid on the Original Notes, from the date interest was most recently paid on the Original Notes to but excluding the Subsequent Closing Date (but, as to such interest, only to the extent such Additional Notes have the same CUSIP number as the Original Notes) (the "Subsequent Closing Purchase Price" and, collectively with the Initial Closing Purchase Price, the "Purchase Price"). No Purchaser shall be required to purchase any of the Notes or the Warrants except upon satisfaction or waiver of the respective terms and conditions hereunder.

On the applicable Closing Date, the Issuer will deliver one or more Global Securities for the account of DTC, as well as any Definitive Securities to the relevant Purchasers, evidencing the aggregate principal amount of Notes to be acquired by all Purchasers pursuant to this Purchase Agreement on such Closing Date, against payment by each such Purchaser of its respective portion of the applicable aggregate Purchase Price for its beneficial interest therein by wire transfer of immediately available funds to an account held at U.S. Bank National Association identified in writing to the Purchasers at least two Business Days prior to the intended funding date (which funds, in the case of the Original Notes, shall be available on the Business Day immediately prior to the Initial Closing Date). On the Initial Closing Date, the Issuer will deliver to each Purchaser a Warrant dated the Initial Closing Date and registered in the name of such Purchaser, evidencing the right of such Purchaser to purchase the number of shares of the Issuer's Common Stock set forth opposite such Purchaser's name on Schedule 1. The Issuer shall cause U.S. Bank National Association, as custodian under the Custodian Agreement (the "Custodian"), to hold all such funds in respect of the Initial Closing Date in trust for the Purchasers pursuant to the Custodian Agreement pending completion of the applicable closing of the transactions contemplated by this Purchase Agreement. The Issuer shall cause U.S. Bank National Association, as trustee under the Indenture (the "Trustee"), to hold all such funds in respect of the Subsequent Closing Date in trust for the Purchasers pending completion of the

applicable closing of the transactions contemplated by this Purchase Agreement. Upon receipt by the Custodian or the Trustee, as the case may be, of the applicable Purchase Price and the satisfaction of the applicable conditions to closing set forth in Article VI in respect of the related Closing Date, the Issuer shall cause the Custodian or the Trustee, as the case may be, to disburse the applicable Purchase Price in accordance with the Custodian Agreement (in the case of the Initial Closing Date) or written instructions provided by the Issuer to the Trustee (in the case of the Subsequent Closing Date). If, in the case of the Subsequent Closing Date, the closing of the transactions contemplated by this Purchase Agreement shall not otherwise be capable of being consummated by 5:00 p.m. (New York City time) on the Subsequent Closing Date, then the Trustee shall return, and the Issuer shall cause the Trustee to return, such portion of the applicable Purchase Price to such Purchaser prior to the close of business on the Subsequent Closing Date (or such later time as may be mutually agreed by the parties hereto) or as soon thereafter as reasonably practicable, in which case such Purchaser shall, at its election, be relieved of all obligations (other than confidentiality obligations) under this Purchase Agreement in respect of such Subsequent Closing Date; *provided*, that the failure to close such transactions shall not be due to the breach of any of the provisions of this Purchase Agreement by any Purchaser or the failure of any Purchaser (or, in the case of Section 6.3, special counsel to the Purchasers) to satisfy any condition to closing applicable to it.

Section 3.3 Allocation of Purchase Price. The Issuer and the Purchasers hereby acknowledge and agree that the Original Notes and the Warrants to be issued to the Purchasers on the Initial Closing Date constitute an "investment unit" for purposes of Section 1273(c)(2) of the Code. In accordance with Section 1273(b)(2) of the Code and Section 1273(c)(2)(A) of the Code, the issue price of the investment unit shall be 99% of the principal amount of such Original Notes, and such issue price shall be allocated between such Original Notes and such Warrant based on their relative fair market values as of the issue date of such investment unit, as required by Section 1273(c)(2)(B) of the Code and U.S. Treasury Regulations Section 1.1273-2(h)(1). On or prior to the Initial Closing Date, the Issuer shall provide its fair market valuation of the Warrants to the Purchasers, based on a Black-Scholes valuation and its determination of the issue price of the Original Notes and purchase price of the Warrants as required by the previous sentence. The Issuer and the Purchasers agree to prepare their respective U.S. federal income tax returns, including statements and reports related thereto, as the case may be, in a manner consistent with the foregoing determination, to the extent such returns, statements and reports are required to be filed.

## ARTICLE IV

## REPRESENTATIONS, WARRANTIES AND AGREEMENTS OF PURCHASERS

Each Purchaser agrees and acknowledges that the Obligors, counsel to the Obligors and counsel to the Purchasers may rely upon the accuracy of and performance of obligations under the representations, warranties and agreements of such Purchaser contained in this Article IV.

Section 4.1 Purchase for Investment and Restrictions on Resales. Each Purchaser:

(a) acknowledges that (i) none of the Notes, the Warrants or the Guarantees have been or will be registered under the Securities Act or the Laws of any U.S. state or other jurisdiction relating to securities matters and (ii) neither the Notes nor the Warrants may be

offered, sold, pledged or otherwise transferred except as set forth in the Transaction Documents and the legend regarding transfers on the Notes;

(b) agrees that, if it should resell or otherwise transfer the Notes or the Warrants, in whole or in part, it will do so only pursuant to an exemption from, or in a transaction not subject to, registration under the Securities Act, the Laws of any applicable state or other jurisdiction relating to securities matters and in accordance with the restrictions and requirements of the provisions of the Transaction Documents and the legend regarding transfers on the Notes and only to a Person whom it reasonably believes, at the time any buy order for such Notes or Warrants is originated, is (i) the Issuer or a Subsidiary of the Issuer, (ii) for so long as such Notes or Warrants are eligible for resale pursuant to Rule 144A, a QIB that purchases for its own account or for the account of a QIB, to which notice is given that the transfer is being made in reliance on Rule 144A, (iii) a Person outside the United States in an offshore transaction in compliance with Rule 903 or 904 of Regulation S (if available) or (iv) an Accredited Investor that is purchasing such Notes or Warrants for its own account or for the account of an Accredited Investor for investment purposes and not with a view to, or for offer or sale in connection with, any distribution in violation of the Securities Act, in each case unless consented to by the Issuer in writing;

(c) acknowledges the restrictions and requirements contained in the Transaction Documents applicable to transfers of the Notes and Warrants and the legend regarding transfers on the Notes and agrees that it will only offer or sell the Notes and the Warrants in accordance with such restrictions and requirements; and

(d) represents that it is purchasing the Notes and the Warrants for investment purposes and not with a view to resale or distribution thereof in contravention of the requirements of the Securities Act; however, such Purchaser reserves the right to sell the Notes or the Warrants at any time in accordance with applicable Laws, the restrictions and requirements contained in the Transaction Documents applicable to transfer of the Notes and the Warrants, the legend regarding transfer of the Notes and its investment objectives.

Section 4.2 Purchaser Status. Each Purchaser represents and warrants that, as of the date hereof, it is (a) a QIB and is purchasing the Notes and the Warrants for its own account or for the account of a QIB, (b) a Person outside the United States purchasing the Notes and the Warrants in an "offshore transaction" in compliance with Regulation S or (c) an Accredited Investor.

Section 4.3 Source of Funds; ERISA Matters.

(a) Each Purchaser represents, warrants and covenants that at least one of the following statements is an accurate representation as to each source of funds (a "Source") to be used by such Purchaser to pay the purchase price of any Notes or Warrants to be purchased by such Purchaser under the Transaction Documents and with respect to its holding of such Notes or such Warrants:

(i) the Source either (A) does not and will not include Plan Assets of any employee benefit plan, other than a plan exempt from the coverage of ERISA,

or (B) includes and will include only assets that are not considered Plan Assets by reason of being held in a separate account of an insurance company that is maintained solely in connection with fixed contractual obligations of the insurance company under which the amounts payable, or credited, to the plan and to any participant or beneficiary of the plan (including an annuitant) are not affected in any manner by the investment performance of the separate account;

(ii) the Source is a governmental plan; or

(iii) the Source does include Plan Assets of an employee benefit plan subject to ERISA, but the use of such Plan Assets to purchase and hold one or more Notes or Warrants will not constitute a non-exempt prohibited transaction within the meaning of Section 406 or 407 of ERISA or Section 4975 of the Code, and one of the following applies:

(w) (A) the Source is an "insurance company general account" within the meaning of United States Department of Labor Prohibited Transaction Exemption ("PTE") 95-60 (issued July 12, 1995, as subsequently amended), (B) there is no employee benefit plan, treating as a single plan, all plans maintained by the same employer or employee organization, with respect to which the amount of the general account reserves and liabilities for all contracts held by or on behalf of such plan exceeds 10% of the total reserves and liabilities of such general account (exclusive of separate account liabilities) plus surplus, as set forth in the NAIC Annual Statement filed with such Purchaser's state of domicile, and (C) the purchase and holding of Notes or Warrants is exempt under the provisions of PTE 95-60;

(x) the Source is either (A) an insurance company pooled separate account, within the meaning of PTE 90-1 (issued January 29, 1990), or (B) a bank collective investment fund, within the meaning of PTE 91-38 (issued July 12, 1991, as subsequently amended), and, except as disclosed by such Purchaser to the Issuer in writing pursuant to this clause (x), no employee benefit plan or group of plans maintained by the same employer or employee organization beneficially owns more than 10% of all assets allocated to such pooled separate account or collective investment fund, and the purchase and holding of Notes or Warrants is covered by either PTE 90-1 or PTE 91-38, as applicable;

(y) the Source constitutes assets of an "investment fund" (within the meaning of Part VI of the QPAM Exemption) managed by a "qualified professional asset manager" or "QPAM" (within the meaning of Part VI of the QPAM Exemption), and the conditions of Part I of the QPAM Exemption are satisfied; or

(z) the Source constitutes assets of a "plan(s)" (within the meaning of Part IV of PTE 96-23 (the "INHAM Exemption")) managed

by an "in-house asset manager" or "INHAM" (within the meaning of Part IV of the INHAM Exemption), and the conditions of Part I of the INHAM Exemption are satisfied.

As used in this Section 4.3(a), the terms "employee benefit plan", "governmental plan" and "separate account" shall have the respective meanings assigned to such terms in Section 3 of ERISA.

(b) Each Purchaser represents, warrants and covenants that, if any Source to be used by such Purchaser to pay the purchase price of any Notes or Warrants under the Transaction Documents consists of assets of a benefit plan that is not subject to ERISA, either (i) such benefit plan is not a governmental plan, non-U.S. plan (as described in Section 4(b) of ERISA), church plan or other plan subject to Law that is substantially similar to Section 406 or 407 of ERISA or Section 4975 of the Code ("Similar Law") or (ii) its purchase and holding of Notes and Warrants will not constitute a violation of Similar Law.

Section 4.4 Due Diligence. Each Purchaser acknowledges that, prior to the Initial Closing Date, (a) it has made, either alone or together with its advisors, such separate and independent investigation of the Obligors and their respective businesses, financial condition, prospects and managements as such Purchaser deems to be, or such advisors have advised to be, necessary or advisable in connection with the purchase of the Notes and the Warrants pursuant to the transactions contemplated by this Purchase Agreement, (b) it and its advisors have received all information and data that it and such advisors reasonably believe to be necessary in order to reach an informed decision as to the advisability of the purchase of the Notes and the Warrants pursuant to the transactions contemplated by this Purchase Agreement and has had adequate time to review all such materials, (c) it understands the nature of the potential risks and potential rewards of the purchase of the Notes and the Warrants, (d) it is a sophisticated investor with investment experience and has the ability to bear complete loss of its investment, whether as a result of an Event of Default on the Notes or any insolvency, liquidation or winding up of any Obligor or otherwise, (e) it has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of purchasing the Notes and the Warrants and can bear the economic risks of investing in the Notes and the Warrants for an indefinite period of time, including the complete loss of its investment, and (f) the Issuer has not given any guarantee or representation as to the potential success, return, effect or benefit of an investment in the Notes and the Warrants or made any representation to such Purchaser regarding the legality of an investment in the Notes and the Warrants. Such Purchaser acknowledges that it has obtained its own attorneys, business advisors and tax advisors as to legal, business and tax advice (or has decided not to obtain such advice) and has not relied in any respect on any Obligor for such advice. Such Purchaser has had a reasonable time prior to the date of this Purchase Agreement to ask questions and receive answers concerning the Obligors and their businesses and the terms and conditions of the offering of the Notes and the Warrants and the transactions contemplated hereby and to obtain any additional information that the Obligors possess or could acquire without unreasonable effort or expense, and has generally such knowledge and experience in business and financial matters and with respect to investments in securities as to enable such Purchaser to understand and evaluate the risks of such investment and form an investment decision with respect thereto. Except for (i) the representations, warranties and covenants made by the Obligors in the Transaction Documents and (ii) the legal opinions provided to the

Purchasers in connection with the transactions contemplated by the Transaction Documents, such Purchaser is relying on its own investigation and analysis in entering into the transactions contemplated hereby.

Section 4.5 No Governmental Review. Each Purchaser acknowledges that no Governmental Authority has passed on or made any recommendation or endorsement of the Notes and the Warrants or the merits of the offering thereof or the fairness or suitability of the investment in the Notes and the Warrants.

Section 4.6 Enforceability of this Purchase Agreement. This Purchase Agreement has been duly authorized, executed and delivered by each Purchaser and constitutes the valid, legally binding and enforceable obligation of such Purchaser, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors' rights generally and by general principles of equity.

Section 4.7 Tax Matters.

(a) Except as otherwise required by Law, each Purchaser agrees to treat, and shall treat, the Notes as indebtedness of the Issuer for U.S. federal income tax purposes.

(b) Each Purchaser understands and acknowledges that if Definitive Securities are issued, failure to provide the Issuer, the Trustee or any Paying Agent with the applicable U.S. federal income tax certifications (generally, on IRS Form W-9 (or successor applicable form) in the case of a Purchaser that is a United States person or on an appropriate IRS Form W-8 (or successor applicable form) in the case of a Purchaser that is not a United States person) may result in U.S. federal back-up withholding from payments in respect of the Definitive Securities.

(c) Each Purchaser represents and warrants that (i) it has not relied upon any Obligor for any tax advice or disclosure of tax consequences arising from the purchase, ownership or disposition of the Notes and the Warrants and (ii) it has relied upon its own tax counsel or advisors with respect to any tax consequences arising from the purchase, ownership or disposition of the Notes and the Warrants.

Section 4.8 Reliance for Opinions. Each Purchaser acknowledges and agrees that the Obligors and, for purposes of the opinions to be delivered to such Purchaser pursuant to Sections 6.2 and 6.3, counsel for the Obligors and counsel for the Purchasers, respectively, may rely, without any independent verification thereof, upon the accuracy of the representations and warranties of such Purchaser, and compliance by such Purchaser with its agreements, contained in Section 4.1, Section 4.2, Section 4.3 and Section 4.4, and such Purchaser hereby consents to such reliance.

## ARTICLE V

## REPRESENTATIONS AND WARRANTIES OF THE ISSUER

The Issuer represents and warrants to the Purchasers as of the date hereof and as of each Closing Date as follows:

Section 5.1 Securities Laws.

(a) No securities of the same class (within the meaning of Rule 144A(d)(3)(i) under the Securities Act) as the Notes, the Guarantees or the Warrants, other than as set forth in Schedule 5.1, have been issued and sold by any Obligor within the six-month period immediately prior to the date hereof.

(b) Assuming the accuracy of the representations and warranties of the Purchasers in this Purchase Agreement, no Obligor or any affiliate (as defined in Rule 144 under the Securities Act) of such Obligor has directly, or through any agent, (i) sold, offered for sale, solicited offers to buy or otherwise negotiated in respect of any security (as defined in the Securities Act) that is or will be integrated with the sale of the Notes, the Guarantees or the Warrants in a manner that would require the registration under the Securities Act of the Notes, the Guarantees or the Warrants, (ii) engaged in any form of general solicitation or general advertising in connection with the offering of the Notes, the Guarantees or the Warrants (as those terms are used in Regulation D under the Securities Act), or in any manner involving a public offering within the meaning of Section 4(a)(2) of the Securities Act, including publication or release of articles, notices or other communications published in any newspaper, magazine or similar medium or broadcast over television, radio or internet, or any seminar or meeting whose attendees have been invited by any general solicitation or general advertising, or (iii) engaged in any directed selling efforts within the meaning of Rule 902(c) of Regulation S.

(c) Assuming the accuracy of the representations and warranties of the Purchasers this Purchase Agreement, (i) the Indenture is not required to be qualified under the U.S. Trust Indenture Act of 1939, as amended, and (ii) no registration under the Securities Act of the Notes, the Guarantees or the Warrants is required in connection with the sale thereof to the Purchasers as contemplated by the Transaction Documents.

Section 5.2 Exchange Act Document; Financial Statements. The Issuer's reports filed under the Exchange Act since December 31, 2017 (excluding any documents or portions thereof furnished to, rather than filed with, the Commission) (such documents, the "Exchange Act Documents"), when they were filed with the Commission, conformed in all material respects to the requirements of the Exchange Act, and none of such reports, as of the respective dates thereof, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. There are no Laws, contracts or other documents that are required to be described in the Exchange Act Documents that are not so described in the Exchange Act Documents. The financial statements (including the related notes thereto) of the Issuer and its consolidated Subsidiaries included in the Issuer's most recent Annual Report on Form 10-K and any other Exchange Act Documents filed subsequent thereto comply in all material respects with the applicable requirements of the Exchange Act and present fairly the financial position of the Issuer and its consolidated Subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified. Such financial statements (including the related notes thereto) have been prepared in conformity with GAAP applied on a consistent basis throughout the periods covered thereby, and any supporting schedules included in such Exchange Act Documents present fairly the information required to be stated therein. Any other financial information included in such Exchange Act Documents has

been derived from the accounting records of the Issuer and its consolidated Subsidiaries and presents fairly the information shown thereby.

Section 5.3 No Material Adverse Change. Since the date of the most recent financial statements of the Issuer included in the Exchange Act Documents, except as otherwise disclosed in the Exchange Act Documents, (a) there has not been any change in the Capital Stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Exchange Act Documents and as set forth in Schedule 5.1), short-term debt or long-term debt of the Issuer or any of its Subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Issuer on any class of Capital Stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the business, properties, management, financial position, stockholders' equity or results of operations of the Issuer and its Subsidiaries taken as a whole, (b) neither the Issuer nor any of its Subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Issuer and its Subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Issuer and its Subsidiaries taken as a whole, and (c) neither the Issuer nor any of its Subsidiaries has sustained any loss or interference with its business that is material to the Issuer and its Subsidiaries taken as a whole and that is from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any Governmental Authority or before or by any self-regulatory organization or other non-governmental regulatory authority (including Nasdaq).

Section 5.4 Organization and Good Standing. The Issuer has been duly organized and is validly existing and in good standing under the laws of the State of Delaware, is duly qualified to do business and is in good standing in each jurisdiction in which it owns or leases property or in which the conduct of its business requires such qualification, and has all power and authority necessary to own or hold its properties and to conduct the business in which it is engaged, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a Material Adverse Effect. The Issuer does not own or control, directly or indirectly, any Person other than the Subsidiaries listed in Exhibit 21.1 to the Issuer's Annual Report on Form 10-K for the year ended December 31, 2017 or Schedule 5.4 or as otherwise disclosed in an Exchange Act Document filed subsequent to the date of this Purchase Agreement notified in writing by the Issuer to the Purchasers with specific reference to this Section 5.4.

Section 5.5 Capitalization. Schedule 5.5 sets forth a complete and accurate list of each Obligor showing, as of the date of this Purchase Agreement (as to each), the jurisdiction of its organization, the address of its principal office and its U.S. taxpayer identification number (where applicable) and, in the case of each Subsidiary of the Issuer, the percentage of the Capital Stock of such Subsidiary owned directly by the Issuer or any other Subsidiary of the Issuer and the identity of each such owner. All the outstanding shares of Capital Stock of the Issuer have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights. Except as described in the Exchange Act Documents, there are no outstanding rights (including pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of Capital Stock in the

Issuer or any of its Subsidiaries, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any Capital Stock of the Issuer or any such Subsidiary, any such convertible or exchangeable securities or any such rights, warrants or options. All the outstanding shares of Equity Interests of each Subsidiary owned, directly or indirectly, by the Issuer have been duly and validly authorized and issued, are fully paid and non-assessable (except, in the case of any non-U.S. Subsidiary, for directors' qualifying shares) and are owned directly or indirectly by the Issuer, free and clear of any Lien or restriction on voting or transfer or any other claim of any third party.

Section 5.6 Due Authorization; Enforceability. As of the applicable Closing Date, each of the Obligors will have full right, power and authority to execute and deliver each Transaction Document to which it is a party and to perform its obligations hereunder or thereunder. As of the applicable Closing Date, all action required to be taken for the due and proper authorization, execution and delivery by each Obligor of each Transaction Document to which it is a party and the consummation by it of the transactions contemplated by each such Transaction Document will have been duly and validly taken. Each Transaction Document to be entered into as of the applicable Closing Date to which any Obligor will be a party will be duly authorized, executed and delivered by such Obligor and will constitute the valid, legally binding and, assuming due authorization, execution and delivery by all other parties thereto, enforceable obligation of such Obligor, except that the enforcement thereof may be subject to (a) bankruptcy, insolvency, reorganization, moratorium or other similar Laws now or hereafter in effect relating to creditors' rights generally and (b) general principles of equity and the discretion of the court before which any proceeding therefor may be brought (collectively, the "Enforceability Exceptions").

Section 5.7 Purchase Agreement. This Purchase Agreement has been duly authorized, executed and delivered by the Issuer and constitutes the valid, legally binding and, assuming due authorization, execution and delivery by all other parties hereto, enforceable obligation of the Issuer, except that the enforcement hereof may be subject to the Enforceability Exceptions.

Section 5.8 Common Stock. The shares of Common Stock of the Issuer to be issued upon the exercise of the Warrants have been reserved by the Issuer and, upon exercise of the Warrants in accordance with their terms, will be validly issued, fully paid and non-assessable.

Section 5.9 No Violation or Default. Neither the Issuer nor any of its Subsidiaries is (a) in violation of its charter or bylaws or similar organizational documents, (b) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Issuer or any of its Subsidiaries is a party or by which the Issuer or any of its Subsidiaries is bound or to which any of the property or assets of the Issuer or any of its Subsidiaries is subject, or (c) in violation of any Law or any judgment, order, enforcement action, rule or regulation of any self-regulatory organization or other non-governmental regulatory authority (including the rules and regulations of Nasdaq to the extent not already disclosed in the Exchange Act Documents), except, in the case of clauses (b) and (c) above, for any such default or violation that would not, individually or in the aggregate, have a Material Adverse Effect other than as set

forth in Section 5.20. As of the applicable Closing Date, there exists no Event of Default under the Indenture.

Section 5.10 Termination or Nonrenewal of Contracts. Except as would not, individually or the aggregate, have a Material Adverse Effect, neither the Issuer nor any of its Subsidiaries has sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements to which the Issuer or its Subsidiaries are a party referred to or described in the Exchange Act Documents, and, to the Issuer's knowledge, no such termination or nonrenewal has been threatened by any other party to any such contract or agreement.

Section 5.11 No Conflicts. The execution and delivery of and performance of obligations under each Transaction Document by each Obligor that is a party hereto or thereto and the consummation of the transactions contemplated hereby and thereby (including the issuance and sale of the Notes and the Warrants to the Purchasers) will not (a) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any Lien upon any property or assets of the Issuer or any of its Subsidiaries pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Issuer or any of its Subsidiaries is a party or by which the Issuer or any of its Subsidiaries is bound or to which any of the property or assets of the Issuer or any of its Subsidiaries is subject, (b) result in any violation of the provisions of the charter or bylaws or similar organizational documents of the Issuer or any of its Subsidiaries or (c) result in the violation of any Law or any judgment, order, rule or regulation of any self-regulatory organization or other non-governmental regulatory authority (including the rules and regulations of Nasdaq), except, in the case of clauses (a) and (c) above, for any such conflict, breach, violation, default, creation or imposition that would not, individually or in the aggregate, have a Material Adverse Effect.

Section 5.12 No Consents Required. No consent, approval, authorization, order, license, registration, qualification or filing of or with any Governmental Authority, self-regulatory organization or other non-governmental regulatory authority (including Nasdaq), the stockholders of the Issuer or any other third party is required for (a) the execution and delivery of and performance of obligations under any Transaction Document by any Obligor that is a party hereto or thereto, (b) the issuance and sale of the Notes and the Warrants to the Purchasers, (c) the consummation of the transactions contemplated by the Transaction Documents, (d) the grant by the Obligors of the Liens granted or purported to be granted by them pursuant to the Security Documents or (e) the perfection of the Liens created under the Security Documents, other than (i) any necessary filings under the securities or blue sky Laws of the various jurisdictions in which the Notes are being offered, (ii) the filing of financing statements under the UCC and any other recordings (including in any applicable non-U.S. jurisdiction) to the extent required to perfect a security interest in, or other Lien on, the Collateral and (iii) such consents, approvals, authorizations, orders, licenses, registrations, qualifications, filings and other actions the failure of which to take, give, make or obtain would not reasonably be expected to have a Material Adverse Effect.

Section 5.13 Legal Proceedings. Except as described in the Exchange Act Documents, there are no legal, governmental or regulatory investigations, actions, suits or proceedings

pending to which the Issuer or any of its Subsidiaries is or may be a party or to which any property of the Issuer or any of its Subsidiaries is or may be the subject that, individually or in the aggregate, if determined adversely to the Issuer or any of its Subsidiaries, could reasonably be expected to have a Material Adverse Effect. Except as described in Section 5.20, no such investigations, actions, suits or proceedings are threatened or, to the knowledge of the Issuer, contemplated by any Governmental Authority or any self-regulatory organization or other non-governmental regulatory authority (including Nasdaq to the extent not already disclosed in the Exchange Act Documents) or any third party. There are no current or pending legal, governmental or regulatory actions, suits or proceedings that are required to be described in the Exchange Act Documents that are not so described in the Exchange Act Documents.

Section 5.14 Title to Real and Personal Property. The Issuer and its Subsidiaries have valid and marketable rights to lease or otherwise use all items of real and personal property and assets that are material to the respective businesses of the Issuer and its Subsidiaries, in each case free and clear of all Liens and defects and imperfections of title except those that (a) do not materially interfere with the use made and proposed to be made of such property by the Issuer and its Subsidiaries or (b) could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. The Exchange Act Documents disclose all material leases of real property to which any Obligor is party (whether as lessor, lessee or otherwise). To the knowledge of the Issuer, any real property held by any Obligor under lease constitutes the valid, legally binding and enforceable obligation of all parties thereto (except that, in each case, the enforcement thereof may be subject to the Enforceability Exceptions) except as would not have a Material Adverse Effect.

Section 5.15 Intellectual Property.

(a) The Issuer and its Subsidiaries own, or have obtained valid and enforceable licenses for, or other rights to use, all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, trade secrets and other intellectual property (collectively, "Intellectual Property") described in the Exchange Act Documents as either being owned or licensed by them or necessary for the conduct of their respective businesses as currently conducted (including the commercialization of products in development), except where the failure to own, license or have such rights would not, individually or in the aggregate, have a Material Adverse Effect. To the knowledge of the Issuer, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property that would have a Material Adverse Effect. There is no pending or, to the knowledge of the Issuer, threatened action, suit, proceeding or claim by others challenging the rights of the Issuer or its Subsidiaries in or to any such Intellectual Property.

(b) The Intellectual Property owned by or licensed to the Issuer and its Subsidiaries has not been adjudicated invalid or unenforceable, in whole or in part. There is no pending or, to the knowledge of the Issuer, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property.

(c) There is no pending or, to the knowledge of the Issuer, threatened action, suit, proceeding or claim by others that the Issuer or its Subsidiaries infringes, misappropriates or otherwise violates any Intellectual Property of others. Neither the Issuer nor any of its

Subsidiaries has received any written notice of any such claim. The Issuer is not aware of any facts that it believes would form a reasonable basis for a successful claim of any such infringement, misappropriation or violation that would have a Material Adverse Effect.

(d) To the knowledge of the Issuer, none of the Issuer's employees is in material violation of any term of any employment, patent disclosure, invention assignment, non-competition, non-solicitation or non-disclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Issuer or any of its Subsidiaries or actions undertaken by the employee while employed with the Issuer or any of its Subsidiaries.

Section 5.16 Investment Company Act. The Issuer is not and, after giving effect to the offering and sale of the Notes and the Warrants and the application of the proceeds thereof, will not be required to register as an "investment company" or an entity "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

Section 5.17 Taxes. Except for matters that would not, individually or in the aggregate, have a Material Adverse Effect, (a) the Issuer and its Subsidiaries have filed all tax returns required to be filed by the Issuer and its Subsidiaries, (b) such returns are accurate in all material respects and (c) the Issuer and its Subsidiaries have paid all U.S. federal, state, local and non-U.S. taxes required to have been paid through the date of this representation and warranty. Except as otherwise disclosed in the Exchange Act Documents, there is no tax deficiency that has been, or to the Issuer's knowledge could reasonably be expected to be, asserted against the Issuer or any of its Subsidiaries or any of their respective properties or assets, which deficiency would, individually or in the aggregate, have a Material Adverse Effect.

Section 5.18 Licenses and Permits. The Issuer and its Subsidiaries possess all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate U.S. federal, state, local or non-U.S. Governmental Authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in the Exchange Act Documents, except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect. Except as described in the Exchange Act Documents, neither the Issuer nor any of its Subsidiaries has received notice of any revocation or modification of any such license, certificate, permit or authorization or has any knowledge that any such license, certificate, permit or authorization will not be renewed in the ordinary course.

Section 5.19 No Labor Disputes. No labor disturbance by or dispute with employees of the Issuer or any of its Subsidiaries exists or, to the knowledge of the Issuer, is contemplated or threatened, and the Issuer is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of its or its Subsidiaries' principal suppliers, contractors or customers, as described in the Exchange Act Documents and except as would not have a Material Adverse Effect. Except for matters that would not, individually or in the aggregate, have a Material Adverse Effect, (a) none of the Issuer or any of its Subsidiaries is knowingly engaged in any unfair labor practice and (b) there has been no knowing violation of any applicable U.S. federal, state, local or non-U.S. Law relating to discrimination in the hiring,

promotion or pay of employees of the Issuer or any of its Subsidiaries, any applicable wage or hour Laws or any similar applicable non-U.S. Law concerning the employees of the Issuer or any of its Subsidiaries.

Section 5.20 Compliance with Applicable Product Laws; Product Authorizations. Except as described in the Exchange Act Documents, the Issuer and its Subsidiaries (a) are and at all times have been in compliance with all Laws applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Issuer ("Applicable Product Laws"), except for such non-compliance as would not, individually or in the aggregate, have a Material Adverse Effect, (b) have not received any FDA Form 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any Governmental Authority, self-regulatory organization or other non-governmental regulatory authority (including Nasdaq) or third party alleging or asserting non-compliance with any Applicable Product Laws or any licenses, exemptions, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Product Laws ("Product Authorizations"), except for such non-compliance as would not, individually or in the aggregate, have a Material Adverse Effect, (c) possess all material Product Authorizations, and such Product Authorizations are valid and in full force and effect and are not in violation of any term of any such Product Authorizations, except for such violations as would not, individually or in the aggregate, have a Material Adverse Effect and as set forth on Schedule 5.20, (d) have not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Authority, self-regulatory organization, other non-governmental regulatory authority or third party alleging that any product operation or activity is in violation of any Applicable Product Laws or Product Authorizations, and, to the Issuer's knowledge, no such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened, (e) have not received written notice that any Governmental Authority, self-regulatory organization or other non-governmental regulatory authority has taken, is taking or intends to take action to materially limit, suspend, modify or revoke any Product Authorizations, and, to the Issuer's knowledge, no such limitation, suspension, modification or revocation is threatened, and (f) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Product Laws or Product Authorizations, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct on the date filed in all material respects (or were corrected or supplemented by a subsequent submission).

Section 5.21 Clinical Trials. The clinical and pre-clinical trials conducted by or on behalf of or sponsored by the Issuer or any of its Subsidiaries, or in which the Issuer or any of its Subsidiaries has participated, that are described in the Exchange Act Documents or the results of which are referred to in the Exchange Act Documents and that were submitted to Regulatory Authorities as a basis for product approval, were conducted in all material respects in accordance with standard medical and scientific research procedures and all applicable Laws of the FDA and comparable drug regulatory agencies outside of the United States to which it is subject (collectively, the "Regulatory Authorities"), including 21 C.F.R. Parts 50, 54, 56, 58 and 312, and current good clinical practices and good laboratory practices. The descriptions in the

Exchange Act Documents of the results of such studies and tests are accurate and complete in all material respects and fairly present the data derived from such trials. The Issuer has no knowledge of any other trials the results of which are inconsistent with or otherwise call into question the results described or referred to in the Exchange Act Documents. The Issuer and its Subsidiaries have operated and are currently in compliance in all material respects with all applicable Laws of the Regulatory Authorities. None of the Issuer or any of its Subsidiaries has received any written notices, correspondence or other communication from the Regulatory Authorities or any other Governmental Authority that could lead to the termination or suspension of any clinical or pre-clinical trials that are described in the Exchange Act Documents or the results of which are referred to in the Exchange Act Documents, and, to the Issuer's knowledge, there are no reasonable grounds for same.

Section 5.22 Compliance with and Liability under Environmental Laws. The Issuer and its Subsidiaries (a) are, and at all prior times were, in compliance with any and all applicable U.S. federal, state, local and non-U.S. Laws, requirements and decisions and the common law relating to pollution or the protection of the environment, natural resources or occupational health or safety (to the extent relating to exposure to Hazardous Materials), including those relating to the generation, storage, treatment, use, handling, transportation, Release or threat of Release of Hazardous Materials (collectively, "Environmental Laws"), (b) have received and are in compliance with all permits, licenses, certificates or other authorizations or approvals required of them under applicable Environmental Laws to conduct their respective businesses, (c) have not received notice of any actual or potential liability under or relating to, or actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any Release or threat of Release of Hazardous Materials, and have no knowledge of any event or condition that would reasonably be expected to result in any such notice, (d) are not conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to any Environmental Law at any location and (e) are not a party to any order, decree or agreement that imposes any obligation or liability under any Environmental Law, except in each case for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. There are no costs or liabilities associated with Environmental Laws of or relating to the Issuer or its Subsidiaries, except in each case for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Except as described in Exchange Act Documents, (i) there are no proceedings that are pending, or to the Issuer's knowledge contemplated, against the Issuer or any of its Subsidiaries under any Environmental Laws in which a governmental entity is also a party, other than such proceedings regarding which it is reasonably believed no fines, penalties or similar monetary sanctions of $100,000 or more will be imposed, (ii) the Issuer is not aware of any facts or issues regarding compliance by the Issuer or any of its Subsidiaries with Environmental Laws, or liabilities or other obligations of the Issuer or any of its Subsidiaries under Environmental Laws, including the Release or threat of Release of Hazardous Materials, that could reasonably be expected to have a material and adverse effect on the capital expenditures, earnings or competitive position of the Issuer and its Subsidiaries, and (iii) none of the Issuer or any of its Subsidiaries currently anticipates material capital expenditures relating to any Environmental Laws.

Section 5.23 Hazardous Materials. Except as disclosed in the Exchange Act Documents, there has been no storage, generation, transportation, use, handling, treatment,

Release or threat of Release of Hazardous Materials by, relating to or caused by the Issuer or any of its Subsidiaries (or, to the knowledge of the Issuer, any other Person (including any predecessor) for whose acts or omissions the Issuer or any of its Subsidiaries is or could reasonably be expected to be liable) at, on, under or from any property or facility now or previously owned, operated or leased by the Issuer or any of its Subsidiaries, or at, on, under or from any other property or facility, in violation of any Environmental Laws or in a manner or amount or to a location that could reasonably be expected to result in any liability under any Environmental Law, except for any violation or liability that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 5.24 Compliance with ERISA. Except as disclosed in the Exchange Act Documents, (a) each employee benefit plan, within the meaning of Section 3(3) of ERISA, for which the Issuer or any member of its Controlled Group would have any liability (each, a "Plan") has been maintained in compliance with its terms and the requirements of any applicable Laws, including ERISA and the Code, (b) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, (c) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, the minimum funding standard of Section 412 of the Code or Section 302 of ERISA, as applicable, has been satisfied (without taking into account any waiver thereof or extension of any amortization period) and is reasonably expected to be satisfied in the future (without taking into account any waiver thereof or extension of any amortization period), (d) the fair market value of the assets of each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan), (e) a "reportable event" (within the meaning of Section 4043(c) of ERISA) has not occurred and is not reasonably expected to occur, (f) neither the Issuer nor any member of the Controlled Group has incurred, or reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guaranty Corporation, in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan", within the meaning of Section 4001(a)(3) of ERISA) and (g) there is no pending audit or investigation by the IRS, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other Governmental Authority with respect to any Plan, except in the case of each of clauses (a) through (g) above that would not reasonably be expected to have a Material Adverse Effect.

Section 5.25 Disclosure Controls. Except as disclosed in the Exchange Act Documents, the Issuer and its Subsidiaries maintain an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Issuer in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Issuer's management as appropriate to allow timely decisions regarding required disclosure. The Issuer and its Subsidiaries have carried out evaluations of the effectiveness of their disclosure controls and procedures as required by Rule 13a-15 under the Exchange Act.

Section 5.26 Accounting Controls. Except as disclosed in the Exchange Act Documents, the Issuer and its Subsidiaries maintain systems of "internal control over financial

reporting" (as defined in Rule 13a-15(f) under the Exchange Act) that comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, including internal accounting controls sufficient to provide reasonable assurance that (a) transactions are executed in accordance with management's general or specific authorizations, (b) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (c) access to assets is permitted only in accordance with management's general or specific authorization, (d) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (e) interactive data in eXtensible Business Reporting Language included in the Exchange Act Documents fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto. Except as disclosed in the Exchange Act Documents, there are no material weaknesses in the Issuer's internal controls. The Issuer's auditors and the audit committee of the board of directors of the Issuer have been advised of (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting that have adversely affected or are reasonably likely to adversely affect the Issuer's ability to record, process, summarize and report financial information and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Issuer's internal controls over financial reporting.

Section 5.27 Insurance. The Issuer and its Subsidiaries have insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are adequate in accordance with customary industry practice to protect the Issuer and its Subsidiaries and their respective businesses. All such insurance is fully in force. None of the Issuer or any of its Subsidiaries has (a) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (b) any knowledge or reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business.

Section 5.28 No Unlawful Payments. None of the Issuer, any of its Subsidiaries, any director, officer or employee of the Issuer or any of its Subsidiaries or, to the knowledge of the Issuer, any agent, affiliate or other person associated with or acting on behalf of the Issuer or any of its Subsidiaries has (a) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity, (b) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds, (c) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any other applicable anti-bribery or anti-corruption Law or (d) made, offered, agreed, requested or taken any bribe, rebate, payoff, influence payment, kickback or other unlawful payment. The Issuer and its Subsidiaries have instituted, maintain and enforce, and will continue to maintain and enforce, policies and procedures designed to promote compliance with all applicable anti-bribery and anti-corruption Laws.

Section 5.29 Compliance with Money Laundering Laws. The operations of the Issuer and its Subsidiaries are and have been conducted at all times in material compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering Laws of all jurisdictions and any related or similar Laws or guidelines issued, administered or enforced by any Governmental Authority (collectively, the "Money Laundering Laws"), and no action, suit or proceeding by or before any Governmental Authority involving the Issuer or any of its Subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Issuer, threatened.

Section 5.30 Compliance with OFAC. None of the Issuer, any of its Subsidiaries, any director, officer or employee of the Issuer or any of its Subsidiaries or, to the knowledge of the Issuer, any agent, affiliate or other person acting on behalf of the Issuer or any of its Subsidiaries is currently the target of any U.S. sanctions administered by OFAC ("Sanctions"). None of the Issuer or any of its Subsidiaries is located, organized or resident in a country or territory that is the subject or target of Sanctions, as of the date of this Purchase Agreement, Crimea, Cuba, Iran, North Korea and Syria (each, a "Sanctioned Country"). The Issuer will not directly or, to its knowledge, indirectly use the proceeds of the offering of the Notes and the Warrants, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person, for the purpose of financing the activities of any Person currently subject to any U.S. sanctions administered by OFAC. For the past five years, the Issuer and its Subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any Person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

Section 5.31 No Restrictions on Subsidiaries. No Subsidiary of the Issuer is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Issuer, from making any other distribution on such Subsidiary's Capital Stock, from repaying to the Issuer any loans or advances to such Subsidiary from the Issuer or from transferring any of such Subsidiary's properties or assets to the Issuer or any other Subsidiary of the Issuer.

Section 5.32 No Brokers' Fees. None of the Issuer or any of its Subsidiaries is a party to any contract, agreement or understanding with any Person that would give rise to a valid claim against the Issuer, any of its Subsidiaries or any Purchaser for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Notes and the Warrants.

Section 5.33 Sarbanes-Oxley Act. There is and has been no failure on the part of the Issuer or, to the knowledge of the Issuer, any of the Issuer's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act"), including Section 402 of the Sarbanes-Oxley Act related to loans and Sections 302 and 906 of the Sarbanes-Oxley Act related to certifications.

Section 5.34 Margin Rules. None of the Issuer, any of its Subsidiaries or any agent acting on their behalf has taken or will take any action that might cause this Purchase Agreement

or the sale of the Notes or the Warrants to violate Regulation T, U or X of the Board of Governors of the Federal Reserve System.

Section 5.35 Solvency. No step has been taken or is currently intended by any Obligor or, to the knowledge of the Issuer, any other Person for the winding-up, liquidation, dissolution or administration or for the appointment of a receiver or administrator of any Obligor for all or any of such Obligor's properties or assets.

Section 5.36 Existing Indebtedness. The Exchange Act Documents disclose all of the following types of material outstanding third-party indebtedness of each Obligor: (a) indebtedness in respect of borrowed money; (b) any other obligation of such Obligor to be liable for, or to pay, as obligor, guarantor or otherwise, on the indebtedness for borrowed money of another Person (other than by endorsement of negotiable instruments for collection in the ordinary course of business); and (c) to the extent not otherwise included, indebtedness for borrowed money of another Person secured by a Lien on any asset owned by such Person (whether or not such indebtedness for borrowed money is assumed by such Person). The Convertible Senior Notes are not guaranteed by, or secured by the assets or property of, any Person.

Section 5.37 Security Documents. The representations and warranties of each Obligor in each Security Document are true and correct as of the applicable Closing Date, except to the extent that any such untrue or incorrect statement, individually or in the aggregate, would not reasonably be expected to have a material adverse effect on the Collateral or on the rights and remedies of the Collateral Agent with respect thereto.

Section 5.38 Certain Repayments. The Issuer has paid in full all obligations under that certain purchase and sale agreement dated as of March 25, 2013 by and between the Issuer and BioPharma Secured Investments III Holdings Cayman LP, and such purchase and sale agreement has been terminated.

Section 5.39 M&A Agreement. With respect to information relating to the parties to the M&A Agreement (other than the Issuer), to the Issuer's knowledge, (a) all written information (other than projections and other forward-looking information and information of a general economic industry nature) that has been or will be made available to the Purchasers by or on behalf of the Issuer in connection with the transactions contemplated by the M&A Agreement is and will be (when furnished), when taken as a whole with all other information made available (taken in combination with the information contained in the Issuer's filings with the Commission), true and correct in all material respects and does not and will not (when furnished), when taken as a whole with all other information made available (taken in combination with the information contained in the Issuer's filings with the Commission), contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements contained therein not materially misleading in light of the circumstances under which such statements are made (after giving effect to all supplements and updates with respect thereto), and (b) the projections and other forward-looking information that have been or will be made available to the Purchasers by or on behalf of the Issuer have been and will be prepared in good faith based upon assumptions that are believed by the preparer thereof to be reasonable when made. The Issuer agrees that if at any time prior to the applicable Closing Date any of the

representations in the preceding sentence would be incorrect in any material respect if made at such time, then the Issuer will promptly supplement, or cause to be supplemented, the information underlying such representations so that such representations will be correct in all material respects at such time.

Section 5.40 Assets of Subsidiaries. As of the applicable Closing Date, no Subsidiary of the Issuer (other than a Guarantor (as will be defined in the Indenture) or a New Grantor (as will be defined in the Collateral Agreement) (a) has any material operations, (b) holds any Intellectual Property or (c) holds any cash or other assets in excess of $250,000, in each case other than as set forth on Schedule 5.40.

## ARTICLE VI

## CONDITIONS TO CLOSING

The obligations of the Purchasers hereunder on each Closing Date are subject to the accuracy in all material respects (except for such representations and warranties qualified by materiality or Material Adverse Effect, which shall be accurate in all respects) of the representations and warranties of the Issuer contained herein as of such Closing Date (subject to the Schedules permitted to be updated pursuant to Section 6.4 in respect of the Subsequent Closing Date), to the accuracy of the statements of the Obligors and their respective officers or other representatives made in any certificates delivered pursuant hereto in respect of such Closing Date, to the performance by the Issuer of its obligations hereunder as of such Closing Date and to the satisfaction of or waiver by the Purchasers of each of the following additional terms and conditions applicable on such Closing Date (and the obligations of the Issuer hereunder on the Initial Closing Date are also subject to the satisfaction of or waiver by the Issuer of Section 6.16):

Section 6.1 M&A Agreement Transactions. All of the conditions to closing set forth in the M&A Agreement shall have been satisfied or the transactions contemplated by the M&A Agreement shall be consummated substantially simultaneously with the issuance of the Original Notes and the Warrants, in all material respects in accordance with the M&A Agreement (and no provision of the M&A Agreement shall have been waived, amended, supplemented or otherwise modified (including any obligation to obtain consents) in a manner material and adverse to the Purchasers without the consent of the Purchasers (such consent not to be unreasonably withheld, delayed or conditioned)) (it being understood that any increase in the purchase price consideration greater than 5% shall be deemed material and adverse to the Purchasers, but that any decrease in the purchase price consideration shall not be deemed material and adverse to the Purchasers).

Section 6.2 Obligors' Counsel Opinion. Weil, Gotshal & Manges LLP, special U.S. counsel to the Obligors, shall have furnished to the Purchasers their opinion, addressed to the Purchasers and dated the applicable Closing Date, in form and substance reasonably satisfactory to the Purchasers.

Section 6.3 Purchasers' Counsel Opinion. Pillsbury Winthrop Shaw Pittman LLP, special counsel to the Purchasers, shall have furnished to the Purchasers their opinion, addressed

to the Purchasers and dated the applicable Closing Date, in form and substance reasonably satisfactory to the Purchasers.

Section 6.4 Certification as to Transaction Documents. Each Obligor shall have furnished to the Purchasers a certificate, dated the applicable Closing Date, of its respective Responsible Officer, stating that, as of such Closing Date, the representations and warranties of such Obligor in the Transaction Documents to which it is party are true and correct in all material respects (except for such representations and warranties qualified by materiality or Material Adverse Effect, which are true and correct in all respects) and such Obligor has complied in all material respects with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied under the Transaction Documents on or before such Closing Date; provided, however, that any such certificate in respect of the Subsequent Closing Date may update Schedule 5.5 or any exhibit provided pursuant to the Collateral Agreement.

Section 6.5 Authorizations. Each Obligor shall have furnished to the Purchasers, as of the applicable Closing Date, (a) a copy of the resolutions, consents or other documents, certified by a Responsible Officer of such Obligor, duly authorizing the execution and delivery of, and performance of obligations under, the Transaction Documents to which it is a party and any other documents to be executed on or prior to such Closing Date by or on behalf of it in connection with the transactions contemplated hereby and thereby and, in the case of the Issuer, the issuance and sale of the applicable Notes and Warrants, and a certification that such resolutions, consents or other documents have not been modified, rescinded or amended and are in full force and effect, (b) certified copies of its respective organizational documents, (c) a certification by a Responsible Officer of such Obligor as to the incumbency and specimen signatures of each officer or other representative executing any Transaction Document or any other document delivered in connection herewith or therewith on behalf of such Obligor (together with a certification of another Responsible Officer of such Obligor as to the incumbency and specimen signature of the first-mentioned Responsible Officer) and (d) a certificate of good standing (or equivalent) of such Obligor as of a recent date from the Secretary of State (or other applicable Governmental Authority) of its jurisdiction of organization.

Section 6.6 CUSIP Numbers. Standard & Poor's CUSIP Service Bureau, as agent for the National Association of Insurance Commissioners, shall have issued CUSIP numbers and ISIN numbers for the Notes to be issued on the applicable Closing Date.

Section 6.7 Further Information. On or prior to the applicable Closing Date, the Obligors shall have furnished to the Purchasers such further information, certificates and documents as the Purchasers may reasonably request in connection with this Purchase Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby.

Section 6.8 Consummation of Transactions. All of the transactions contemplated by the Transaction Documents to be completed on or before the applicable Closing Date shall have been consummated or shall be consummated concurrently with the transactions contemplated hereby, including the execution and delivery of the Indenture and the issuance of the Warrants to the Purchasers, and the Purchasers shall have received executed copies of the Transaction Documents (which shall be in full force and effect).

Section 6.9 No Actions. No action shall have been taken and no Law shall have been enacted, adopted or issued by any Governmental Authority that would, as of the applicable Closing Date, prevent the issuance or sale of the applicable Notes or Warrants, and no injunction, restraining order or order of any other nature by any court of competent jurisdiction shall have been issued as of the applicable Closing Date that would prevent the issuance or sale of the applicable Notes or Warrants.

Section 6.10 Collateral Requirements. The Collateral Agent shall have received with respect to the Collateral, on or prior to the Initial Closing Date:

(a) all certificates, agreements or instruments, to the extent they exist, representing or evidencing the Equity Interests of the Subsidiary Guarantors referred to in the Security Documents accompanied by instruments of transfer and stock powers undated and endorsed in blank;

(b) all other certificates, agreements or instruments necessary to perfect the Collateral Agent's security interest in, or other Lien on, all chattel paper, all instruments, all deposit accounts and all investment property of each Obligor (to the extent required by any Transaction Document);

(c) evidence of the filing of financing statements under the UCC and other recordings (including in any applicable non-U.S. jurisdiction) required to be made to perfect a security interest in, or other Lien on, the Collateral, including those specified in the Security Documents; and

(d) certified copies of UCC, PTO, United States Copyright Office, tax, judgment lien, bankruptcy and pending lawsuit searches or equivalent reports or searches, each as of a recent date and listing all effective financing statements, lien notices or comparable documents that name any Obligor as debtor and that are filed in the jurisdiction in which such Obligor is organized or maintains its principal place of business, and such searches or reports reveal no Liens on any of the Collateral except for (i) Liens discharged on or prior to the Initial Closing Date pursuant to documentation reasonably satisfactory to the Purchasers and (ii) other Liens reasonably satisfactory to the Purchasers.

Section 6.11 Insurance. The Collateral Agent shall have received on or prior to the Initial Closing Date evidence that all insurance required to be maintained pursuant to the Transaction Documents by the Obligors has been obtained and is in effect together with the certificates of insurance, naming the Collateral Agent, on behalf of all Persons in whose name the Notes are registered from time to time in the register with respect to the Notes, as an additional insured or loss payee, as the case may be, under all insurance policies maintained with respect to the properties and assets that constitute Collateral.

Section 6.12 Use of Proceeds. The Issuer will apply the proceeds from the issuance and sale of the Notes and the Warrants (a) to pay fees, costs and expenses arising in connection with the issuance and sale thereof, (b) to pay the fee contemplated by Section 6.15, (c) to fund part of the consideration to acquire assets in respect of Pancreaze® and (d) for general corporate purposes.

Section 6.13 No Other Issuances. Except for any Notes, Guarantees and Warrants issued and sold pursuant to this Purchase Agreement, no securities of the same class (within the meaning of Rule 144A(d)(3)(i) under the Securities Act) as the Notes, the Guarantees or the Warrants have been issued and sold by any Obligor since the date of this Purchase Agreement.

Section 6.14 Fair Market Valuation of Warrants. On or prior to the Initial Closing Date, the Issuer shall provide its fair market valuation of the Warrants to the Purchasers pursuant to Section 3.3.

Section 6.15 Payment of Commitment Fee. The Issuer shall cause to be paid to the Purchasers on the Initial Closing Date, out of the proceeds of the issuance of the Original Notes and the Warrants, a fee equal to $100,000.

Section 6.16 Convertible Notes Transaction. On or prior to the Initial Closing Date, the Purchasers and/or their Affiliates shall sell to the Issuer $60,000,000 aggregate principal amount of the Convertible Senior Notes for the purchase price set forth in the agreement of the parties hereto dated April 4, 2018 (including for the avoidance of doubt any accrued but unpaid interest thereon to the date of such sale); *provided*, *however*, that any Purchaser may elect to exchange all or part of such Purchaser's Convertible Senior Notes for Original Notes and Warrants (plus any accrued but unpaid interest thereon to the date of such exchange), in which case the Issuer and such Purchaser intend for any such exchange to be treated as a recapitalization within the meaning of Section 368(a)(1)(E) of the Code and in which case such Purchaser shall not be required to pay the cash portion of the purchase price in respect of the Original Notes and Warrants attributable to such exchanged Convertible Senior Notes.

## ARTICLE VII

## ADDITIONAL COVENANTS

Section 7.1 DTC. The Issuer will use reasonable best efforts to comply with the agreements set forth in any representation letter of the Issuer to DTC relating to the approval of any Notes by DTC for "book-entry" transfer.

Section 7.2 Certain Expenses. The Issuer agrees to pay or cause to be paid from the proceeds of the issuance of the Notes and the Warrants all reasonable, documented fees and expenses of Pillsbury Winthrop Shaw Pittman LLP, acting as special counsel to the Purchasers (it being understood that the Issuer shall not be obligated to pay any such fees and expenses up to and including the Initial Closing Date in excess of $250,000), it being understood that the Issuer will not reimburse any other expenses of any Purchasers (including expenses of any other counsel).

Section 7.3 Right of First Offer. In connection with the proposed issuance, if any, of Optional Secured Notes, the Issuer will grant to each Purchaser the right to purchase an aggregate amount of such Optional Secured Notes in an amount equal to the same proportion that the principal amount of Original Notes set forth opposite such Purchaser's name on Schedule 1 bears to the aggregate principal amount of Original Notes to be issued on the Initial Closing Date to the Purchasers and at a purchase price specified by the Issuer (which purchase price shall not be more than the purchase price being offered to other investors), with such right

to purchase being exercised by such Purchaser by written notice to the Issuer no later than 10 days after being notified of such proposed issuance by the Issuer. To the extent that any Purchaser decline to exercise its right to purchase any Optional Secured Notes (in whole or in part), the Issuer will promptly notify the other Purchasers (only if such Purchasers exercised their right to purchase Optional Secured Notes in full pursuant to the preceding sentence), and such other Purchasers will have the right to purchase such remaining Optional Secured Notes (subject to proportional reduction to the extent of the relative initial principal amount of Optional Secured Notes purchased by other Purchasers exercising the same right) on the same terms as any Optional Secured Notes it previously exercised the right to purchase pursuant to the preceding sentence, with such right to purchase being exercised by such Purchaser by written notice to the Issuer no later than two days after being notified of the opportunity to purchase such remaining Optional Secured Notes by the Issuer.

Section 7.4 Confidentiality. Except as otherwise required by Law or judicial or administrative proceedings (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigation demand or similar process) or the rules and regulations of the Commission or any securities exchange or trading system or any other Governmental Authority or pursuant to requests from regulatory agencies having oversight over any of the Obligors and except as otherwise set forth in this Section 7.4, the Issuer will, and will cause each of its Subsidiaries, other Affiliates, directors, officers, employees, agents, representatives and similarly situated persons who receive such information to, treat and hold as confidential and not disclose to any Person any and all Confidential Information furnished to it by the Purchasers, as well as the information on Schedule 1, and to use any such Confidential Information and other information only in connection with this Purchase Agreement and any other Transaction Document and the transactions contemplated hereby and thereby. Notwithstanding the foregoing, the Issuer may disclose such information solely on a need-to-know basis and solely to its members, directors, employees, managers, officers, agents, brokers, advisors, lawyers, bankers, trustees, representatives, investors, co-investors, insurers, insurance brokers, underwriters and financing parties; provided, however, that such Persons shall be informed of the confidential nature of such information and shall be obligated to keep such Confidential Information and other information confidential pursuant to obligations of confidentiality no less onerous than those set forth herein.

## ARTICLE VIII

## INDEMNIFICATION

Section 8.1 Indemnification.

(a) In consideration of the Purchasers' execution and delivery of this Purchase Agreement, the issuance of the Notes under the Indenture and the issuance of the Warrant and of acquiring the Notes and the Warrant pursuant hereto and in addition to all of the other obligations of the Issuer under this Purchase Agreement, the Issuer shall defend, protect, indemnify and hold harmless the Purchasers and the Purchasers' equityholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing Persons' agents or other representatives, including those retained in connection with the transactions contemplated by this Purchase Agreement (each, a "Purchaser Indemnitee" and, collectively, the "Purchaser Indemnitees"), as incurred, from and against any and all actions,

causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Purchaser Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable and documented attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Purchaser Indemnitee as a result of, arising out of or relating to any misrepresentation or breach of any representation or warranty made by the Issuer in this Purchase Agreement or in any certificate, instrument or other document contemplated hereby. To the extent that the foregoing undertaking by the Issuer may be unenforceable for any reason, the Issuer shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law. Notwithstanding the foregoing, this Section 8.1(a) shall not apply to the extent that the Indemnified Liabilities result from any misrepresentation or breach described in Section 8.1(b).

(b) Each Purchaser, severally and not jointly, acknowledges that such Purchaser understands the meaning and legal consequences of the representations, warranties and restrictions contained in this Purchase Agreement and that the truth of these representations and warranties will be relied upon by the Issuer and its agents, officers and affiliates. With regard to the representations and warranties contained in this Purchase Agreement, each Purchaser, severally and not jointly, hereby agrees to defend, protect, indemnify and hold harmless the Issuer and the Issuer's stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing Persons' agents or other representatives (each, an "Issuer Indemnitee" and, collectively, the "Issuer Indemnitees"), as incurred, from and against the Indemnified Liabilities incurred by any Issuer Indemnitee as a result of any misrepresentation or breach of any representation or warranty made by such Purchaser in this Purchase Agreement or in any certificate, instrument or other document contemplated hereby. To the extent that the foregoing undertaking by such Purchaser may be unenforceable for any reason, such Purchaser, severally and not jointly, shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

(c) Promptly after receipt by an indemnitee under this Article VIII of notice of any claim or the commencement of any action or proceeding (including any governmental investigation), such indemnitee will, if a claim for indemnification in respect thereof is to be made against the indemnifying party, notify the indemnifying party in writing of the commencement thereof, but the omission to so notify will not relieve the indemnifying party from any liability it may have to any indemnitee to the extent the indemnifying party is not materially prejudiced as a result thereof. In case any such action or proceeding is brought against any indemnitee and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate therein and, to the extent that it may elect, by written notice delivered to such indemnitee promptly after receiving the aforesaid notice from such indemnitee, to assume the defense thereof, with counsel reasonably satisfactory to such indemnitee; *provided*, *however*, that if the defendants (including any impleaded parties) in any such action include both the indemnitee and the indemnifying party and the indemnitee shall have reasonably concluded that there may be legal defenses available to it and/or other indemnitees that are different from or additional to those available to the indemnifying party, the indemnitee or indemnitees shall have the right to select separate counsel to defend such action on behalf of such indemnitee or indemnitees. Upon receipt of notice from the indemnifying party to such indemnitee of its election to so appoint counsel to defend such action and reasonable

approval by the indemnitee of such counsel, the indemnifying party will not be liable to such indemnitee under this Article VIII for any legal or other expenses subsequently incurred by such indemnitee in connection with the defense thereof unless: (A) the indemnitee shall have employed separate counsel in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expense of more than one separate counsel (in addition to any local counsel), approved by the indemnitee representing the indemnitees who are parties to such action); (B) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnitee to represent the indemnitee within a reasonable time after notice or commencement of the action; (C) the indemnifying party shall have authorized the employment of counsel for the indemnitee at the expense of the indemnifying party; or (D) the use of counsel chosen by the indemnifying party to represent the indemnitee would present such counsel with a conflict of interest.

(d) The indemnifying party and the indemnitees will not, without the prior written consent of the applicable indemnitees, or the indemnifying party, as applicable, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not such indemnitees are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnitee, or the indemnifying party, as applicable, from all liability arising out of such claim, action, suit or proceeding and does not include an admission of guilt of, or failure to act by, the indemnitee, or include any injunctive relief against any indemnitee. The indemnifying party shall not be liable for any settlement or compromise or the consent to the entry of judgment in connection with any such action effected without its written consent, but if settled with its written consent or if there be a final judgment for the plaintiff in any such action other than a judgment entered with the consent of such indemnitee, then the indemnifying party shall indemnify and hold harmless any indemnitee from and against any loss or liability by reason of such settlement or judgment.

(e) Each indemnitee shall furnish such information regarding itself or the claim in question as the indemnifying party may reasonably request in writing and as shall be reasonably required in connection with the defense of such claim and litigation arising therefrom.

(f) Notwithstanding anything to the contrary herein, the provisions of this Article VIII are intended solely for the benefit of the parties to this Purchase Agreement and not for the benefit of, nor may any provision hereby be enforced by, any other Person.

## ARTICLE IX

## SURVIVAL OF CERTAIN PROVISIONS

Section 9.1 Survival of Certain Provisions. The representations, warranties, covenants and agreements contained in this Purchase Agreement shall survive (a) the execution and delivery of this Purchase Agreement, the Notes, the Guarantees and the Warrants and (b) the purchase or transfer by any Purchaser of any Note or Warrant or portion thereof or interest therein. All such provisions are binding upon and may be relied upon by any subsequent holder or beneficial owner of a Note or Warrant, regardless of any investigation made at any time by or on behalf of any Purchaser or any other holder or beneficial owner of a Note or Warrant. All

statements contained in any certificate or other instrument delivered by or on behalf of any party hereto pursuant to this Purchase Agreement shall be deemed to have been relied upon by each other party hereto and shall survive the consummation of the transactions contemplated hereby regardless of any investigation made by or on behalf of any such party. The Transaction Documents embody the entire agreement and understanding among the parties hereto and supersede all prior agreements and understandings relating to the subject matter hereof.

## ARTICLE X

## TERMINATION

Section 10.1 Termination. This Purchase Agreement (a) shall be terminated automatically without further notice or action by any party hereto if the M&A Agreement has been terminated prior to the Initial Closing Date, (b) may be terminated by the Purchasers if the Initial Closing Date has not occurred by the date that is 60 days after the date of this Purchase Agreement and (c) may be terminated upon the mutual written agreement of all parties hereto.

## ARTICLE XI

## NOTICES

Section 11.1 Notices. All statements, requests, notices and agreements hereunder shall be in writing and delivered by hand, mail, electronic mail, overnight courier or telefax as follows:

(a) if to any Purchaser, in accordance with Schedule 1; and

(b) if to the Issuer, to:

VIVUS, Inc.
900 East Hamilton Avenue, Suite 550
Campbell, California 95008
Attention: Chief Financial Officer and General Counsel
Electronic mail: cfo@vivus.com;
generalcounsel@vivus.com

## ARTICLE XII

## SUCCESSORS AND ASSIGNS

Section 12.1 Successors and Assigns. This Purchase Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors, permitted assignees and permitted transferees. So long as any of the Notes or Warrants are outstanding, the Issuer may not assign any of its rights or obligations hereunder or any interest herein without the prior written consent of the Purchasers except as permitted in accordance with the Indenture and the Warrants, as applicable.

ARTICLE XIII

SEVERABILITY

Section 13.1 Severability. If any term, covenant, restriction or provision of this Purchase Agreement is held by a court of competent jurisdiction to be invalid, illegal, void, prohibited or unenforceable, the remainder of the terms, covenants, restrictions and provisions set forth herein shall remain in full force and effect and shall in no way be invalidated, rendered illegal, made void, prohibited or made unenforceable, and the parties hereto shall use their best efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, covenant, restriction or provision. It is hereby stipulated and declared to be the intention of the parties hereto that they would have executed the remaining terms, covenants, restrictions and provisions without including any of such that may be hereafter invalidated, rendered illegal, made void, prohibited or made unenforceable.

ARTICLE XIV

WAIVER OF JURY TRIAL

Section 14.1 WAIVER OF JURY TRIAL. TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH PURCHASER AND THE ISSUER HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS PURCHASE AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

ARTICLE XV

GOVERNING LAW; CONSENT TO JURISDICTION

Section 15.1 Governing Law; Consent to Jurisdiction. THIS PURCHASE AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL SUBSTANTIVE LAWS OF THE STATE OF NEW YORK WITHOUT REFERENCE TO THE RULES THEREOF RELATING TO CONFLICTS OF LAW OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK, AND THE OBLIGATIONS, RIGHTS AND REMEDIES OF THE PARTIES HEREUNDER SHALL BE DETERMINED IN ACCORDANCE WITH SUCH LAWS. To the extent permitted by applicable Law, the parties hereto hereby submit to the non-exclusive jurisdiction of the U.S. federal and state courts of competent jurisdiction in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Purchase Agreement or the transactions contemplated hereby.

ARTICLE XVI

COUNTERPARTS

Section 16.1 Counterparts. This Purchase Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Purchase Agreement. Any counterpart may be executed by facsimile or other electronic transmission, and such facsimile or other electronic transmission shall be deemed due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original.

## ARTICLE XVII

## TABLE OF CONTENTS AND HEADINGS

Section 17.1 Table of Contents and Headings. The Table of Contents and headings of the Articles and Sections of this Purchase Agreement have been inserted for convenience of reference only, are not to be considered a part hereof and shall in no way modify or restrict any of the terms or provisions hereof.

{SIGNATURE PAGES FOLLOW}

If the foregoing is in accordance with your understanding of this Purchase Agreement, kindly sign and return to us one of the counterparts hereof, whereupon it will become a binding agreement among us and you in accordance with its terms.

Very truly yours,

VIVUS, INC.

By: /s/ John P. Amos
Name: John P. Amos
Title: Chief Executive Officer

PURCHASERS:

ATHYRIUM OPPORTUNITIES III CO-INVEST 1 LP

By: Athyrium Opportunities Associates Co-Invest LLC, its general partner

By: /s/ Andrew C. Hyman
Name: Andrew C. Hyman
Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES II ACQUISITION LP

By: Athyrium Opportunities Associates II LP, its general partner

By: Athyrium GP Holdings LLC, its general partner

By: /s/ Andrew C. Hyman
Name: Andrew C. Hyman
Title: Authorized Signatory

**ANNEX A**
**RULES OF CONSTRUCTION AND DEFINED TERMS**

Unless the context otherwise requires, in this Annex A and each Transaction Document (or other document) to which this Annex A is attached:

(a) A term has the meaning assigned to it and an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP, unless any Transaction Document (or other document) otherwise provides.

(b) Where any payment is to be made, any funds are to be applied or any calculation is to be made under any Transaction Document (or other document) on a day that is not a Business Day, unless any Transaction Document (or other document) otherwise provides, such payment shall be made, such funds shall be applied and such calculation shall be made on the succeeding Business Day, and payments shall be adjusted accordingly, including interest unless otherwise specified.

(c) Words of the masculine, feminine or neuter gender shall mean and include the correlative words of other genders.

(d) The definitions of terms shall apply equally to the singular and plural forms of the terms defined.

(e) The terms "include", "including" and similar terms shall be construed as if followed by the phrase "without limitation".

(f) The word "or" is not exclusive.

(g) Unless otherwise specified, references to an agreement or other document include references to such agreement or document as from time to time amended, restated, reformed, supplemented or otherwise modified in accordance with the terms thereof (subject to any restrictions on such amendments, restatements, reformations, supplements or modifications set forth in this Annex A or any Transaction Document (or other document)) and include any Annexes, Exhibits and Schedules attached thereto.

(h) Unless otherwise specified, references to any Law shall include such Law as from time to time in effect, including any amendment, modification, codification, replacement or reenactment thereof or any substitution therefor.

(i) References to any Person shall be construed to include such Person's successors and permitted assigns (subject to any restrictions on assignment, transfer or delegation set forth in this Annex A or any Transaction Document (or other document)), and any reference to a Person in a particular capacity excludes such Person in other capacities.

(j) The word "will" shall be construed to have the same meaning and effect as the word "shall".

(k) The words “hereof”, “herein”, “hereunder” and similar terms when used in this Annex A or any Transaction Document (or other document) shall refer to this Annex A or such Transaction Document (or other document) as a whole and not to any particular provision hereof or thereof, and references to Articles, Sections, Annexes, Schedules and Exhibits herein and therein are references to Articles and Sections of, and Annexes, Schedules and Exhibits to, the relevant Transaction Document (or other document) unless otherwise specified.

(l) In the computation of a period of time from a specified date to a later specified date, the word “from” means “from and including” and each of the words “to” and “until” means “to but excluding”.

(m) References to any action, remedy or method of judicial proceeding for the enforcement of the rights of creditors or of security shall be deemed to include, in respect of any jurisdiction other than the State of New York, references to such action, remedy or method of judicial proceeding for the enforcement of the rights of creditors or of security available or appropriate in such jurisdiction as shall most nearly approximate such action, remedy or method of judicial proceeding described or referred to in the relevant Transaction Document (or other document).

(n) References to any term having the meaning set forth in the Indenture shall mean the meaning set forth in the Indenture as of the Initial Closing Date.

"$" means lawful money of the United States.

"Accredited Investor" means an "accredited investor" as defined in Rule 501(a)(1), (a)(2), (a)(3) or (a)(7) under the Securities Act that is not (i) a QIB or (ii) a Person other than a U.S. person (as defined in Regulation S) that acquires Notes in reliance on Regulation S.

"Additional Notes" means the 10.375% Senior Secured Notes due 2024 of the Issuer in the initial Outstanding Principal Balance of up to $10,000,000 that may be issued on the Subsequent Closing Date pursuant to Section 2.01(c) of the Indenture and Section 3.2.

"Affiliate" means, with respect to any specified Person, another Person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the specified Person. For purposes of this definition, "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of Voting Stock, by contract or otherwise, and "controlled" has a meaning correlative thereto.

"Applicable Product Laws" has the meaning set forth in Section 5.20.

"Business Day" means any day other than a Saturday, a Sunday or any other day on which banking institutions are authorized or required by Law to close in New York City or the city in which the Trustee's corporate trust office is located.

"Capital Stock" means (a) in the case of a corporation, corporate stock or shares, (b) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock, (c) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited) and membership rights, and (d) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person, in each case to the extent treated as equity in accordance with GAAP, but excluding from all of the foregoing any debt securities convertible into or exchangeable for Capital Stock whether or not such debt securities include any right of participation with Capital Stock.

"Closing Date" means each of the Initial Closing Date and the Subsequent Closing Date.

"Code" means the U.S. Internal Revenue Code of 1986, as amended.

"Collateral" means all property subject, or purported to be subject from time to time, to a Lien under the Security Documents.

"Collateral Agent" means U.S. Bank National Association in its capacity as "Collateral Agent" under the Indenture and under the Security Documents and any successor thereto in such capacity.

"Collateral Agreement" means that certain collateral agreement, to be dated as of the Initial Closing Date, to which the Issuer, the Trustee and the Collateral Agent will be party.

"Commission" means the U.S. Securities and Exchange Commission or any successor thereto.

"Common Stock" means (i) the Issuer's common stock, par value $0.001 per share, and (ii) any other capital stock into which such common stock is reclassified or reconstituted.

"Confidential Information" means, as it relates to any Purchaser (or its Affiliates), all information (whether written or oral, or in electronic or other form) furnished to the Issuer or its Affiliates at any time concerning such Purchaser or its Affiliates (including any of its equityholders), including any and all information regarding any aspect of such Purchaser's business, including its owners, funds, strategy, market views, structure, investors or potential investors. Such Confidential Information includes any IRS Form W-9 or W-8 (or any similar type of form) provided by such Purchaser to the Issuer. Notwithstanding the foregoing definition, "Confidential Information" shall not include information that is (v) independently developed or discovered by the Issuer without use of or access to any information described in the second preceding sentence, as demonstrated by documentary evidence, (w) already in the public domain at the time the information is disclosed or has become part of the public domain after such disclosure through no breach of this Purchase Agreement, (x) lawfully obtainable from other sources, (y) required to be disclosed in any document to be filed with any Governmental Authority or otherwise required to be disclosed under applicable Law or judicial or administrative proceedings (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigation demand or similar process) or pursuant to requests from regulatory agencies having oversight over the Issuer or (z) required to be disclosed by court or administrative order or under securities Laws applicable to any party to this Purchase Agreement or pursuant to the rules and regulations of any stock exchange or stock market on which securities of the Issuer or such Purchaser or its respective Affiliates may be listed for trading.

"Controlled Group" means any organization that is a member of a controlled group of corporations within the meaning of Section 414 of the Code.

"Convertible Senior Notes" means the Issuer's 4.50% Convertible Senior Notes due May 1, 2020.

"Custodian" has the meaning set forth in Section 3.2.

"Custodian Agreement" means that certain Custodian Agreement to be entered into between the Issuer, the Custodian and the Purchasers in respect of the Initial Closing Date.

"Default" means any event that is, or after notice or passage of time or both would be, an Event of Default.

"Definitive Security" has the meaning set forth in the Indenture.

"DTC" means The Depository Trust Company (including its nominees).

"Enforceability Exceptions" has the meaning set forth in Section 5.6.

"Environmental Laws" has the meaning set forth in Section 5.22.

"Equity Interests" means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

"ERISA" means the U.S. Employee Retirement Income Security Act of 1974, as amended.

"Event of Default" has the meaning set forth in the Indenture.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

"Exchange Act Documents" has the meaning set forth in Section 5.2.

"FDA" means the U.S. Food and Drug Administration or any successor thereto.

"GAAP" means generally accepted accounting principles as in effect in the United States from time to time.

"Global Security" has the meaning set forth in the Indenture.

"Governmental Authority" means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, arbitrator, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"Guarantee" means any guarantee of the obligations of the Issuer under the Indenture and the Notes by any Person in accordance with the provisions of the Indenture.

"Hazardous Materials" means any material, chemical, substance, waste, pollutant, contaminant, compound, mixture or constituent thereof, in any form or amount, including petroleum (including crude oil or any fraction thereof) and petroleum products, natural gas liquids, asbestos and asbestos containing materials, naturally occurring radioactive materials, brine and drilling mud, or that can give rise to liability under any Environmental Law.

"Indemnified Liabilities" has the meaning set forth in Section 8.1(a).

"Indenture" means that certain indenture for the Notes, to be dated as of the Initial Closing Date, among the Issuer, any Subsidiary Guarantors, the Trustee and the Collateral Agent, in the form attached as Exhibit B.

"INHAM Exemption" has the meaning set forth in Section 4.3(a)(iii)(z).

"Initial Closing Date" has the meaning set forth in Section 3.1.

"Initial Closing Purchase Price" has the meaning set forth in Section 3.2.

"Intellectual Property" has the meaning set forth in Section 5.15(a).

"IRS" means the U.S. Internal Revenue Service or any successor thereto.

"Issuer" has the meaning set forth in the preamble hereto.

"Issuer Indemnitee" has the meaning set forth in Section 8.1(b).

"Issuer Indemnitees" has the meaning set forth in Section 8.1(b).

"Laws" means, collectively, all international, foreign, federal, state and local laws, statutes, treaties, rules, guidelines, regulations, ordinances, judgments, orders, writs, injunctions, decrees, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

"Lien" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable Law (including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the UCC (or equivalent statutes) of any jurisdiction); provided, that in no event shall an operating lease be deemed to constitute a Lien.

"M&A Agreement" means that certain Asset Purchase Agreement dated as of April 30, 2018 between Janssen Pharmaceuticals, Inc. and the Issuer.

"Material Adverse Effect" means a material adverse effect on (a) the business, properties, management, financial position, stockholders' equity or results of operations of the Issuer and its Subsidiaries taken as a whole, (b) on the ability of the Obligors to perform their obligations under the Transaction Documents, including the issuance and sale of the Notes and the Warrants, or (c) the validity or enforceability of the Transaction Documents.

"Money Laundering Laws" has the meaning set forth in Section 5.29.

"Nasdaq" means the NASDAQ Global Select Market.

"Notes" means the 10.375% Senior Secured Notes due 2024 of the Issuer, substantially in the form of Exhibit A to the Indenture, and shall include, for the avoidance of doubt, the Original Notes and the Additional Notes, as and to the extent issued pursuant to the terms and conditions of the Indenture and this Purchase Agreement.

"Obligors" means, collectively, the Issuer and the Subsidiary Guarantors.

"OFAC" means the Office of Foreign Assets Control of the U.S. Department of the Treasury or other relevant U.S. sanctions authority.

"Optional Secured Notes" has the meaning set forth in the Indenture.

"Original Notes" means the 10.375% Senior Secured Notes due 2024 of the Issuer in the initial Outstanding Principal Balance of $110,000,000 to be issued on the Initial Closing Date pursuant to Section 2.01(b) of the Indenture and Section 3.2.

"Outstanding Principal Balance" means, with respect to any Note or other evidence of indebtedness outstanding, the total principal amount of such Note or other evidence of indebtedness unpaid and outstanding at any time.

"Pancreaze®" means the product referred to as Pancreaze® (whether marketed under such name or any other name and including any authorized generic).

"Paying Agent" means an office or agency where Notes may be presented for payment maintained by the Issuer in accordance with the Indenture.

"Person" means an individual, corporation, company, partnership, association, limited liability company, unincorporated organization, trust, joint stock company or joint venture, a Governmental Authority or any other entity.

"Plan" has the meaning set forth in Section 5.24.

"Plan Assets" has the meaning given to such term by Section 3(42) of ERISA and regulations issued by the U.S. Department of Labor.

"Product Authorizations" has the meaning set forth in Section 5.20.

"PTE" has the meaning set forth in Section 4.3(a)(iii)(w).

"PTO" means the U.S. Patent and Trademark Office.

"Purchase Agreement" means this agreement.

"Purchase Price" has the meaning set forth in Section 3.2.

"Purchaser" has the meaning set forth in Section 1.1.

"Purchaser Indemnitee" has the meaning set forth in Section 8.1(a).

"Purchaser Indemnitees" has the meaning set forth in Section 8.1(a).

"Purchasers" has the meaning set forth in Section 1.1.

"QIB" means a qualified institutional buyer within the meaning of Rule 144A.

"QPAM Exemption" means PTE 84-14 (issued December 21, 1982, as subsequently amended).

"Regulation S" means Regulation S under the Securities Act.

"Regulatory Authorities" has the meaning set forth in Section 5.21.

"Release" means any spilling, leaking, seepage, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, depositing, dispersing or migrating in, into or through the environment or in, into, from or through any building or structure.

"Responsible Officer" means, with respect to any Obligor, any manager, director or officer of such Obligor.

"Rule 144A" means Rule 144A under the Securities Act.

"Sanctioned Country" has the meaning set forth in Section 5.30.

"Sanctions" has the meaning set forth in Section 5.30.

"Sarbanes-Oxley Act" has the meaning set forth in Section 5.33.

"Securities Act" means the U.S. Securities Act of 1933, as amended.

"Security Documents" means the security agreements, pledge agreements, mortgages, collateral assignments and related agreements, as amended, supplemented, restated, renewed, refunded, replaced, restructured, repaid, refinanced or otherwise modified from time to time, creating, perfecting or otherwise evidencing the security interests in, or other Liens on, the Collateral as contemplated by the Indenture.

"Similar Law" has the meaning set forth in Section 4.3(b).

"Source" has the meaning set forth in Section 4.3(a).

"Subsequent Closing Date" has the meaning set forth in Section 3.2.

"Subsequent Closing Purchase Price" has the meaning set forth in Section 3.2.

"Subsidiary" means, with respect to any Person, (a) any corporation, association or other business entity (other than a partnership, joint venture or limited liability company) of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time of determination owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof, and (b) any partnership, joint venture or limited liability company of which (x) more than 50% of the capital accounts, distribution rights, total equity and voting interests or general and limited partnership interests, as applicable, are owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof, whether in the form of membership, general, special or limited partnership interests or otherwise, and (y) such Person or any Subsidiary of such Person is a controlling general partner or otherwise controls such entity. For purposes of clarity, a Subsidiary of a Person shall not include any Person that is under common control with the first Person solely by virtue of having directors, managers or trustees in common and shall not include any Person that is solely under common control with the first Person (i.e., a sister company with a common parent).

"Subsidiary Guarantors" means any Subsidiary of the Issuer that is party to the Indenture as of the applicable Closing Date (if any).

"Transaction Documents" means this Purchase Agreement, the Indenture, the Notes, the Warrants, the Guarantees, the Security Documents and each other agreement pursuant to which the Collateral Agent (or its agent) is granted a Lien to secure the obligations under the Indenture, the Notes or the Guarantees.

"Trustee" has the meaning set forth in Section 3.2.

"UCC" means the Uniform Commercial Code as in effect in the State of New York; provided, that, if perfection, the effect of perfection or non-perfection or the priority of any security interest in any Collateral is governed by the Uniform Commercial Code (or equivalent Law) as in effect in a jurisdiction other than the State of New York, then "UCC" means the Uniform Commercial Code (or equivalent Law) as in effect from time to time in such other jurisdiction for purposes of the provisions relating to such perfection, effect of perfection or non-perfection or priority.

"U.S." or "United States" means the United States of America, its 50 states, each territory thereof and the District of Columbia.

"Voting Stock" of any Person as of any date means the Capital Stock of such Person that is at the time entitled to vote in the election of the board of directors of such Person.

"Warrants" means that certain warrant or warrants, to be dated the Initial Closing Date, executed by the Issuer and acknowledged by the Purchasers named therein, in the form attached as Exhibit A.

**EXHIBIT A**

**FORM OF WARRANT**

See attached.

THIS COMMON STOCK PURCHASE WARRANT AND THE SHARES THAT MAY BE PURCHASED HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER APPLICABLE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. THIS COMMON STOCK PURCHASE WARRANT AND THE SHARES THAT MAY BE PURCHASED HEREUNDER MAY NOT BE SOLD OR OFFERED FOR SALE IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 AND REGISTRATION OR QUALIFICATION UNDER ANY OTHER SECURITIES LAWS OF ANY APPLICABLE STATE OR OTHER JURISDICTION OR (B) AN EXEMPTION FROM REGISTRATION UNDER SUCH ACT OR SUCH LAWS.

**VIVUS, INC.**

**COMMON STOCK PURCHASE WARRANT**

**WHEREAS**, capitalized terms used herein shall have the meanings ascribed to such terms in Section 11 hereof;

**WHEREAS**, the Company and the Holder and certain other parties thereto have entered into that certain Purchase Agreement (as amended, modified or supplemented, the "Purchase Agreement") pursuant to which the Company will issue to the Holder the Company's 10.375% Senior Secured Notes due 2024 (the "Senior Notes");

**WHEREAS**, in connection with the issuance of the Senior Notes to the Holder, the Company also wishes to issue this Warrant to the Holder; and

**WHEREAS**, the Company and the Holder desire to set forth herein the rights and obligations of the Company and the Holder both prior to and following the exercise of this Warrant;

**NOW THEREFORE**, in consideration of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company hereby issues this Warrant to the Holder, and the Company and the Holder hereby agree as follows:

Date of Issuance: June 8, 2018 Certificate No. [ ]

**THIS IS TO CERTIFY** that [ ] and its permitted transferees, successors and assigns (the "Holder") is the holder of this Warrant (this "Warrant") entitling the Holder to purchase from VIVUS, Inc., a Delaware corporation (the "Company"), at the price of $0.3951 per share (the "Exercise Price"), at any time after the date hereof (the "Commencement Date") and expiring on June 8, 2024 (the "Expiration Date"), up to [ ] shares of the fully paid and non-assessable common stock, par value $0.001 per share, of the Company (as such number may be adjusted as provided herein). The maximum number of shares of Common Stock that may be purchased pursuant to this Warrant is referred to herein as the "Aggregate Number". The Aggregate Number and Exercise Price set forth above shall also be adjusted under certain conditions specified in Section 5 hereof.

**SECTION 1. This Warrant; Transfer and Exchange.**

(a) This Warrant. This Warrant and the rights and privileges of the Holder under this Warrant may be exercised by the Holder in whole or in part as provided herein, shall survive any termination of the Purchase Agreement and, as more fully set forth in Section 1(b) hereof and Section 7 hereof, may, subject to the terms of this Warrant, be transferred by the Holder to any other Person or Persons who meet the requirements set forth herein at any time or from time to time, in whole or in part, regardless of whether the Holder retains any or all rights under the Purchase Agreement.

(b) Transfer and Exchanges. The Company shall initially record this Warrant on a register to be maintained by the Company and, subject to Section 7 hereof, from time to time thereafter shall reflect the transfer of this Warrant on such register when surrendered for transfer in accordance with the terms of this Warrant and properly endorsed, accompanied by appropriate instructions, and further accompanied by payment in cash or by check, bank draft or money order payable to the order of the Company, in United States currency, of an amount equal to any stamp or other tax or governmental charge or fee required to be paid in connection with the transfer of this Warrant. Upon any such transfer, a new warrant or warrants shall be issued to the transferee (and the Holder in the event this Warrant is only partially transferred), and the surrendered warrant shall be cancelled. This Warrant may be exchanged at the option of the Holder, when surrendered at the Principal Office, for another warrant or other warrants of like tenor and representing in the aggregate the right to purchase a like number of shares of Common Stock. Any attempt to transfer this Warrant in violation of the provisions of this Section 1(b) shall be null and void and the Company shall not register or effect any such transfer.

**SECTION 2. Exercise.**

(a) Right to Exercise. At any time after the Commencement Date and on or before the Expiration Date, the Holder, in accordance with the terms hereof, may exercise this Warrant, in whole at any time or in part from time to time, by delivering this Warrant to the Company during normal business hours on any Business Day at the Principal Office, together with the notice of exercise in the form attached hereto as Exhibit A and made a part hereof (the "Notice of Exercise"), duly executed, and payment of the Exercise Price per share for each share purchased, as specified in the Notice of Exercise. The aggregate amount (the "Aggregate Exercise Price") to be paid for the shares to be purchased (the "Exercise Amount") shall equal the product of (i) the Exercise Amount multiplied by (ii) the Exercise Price. If the Expiration Date is not a Business Day, then this Warrant may be exercised on the next succeeding Business Day.

(b) Payment of the Aggregate Exercise Price. Payment of the Aggregate Exercise Price shall be made to the Company in cash or other immediately available funds or as provided in Section 2(c) hereof or a combination thereof. In the case of payment of all or a portion of the Aggregate Exercise Price pursuant to Section 2(c) hereof, the direction by the Holder to make a "Cashless Exercise" shall serve as accompanying payment for that portion of the Aggregate Exercise Price.

(c) Cashless Exercise. If the Company shall receive written notice from the Holder at the time of exercise of this Warrant that the Holder elects to make a "Cashless Exercise"

of this Warrant, the Company shall deliver to the Holder (without payment by the Holder of any Exercise Price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where

X = the number of Warrant Shares to be issued to the Holder;

Y = the number of Warrant Shares purchasable under this Warrant (at the date of such calculation) or, if only a portion of this Warrant is being exercised, the number of Warrant Shares purchasable under the portion of this Warrant being exercised (at the date of such calculation);

A = the Fair Market Value Per Share; and

B = the Exercise Price (as adjusted to the date of such calculation).

(d) Issuance of Shares of Common Stock. Upon receipt by the Company of this Warrant at the Principal Office in proper form for exercise, and accompanied by the Notice of Exercise and payment of the Aggregate Exercise Price as aforesaid, the Holder shall be deemed to be the holder of record of the shares of Common Stock issuable upon such exercise, notwithstanding that certificates representing such shares of Common Stock may not then be actually delivered. Within 10 Business Days after such surrender of this Warrant, delivery of the Notice of Exercise and payment of the Aggregate Exercise Price as aforesaid, the Company shall cause its transfer agent to issue the Warrant Shares so purchased to the Holder in book-entry form. Any reference in this Warrant to the issuance of a certificate or certificates representing the Warrant Shares shall also be deemed a reference to the book-entry issuance of such Warrant Shares.

(e) Fractional Shares. The Company may, but shall not be required to, deliver fractions of shares of Common Stock upon exercise of this Warrant. If any fraction of a share of Common Stock would be deliverable upon an exercise of this Warrant, the Company may, in lieu of delivering such fraction of a share of Common Stock, make a cash payment to the Holder in an amount equal to the same fraction of the Fair Market Value Per Share.

(f) Partial Exercise. In the event of a partial exercise of this Warrant, the Company shall issue to the Holder a Warrant in like form for the unexercised portion thereof that has not expired.

(g) Deemed Automatic Exercise. If, on the Expiration Date, this Warrant remains unexercised (in whole or in part) and the Fair Market Value Per Share is greater than the Exercise Price, then this Warrant shall (automatically and without any action on the part of the Holder) be deemed exercised in full in a "Cashless Exercise" in accordance with Section 2(a) hereof, Section 2(b) hereof and Section 2(c) hereof.

**SECTION 3. Payment of Taxes**. The Company shall pay all stamp taxes attributable to

the initial issuance of shares or other securities issuable upon the exercise of this Warrant or issuable pursuant to Section 5 hereof, excluding any tax or taxes that may be payable because of a transfer involved in the issuance or delivery of any certificates for shares or other securities issued or delivered upon exercise of this Warrant in a name other than that of the Holder surrendered upon the exercise of this Warrant, and the Company shall not be required to issue or deliver Warrant Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

**SECTION 4. Replacement Warrant**. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of an affidavit of loss by the Holder to the Company in customary form, and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall issue and deliver in exchange and substitution for and upon cancellation of the mutilated Warrant, or in lieu of and in substitution for the Warrant lost, stolen or destroyed, a new Warrant of like tenor and representing an equivalent right or interest.

**SECTION 5. Adjustments to the Aggregate Number and the Exercise Price**.

(a) Adjustments to Exercise Price. The Exercise Price shall be subject to adjustment from time to time as provided in this Section 5 (without duplication, but in each case after taking into consideration any prior adjustments pursuant to this Section 5) upon the occurrence of any of the following events:

(i) The issuance of Common Stock as a dividend or distribution to all holders of Common Stock, or a subdivision, combination, split, reverse split or reclassification of the outstanding Common Stock into a greater or smaller number of Common Stock, in which event the Exercise Price shall be adjusted based on the following formula:

$$E_1 = E_0 \times \frac{N_0}{N_1}$$

where:

$E_1$ = the Exercise Price in effect immediately after (i) in the case of a dividend or distribution, the start of business on the first date on which the Common Stock can be traded without the right to receive such dividend or distribution (the "Ex-Date"), or (ii) the consummation of the transaction in the case of a subdivision, combination, split, reverse split or reclassification;

$E_0$ = the Exercise Price in effect immediately prior to (i) the start of business on the Ex-Date in the case of a dividend or distribution or (ii) the consummation of the transaction in the case of a subdivision, combination, split, reverse split or reclassification;

$N_0$ = the number of outstanding shares of Common Stock (including any shares issuable on exercise or conversion of outstanding options, warrants and convertible securities, but excluding any shares held by the Company or any of its subsidiaries) (together, "Common Stock Deemed Outstanding") immediately prior to (i) the start of business on the record date in the case of a dividend or distribution or (ii) the consummation of the transaction in the case of a subdivision, combination, split, reverse split or reclassification; and

$N_1$ = the number of shares of Common Stock equal to (i) in the case of a dividend or distribution, the sum of the Common Stock Deemed Outstanding immediately prior to the start of business on the record date for such dividend or distribution plus the total number of shares of Common Stock issued pursuant to such dividend or distribution, or (ii) in the case of a subdivision, combination, split, reverse split or reclassification, the shares of Common Stock Deemed Outstanding immediately after such subdivision, combination, split, reverse split or reclassification.

Such adjustment shall become effective immediately after (i) the start of business on the Ex-Date in the case of a dividend or distribution or (ii) the consummation of the transaction in the case of a subdivision, combination, split, reverse split or reclassification. If any dividend or distribution or subdivision, combination, split, reverse split or reclassification of the type described in this Section 5(a) is declared or announced but not so paid or made, the Exercise Prices shall again be adjusted to the applicable Exercise Prices that would then be in effect if such dividend or distribution or subdivision, combination, split, reverse split or reclassification had not been declared or announced, as the case may be.

(ii) The issuance as a dividend or distribution to all holders of Common Stock of evidences of indebtedness, securities (including convertible securities) of the Company or any other Person (other than Common Stock), cash or other property (excluding any dividend or distribution covered by clause (i) above), in which event the Exercise Price will be adjusted based on the following formula:

$$E_1 = E_0 \times \frac{P\text{-}FMV}{P}$$

where:

$E_1$ = the Exercise Price in effect immediately after the start of business on the Ex-Date for such dividend or distribution;

$E_0$ = the Exercise Price in effect immediately prior to the start of business on the Ex-Date for such dividend or distribution;

P = the Fair Market Value Per Share as of immediately prior to the start of business on the second Business Day preceding the Ex-Date for such dividend or distribution; and

FMV = the Fair Value of the portion of such dividend or distribution applicable to one share of Common Stock as of the start of business on the date of such dividend or distribution.

Such decrease shall become effective immediately after the start of business on the Ex-Date for such dividend or distribution. In the event that such dividend or distribution is declared or announced but not so paid or made, the Exercise Price shall again be adjusted to be the Exercise Price which would then be in effect if such dividend or distribution had not been declared or announced.

(iii) The payment in respect of any tender offer or exchange offer by the Company for shares of Common Stock, where the cash and Fair Value of any other consideration included in the payment per share of Common Stock exceeds the Fair Market Value Per Share as of the start of business on the second Business Day preceding the

expiration date of the tender or exchange offer (the "Offer Expiration Date"), in which event the Exercise Price will be adjusted based on the following formula:

$$E_1 = E_0 \times \frac{(N_0 \times P) - A}{(P \times N_1)}$$

where:

$E_1$ = the Exercise Price in effect immediately after the start of business on the Offer Expiration Date;

$E_0$ = the Exercise Price in effect immediately prior to the start of business on the Offer Expiration Date;

$N_0$ = the number of shares of Common Stock Deemed Outstanding immediately prior to the expiration of the tender or exchange offer (prior to giving effect to the purchase or exchange of Common Stock);

$N_1$ = the number of shares of Common Stock Deemed Outstanding immediately after the expiration of the tender or exchange offer (prior to giving effect to the purchase or exchange of Common Stock);

A= the aggregate cash and Fair Value of any other consideration payable for the shares of Common Stock purchased in such tender offer or exchange offer; and

P = the Fair Market Value Per Share as of the start of business on the second Business Day preceding the Offer Expiration Date.

An adjustment, if any, to the Exercise Price pursuant to this clause (iii) shall become effective immediately after the close of business on the Offer Expiration Date. In the event that the Company or a subsidiary of the Company is obligated to purchase shares of Common Stock pursuant to any such tender offer or exchange offer, but the Company or such subsidiary is permanently prevented by applicable law from effecting any such purchases, or all such purchases are rescinded, then the Exercise Price shall again be adjusted to be the Exercise Price which would then be in effect if such tender offer or exchange offer had not been made. Except as set forth in the preceding sentence, if the application of this clause (iii) to any tender offer or exchange offer would result in an increase in the Exercise Price, no adjustment shall be made for such tender offer or exchange offer under this clause (iii).

(iv) If any single action would require adjustment of the Exercise Price pursuant to more than one subsection of this Section 5(a), only one adjustment shall be made and such adjustment shall be the amount of adjustment that has the highest absolute value relative to the rights and interests of the Holder.

(v) Notwithstanding this Section 5(a) or any other provision of this Warrant, if an Exercise Price adjustment becomes effective on any Ex-Date, and a Warrant has been exercised on or after such Ex-Date and on or prior to the related record date resulting in the Person issued Common Stock being treated as the record holder of such Common Stock on or prior to the record date, then, notwithstanding the Exercise Price adjustment provisions in this Section 5(a), the Exercise Price adjustment relating to such Ex-Date will not be made. Instead, such Person will be treated as if it were the record owner

of such Common Stock on an un-adjusted basis and participate in the related dividend, distribution or other event giving rise to such adjustment.

(b) Adjustments to Aggregate Number. Concurrently with any adjustment to the Exercise Price under Section 5(a), the Aggregate Number will be adjusted such that the Aggregate Number in effect immediately following the effectiveness of such adjustment will be equal to the Aggregate Number in effect immediately prior to such adjustment, multiplied by a fraction, (i) the numerator of which is the Exercise Price in effect immediately prior to such adjustment and (ii) the denominator of which is the Exercise Price in effect immediately following such adjustment.

(c) Certain Distributions of Rights and Warrants.

(i) Rights or warrants distributed by the Company to all holders of Common Stock entitling the holders thereof to subscribe for or purchase the Company's securities (either initially or under certain circumstances), which rights or warrants, until the occurrence of a specified event or events (a "Trigger Event"):

(1) are deemed to be transferred with such Common Stock;

(2) are not exercisable; and

(3) are also issued in respect of future issuances of Common Stock,

shall be deemed not to have been distributed for purposes of this Section 5 (and no adjustment to the Exercise Price or the Aggregate Number under this Section 5 will be made) until the occurrence of the earliest Trigger Event, whereupon such rights and warrants shall be deemed to have been distributed and an appropriate adjustment (if any is required) to the Exercise Price and the Aggregate Number shall be made under this Section 5 (subject in all respects to Section 5(d) below).

(ii) If any such right or warrant is subject to events, upon the occurrence of which such rights or warrants become exercisable to purchase different securities, evidences of indebtedness or other assets, then the date of the occurrence of any and each such event shall be deemed to be the date of distribution and record date with respect to new rights or warrants with such rights (subject in all respects to Section 5(d) below).

(iii) In addition, except as set forth in Section 5(d), in the event of any distribution (or deemed distribution) of rights or warrants, or any Trigger Event or other event (of the type described in clause (ii) above) with respect thereto that was counted for purposes of calculating a distribution amount for which an adjustment to the Exercise Price and the Aggregate Number under this Section 5 was made (including any adjustment contemplated in Section 5(d)):

(1) in the case of any such rights or warrants that shall all have been redeemed or repurchased without exercise by the holders thereof, the Exercise Price and the Aggregate Number shall be readjusted upon such final redemption or

repurchase to give effect to such distribution or Trigger Event, as the case may be, as though it were a distribution under Section 5(a)(ii), equal to the per share redemption or repurchase price received by a holder or holders of Common Stock with respect to such rights or warrants (assuming such holder had retained such rights or warrants), made to all holders of Common Stock as of the date of such redemption or repurchase; and

(2) in the case of such rights or warrants that shall have expired or been terminated without exercise by the holders thereof, the Exercise Price and the Aggregate Number shall be readjusted as if such rights and warrants had not been issued or distributed.

(d) Stockholder Rights Plans. If the Company has a stockholder rights plan in effect with respect to the Common Stock, upon exercise of this Warrant the Holder shall be entitled to receive, in addition to the Common Stock, the rights under such stockholder rights plan, unless, prior to such exercise, such rights have separated from the Common Stock.

(e) Restrictions on Adjustments.

(i) Except in accordance with Sections 5(a) and 5(b), the Exercise Price and the Aggregate Number will not be adjusted for the issuance of Common Stock or other securities of the Company.

(ii) For the avoidance of doubt, except as otherwise provided in Sections 5(a) and 5(b), neither the Exercise Price nor the Aggregate Number will be adjusted:

(1) upon the issuance of any shares of Common Stock or other securities or any payments pursuant to any other equity incentive plan of the Company;

(2) upon any issuance of any shares of Common Stock pursuant to the exercise of this Warrant;

(3) upon the offer and sale of shares of Common Stock by the Company in a primary offering at a price that is less than Fair Market Value Per Share at the time of such offer and sale; and

(4) upon the issuance of shares of Common Stock or other securities of the Company in connection with a business acquisition transaction.

(iii) No adjustment shall be made to the Exercise Price or the Aggregate Number for any of the transactions described in Section 5(a) if the Company makes provisions for participation in any such transaction with respect to the Holder of this Warrant without exercise of this Warrant on the same basis as with respect to the shares of Common Stock issuable hereunder with notice that the Company's board of directors determines in good faith to be fair and appropriate

(f) Certificate as to Adjustment. As promptly as reasonably practicable following (i) any adjustment of the Exercise Price or the Aggregate Number or (ii) the receipt by the Company of a written request by the Holder, but in each case in any event not later than ten Business Days thereafter, the Company shall furnish to the Holder a certificate of an executive officer certifying the Exercise Price then in effect and the Aggregate Number or the amount, if any, of other shares of stock or other securities or assets then issuable upon exercise of this Warrant, including in the case of clause (i) above setting forth in reasonable detail any adjustment and the facts upon which it is based.

(g) Treatment of Warrant upon a Cash/Public Change of Control. In the event of a Change of Control in which the consideration to be received by the Company's stockholders consists solely of cash, Marketable Securities or a combination thereof (a "Cash/Public Change of Control"), if this Warrant is outstanding immediately prior to such Cash/Public Change of Control, then (i) if the Fair Market Value Per Share is greater than the then applicable Exercise Price, this Warrant shall be automatically exchanged without exercise for the same amount and kind of securities, cash or property as the Holder would have been entitled to receive upon the occurrence of such Cash/Public Change of Control if this Warrant had been exercised in full pursuant to Section 2(c) hereof immediately prior to such Cash/Public Change of Control, and (ii) if the Fair Market Value Per Share is less than or equal to the then applicable Exercise Price, this Warrant will expire immediately prior to the consummation of such Change of Control. If this Warrant is exchanged in accordance with clause (i) above, the Company shall pay or deliver to the Holder the securities, cash or property so contemplated promptly following the consummation of the Cash/Public Change of Control.

(h) Treatment of Warrant upon a Non-Cash/Public Change of Control. If, at any time while this Warrant is outstanding, the Company consummates a Change of Control that is not a Cash/Public Change of Control, then the Holder shall have the right thereafter to receive, upon exercise of this Warrant (in whole at any time or in part from time to time), the same amount and kind of securities, cash or property as the Holder would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, a holder of the number of Warrant Shares then issuable upon such exercise of this Warrant (the "Alternate Consideration"). The Company shall not effect any such Change of Control unless, prior to or simultaneously with the consummation thereof, any successor to the Company, any surviving entity or the Person purchasing or otherwise acquiring such assets or other appropriate Person shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive and the other obligations under this Warrant.

**SECTION 6. Purchase Rights and Right of Offer**.

(a) Purchase Rights. If at any time the Company grants, issues or sells any shares of Common Stock, options, convertible securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of Common Stock (the "Purchase Rights"), then the Holder shall be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights that the Holder would have acquired if the Holder had held the number of Warrant Shares acquirable upon complete exercise of this Warrant immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights

or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights. Anything herein to the contrary notwithstanding, the Holder shall not be entitled to the Purchase Rights granted herein with respect to any issuance or sale by the Company of (i) shares of Common Stock issued upon the exercise of this Warrant, (ii) shares of Common Stock issued directly or upon the exercise of options to directors, officers, employees or consultants of the Company in connection with their service as directors of the Company, their employment by the Company or their retention as consultants by the Company, in each case authorized by the Company's board of directors and issued pursuant to an equity incentive plan of the Company, or (iii) shares of Common Stock issued upon the conversion or exercise of options, warrants or convertible securities issued prior to the Commencement Date, *provided*, that such securities are not amended after the Commencement Date to increase the number of shares of Common Stock issuable thereunder or to lower the exercise or conversion price thereof.

(b) Right of Offer. If at any time while this Warrant is outstanding the Holder should desire to transfer this Warrant (but not, for the avoidance of doubt, the Warrant Shares) to a non-affiliated Person, the Holder shall so notify the Company. If the Company wishes to offer to purchase this Warrant for cash, it shall in good faith determine the current fair value of this Warrant and shall so notify the Holder within five Business Days after the Holder's notice of intent to transfer is received by the Company. In this regard, the Company shall use a Black-Scholes valuation model with (i) a six-month trailing realized volatility, (ii) a maturity-matched U.S. Treasury curve risk-free interest rate, (iii) the actual remaining term on this Warrant and (iv) the 15-day volume weighted average price for the current price (for the 15 trading days preceding the date that the Holder's notice of intent to transfer is received by the Company). The Holder may, at its option and in its sole discretion, accept the Company's offer within five Business Days after the Holder's receipt of such offer.

**SECTION 7. Transfers of this Warrant and the Warrant Shares**.

(a) Generally. Subject to compliance with applicable U.S. federal and state securities Laws, the right of offer set forth in Section 6(b) hereof and the restrictions set forth in this Section 7, the Holder may transfer this Warrant and the Warrant Shares in whole or in part to any Person, and, upon the reasonable request of the Holder, the Company agrees that it shall use commercially reasonable efforts to promptly assist the Holder in making any such transfer in compliance with any applicable U.S. federal and state securities Laws. This Warrant has not been, and the Warrant Shares at the time of their issuance may not be, registered under the Securities Act. For a transfer of this Warrant as an entirety by the Holder, upon surrender of this Warrant to the Company, together with the notice of assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Holder, the Company shall issue a new Warrant of the same denomination to the assignee. For a transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, upon surrender of this Warrant to the Company, together with the notice of assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Holder, the Company shall issue a new Warrant to the assignee, in such denomination as shall be requested by the Holder, and shall issue to the Holder a new Warrant covering the number of Warrant Shares in respect of which this Warrant shall not have been transferred.

(b) Representations by the Holder. The Holder, by its acceptance of this Warrant, represents and warrants to the Company as follows:

(i) this Warrant has been acquired by the Holder, and any Warrant Shares to be acquired by the Holder will be acquired, for the account of the Holder for investment purposes for its own account and not with a view to or for sale in connection with any distribution or reselling thereof in a transaction that would violate the Securities Act or the securities laws of any state of the United States or any other applicable jurisdiction;

(ii) the Holder is an "accredited investor" within the meaning of Rule 501(a) of Regulation D under the Securities Act;

(iii) the Holder is experienced in evaluating and investing in companies engaged in businesses similar to that of the Company;

(iv) the Holder understands that investment in this Warrant (and any Warrant Shares that the Holder acquires) involves substantial risks;

(v) the Holder has such knowledge and experience in financial and business matters so as to be capable of evaluating the merits and risks of its investment in this Warrant (and any Warrant Shares that the Holder acquires) and is able to bear the economic risk of that investment; and

(vi) the Holder understands that this Warrant is, and the Warrant Shares may be, characterized as "restricted securities" under the U.S. federal securities Laws inasmuch as they are being (or may be) acquired from the Company in a transaction not involving a public offering and that under such Laws this Warrant and the Warrant Shares may be resold without registration under the Securities Act only in certain limited circumstances and, accordingly, the Holder represents that it is familiar with Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(c) Covenant by the Holder. The Holder, by its acceptance of this Warrant, covenants with the Company that, prior to and as a condition to the sale or transfer of the Warrant Shares issuable upon exercise of this Warrant, the Holder shall furnish to the Company such customary certificates, representations, agreements and other information as the Company or the Company's transfer agent may reasonably require to confirm that such sale or transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, unless such Warrant Shares are being sold or transferred pursuant to an effective registration statement.

(d) Transfer Restrictions Regarding This Warrant. This Warrant (or any warrants represented hereby) may only be sold, in whole or in part, (i) pursuant to an effective registration statement covering the resale by the Holder of this Warrant under the Securities Act or (ii) pursuant to an exemption from registration under the Securities Act and, if reasonably required by the Company, upon delivery to the Company of a customary opinion of legal counsel

(which may rely on customary certificates and representations), certifications or other evidence to establish that such registration is not required under the Securities Act.

(e) Transfer Restrictions Regarding Warrant Shares. If the Warrant Shares are not registered at the time of issuance, then any Warrant Shares may only be sold (i) pursuant to an effective registration statement under the Securities Act or (ii) pursuant to an exemption from registration under the Securities Act and upon delivery to the Company of a customary opinion of legal counsel (which may rely on customary certificates and representations), certifications or other evidence as may reasonably be required by the Company in order to determine that such registration is not required under the Securities Act. The Holder acknowledges that the Company may place a restrictive legend on any Warrant Shares issued upon exercise in order to comply with applicable securities Laws, unless such Warrant Shares are sold pursuant to an effective registration statement or are otherwise freely tradable under Rule 144.

**SECTION 8. Covenants**. Until the later of (i) the Expiration Date and (ii) the date as of which this Warrant has been exercised in full, the Company hereby covenants to the Holder as set forth in this Section 8.

(a) Validly Issued Shares. All shares of Common Stock that may be issued upon exercise of this Warrant, assuming full payment of the Aggregate Exercise Price, shall, upon delivery by the Company, be duly authorized and validly issued, fully paid and non-assessable, free from all stamp taxes, liens and charges with respect to the issue or delivery thereof and otherwise free of all other security interests, encumbrances and claims (other than security interests, encumbrances and claims to which the Holder is subject prior to or upon the issuance of the applicable Warrant Shares, restrictions under applicable U.S. federal and/or state securities Laws and other transfer restrictions described herein).

(b) Reservation of Shares. The Company shall at all times reserve and keep available out of the aggregate of its authorized but unissued Common Stock or its authorized and issued Common Stock held in its treasury, free of preemptive rights, such number of its duly authorized shares of Common Stock as shall be sufficient to enable the Company to issue the shares of Common Stock issuable upon exercise in full of this Warrant.

(c) Affirmative Actions to Permit Exercise and Realization of Benefits. If any shares of Common Stock reserved or to be reserved for the purpose of the exercise of this Warrant, or any shares or other securities reserved or to be reserved for the purpose of issuance pursuant to Section 5 hereof, require registration with or approval of any Governmental Authority under any U.S. federal or state Law (other than securities Laws) before such shares or other securities may be validly delivered upon exercise of this Warrant, then the Company covenants that it will, at its sole expense, secure such registration or approval, as the case may be (including, without limitation, approvals or expirations of waiting periods required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended).

(d) Integration. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of this Warrant in a manner that

would require the registration under the Securities Act of the sale of this Warrant to the Holder or any assignee of the Holder.

**SECTION 9. Representations and Warranties by the Company**. The Company represents and warrants to the Holder as of the Commencement Date as set forth in this Section 9.

(a) Organizational Matters. The Company (i) is duly organized and validly existing under the Laws of the State of Delaware, (ii) has all requisite corporate power, and has all material governmental licenses, authorizations, consents and approvals, necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same would not reasonably be expected to have a material adverse effect, (iii) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary and where failure so to qualify would (either individually or in the aggregate) reasonably be expected to have a material adverse effect, (iv) has full power, authority and legal right to issue this Warrant and the Warrant Shares and to perform its obligations hereunder and (v) is in material compliance with all applicable Laws to which it is subject.

(b) Enforceability. The making, entry into, issuance and sale of this Warrant and the performance of the Company's obligations hereunder are within the Company's corporate powers and have been duly authorized by all necessary corporate action. This Warrant has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as such enforceability may be limited by (i) bankruptcy, insolvency, reorganization, moratorium or similar Laws of general applicability affecting the enforcement of creditors' rights and (ii) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) No Conflicts. The making, entry into, issuance and sale of this Warrant and the performance of the Company's obligations hereunder (i) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any third party, except for such as have been obtained or made and are in full force and effect, (ii) will not violate any applicable Law or the charter, bylaws or other organizational documents of the Company or any order of any Governmental Authority, (iii) will not violate or result in a default under any indenture, agreement or other instrument binding upon the Company, any of its subsidiaries or the Company's or its subsidiaries' assets or give rise to a right thereunder to require any payment to be made by any such Person and (iv) will not result in the creation or imposition of any lien on any asset of any of the Company or any of its subsidiaries.

(d) No Registration. Assuming the accuracy of the representations made by the Holder herein, the offer and sale by the Company of this Warrant and the delivery of the Warrant Shares upon exercise hereof are not required to be registered pursuant to the provisions of Section 5 of the Securities Act.

(e) Capitalization. The authorized capital stock of the Company consists of 205,000,000 shares, of which 200,000,000 shares are designated as common stock and 5,000,000 shares are designated as preferred stock. As of April 13, 2018, (i) 106,041,014 shares of common

stock of the Company are issued and outstanding, (ii) no shares of common stock of the Company are held in treasury and (iii) no shares of preferred stock of the Company are issued and outstanding or held in treasury. All of the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable.

(f) Taxes. All taxes (other than any taxes that may be payable because of a transfer involved in the issuance or delivery of any certificates for shares or other securities issued or delivered upon exercise of this Warrant in a name other than that of the Holder) imposed on the Company in connection with the issuance, sale and delivery of the Warrant Securities have been or will be timely and fully paid, and all Laws imposing such taxes have been or will be fully complied with by the Company.

**SECTION 10. Registration Rights**.

(a) Piggyback Rights. The Company agrees that it shall notify the Holder in writing at least 10 days prior to the filing of any registration statement under the Securities Act for purposes of a public offering of Common Stock of the Company (including, without limitation, registration statements relating to secondary offerings of securities of the Company, but excluding any Special Registration Statement) that would be filed at any time during which this Warrant is still outstanding, and the Company will afford the Holder an opportunity to include in such registration statement all or part of the Warrant Shares subject to the provisions hereof (such registration statement, the "Piggyback Registration Statement"). If the Holder desires to include in any such Piggyback Registration Statement all or any part of the Warrant Shares held by it, the Holder shall, within seven days after the above-described notice from the Company, so notify the Company in writing and shall thereafter furnish the Company with such information as the Company reasonably requires to effect the registration of such Warrant Shares. The Company will use its commercially reasonable efforts to cause such Warrant Shares as to which inclusion shall have been so requested to be included in the Piggyback Registration Statement. The Holder shall be entitled to sell the Warrant Shares included in a Piggyback Registration Statement in accordance with the method of distribution requested by it; *provided* that, if the Piggyback Registration Statement relates to an underwritten offering, then (i) the Company shall be entitled to select the underwriters in its sole discretion and (ii) the Holder must sell all Warrant Shares included on the Piggyback Registration Statement in such underwritten offering pursuant to an underwriting agreement containing terms and conditions that are customary for secondary offerings. In the event the managing underwriter shall be of the opinion that the number of such securities, when taken together with the Warrant Shares requested to be included in a public primary offering pursuant to a piggyback registration request under this Section 10(a), alone or taken together with the equity securities of the Company to be included therein, would adversely affect the marketing of such offering (including the price at which the securities of the Company may be sold), then the number of securities of the Company to be included in such underwritten offering will be reduced (an "Underwriter Cutback"), with the securities of the Company to be included in such offering based on the following priority: (x) first, the number of securities that the Company seeks to include in the offering, up to the number that, in the opinion of the managing underwriter, would not adversely affect the marketing of the offering (including the price at which such securities of the Company may be sold); (y) second, the number of the securities of the Company requested to be included by the Holder and any other Person(s) who has (have) elected to include securities pursuant to written agreements with the Company, in each case, up to the number that, in the

opinion of the managing underwriter, would not adversely affect the marketing of the offering (including the price at which the securities (including the Warrant Shares) may be sold); and (z) third, in addition to securities of the Company included pursuant to the preceding clause (x) and the Warrant Shares of the Holder and the securities of any other Person included pursuant to the preceding clause (y), the number of securities of the Company requested to be included by any other Person(s) in the offering with the permission of the Company, up to the number that, in the opinion of the managing underwriter, would not adversely affect the marketing of the offering (including the price at which the securities of the Company may be sold). The Underwriter Cutbacks described in the immediately preceding clause (y) shall be allocated pro rata among the participating Persons, including the Holder, on the basis of the number of securities requested to be included in such registration by such Persons. The Company may withdraw a Piggyback Registration Statement prior to its being declared effective without incurring any liability to the Holder and shall not be required to keep a Piggyback Registration Statement effective for longer than the period contemplated by the intended manner of distribution for the securities of the Company to be sold by the Company as described in the prospectus included in the Piggyback Registration Statement. The expenses of such registration (other than any underwriting discounts, selling commissions and stock transfer taxes applicable to the sale of Warrant Shares) shall be borne by the Company. If the Holder decides not to include all of its Warrant Securities in any registration statement thereafter filed by the Company, the Holder shall nevertheless continue to have the right to include any Warrant Securities in any subsequent registration statement or registration statements (other than any Special Registration Statement) as may be filed by the Company with respect to offerings of its securities, all upon the terms and conditions set forth herein.

(b) Listing of the Warrant Shares. To the extent applicable, the Company shall promptly secure the listing of the Warrant Shares on whichever market is at the time the principal trading exchange or market for the Common Stock, based upon share volume, after such time as the Warrant Shares are no longer required to contain the legend referred to in Section 7 hereof, and the Company shall provide to the Holder evidence of such listing.

(c) Compliance with Rule 144. The Company shall timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act. As long as the Holder owns any Warrant Securities, if the Company is not required to file reports pursuant to such Laws, the Company will prepare and furnish to the Holder and make publicly available in accordance with Rule 144 such information as is required for the Holder to sell Warrant Securities under Rule 144. So long as the Warrant Securities are not registered under an effective registration statement, the Company further covenants that it will take such further action as the Holder may reasonably request and is within the Company's control, all to the extent required from time to time to enable the Holder to sell such Warrant Securities without registration under the Securities Act within the limits of the exemptions provided by Rule 144.

**SECTION 11. Definitions**. As used herein, the following terms shall have the following meanings.

"Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, controls or is controlled by or is under common

control with the Person specified.

"Aggregate Exercise Price" has the meaning set forth in Section 2(a) hereof.

"Aggregate Number" has the meaning set forth in the preamble hereto.

"Alternate Consideration" has the meaning set forth in Section 5(h) hereof.

"Bloomberg" means Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the Holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock).

"Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City.

"Cash/Public Change of Control" has the meaning set forth in Section 5(g) hereof.

"Change of Control" means (i) the sale, assignment, transfer, conveyance or other disposal of all or substantially all of the assets or all or a majority of the outstanding voting shares of capital stock of the Company, (ii) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company or (iii) a "person" or "group" (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) is or shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of a majority of the voting power of the capital stock of the Company including pursuant to any merger, consolidation or other business combination.

"Common Stock Deemed Outstanding" has the meaning set forth in Section 5(a)(i) hereof.

"Commencement Date" has the meaning set forth in the preamble hereto.

"Commission" means the Securities and Exchange Commission, or any Governmental Authority succeeding to any of its principal functions.

"Common Stock" means (i) the Company's common stock, par value $0.001 per share, and (ii) any other capital stock into which such common stock is reclassified or reconstituted.

"Company" has the meaning set forth in the preamble hereto.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Ex-Date" has the meaning set forth in Section 5(a)(i) hereof.

"Exercise Amount" has the meaning set forth in Section 2(a) hereof.

"Exercise Price" has the meaning set forth in the preamble hereto.

"Expiration Date" has the meaning set forth in the preamble hereto.

"Fair Market Value Per Share" means (as of immediately before the date of a Notice of Exercise) (i) the last reported sale price or, if there are no sales, the last reported bid price of the Common Stock on the Business Day immediately prior to the date of exercise on the NASDAQ Global Select Market as reported by Bloomberg, (ii) if clause (i) above does not apply, the last sales price of the Common Stock in the over-the-counter market on the pink sheets or bulletin board for such security on the Business Day immediately prior to the date of exercise as reported by Bloomberg or, if there are no sales, the last reported bid price of the Common Stock on the Business Day immediately prior to the date of exercise as reported by Bloomberg or (iii) if fair market value cannot be calculated as of such date on the basis of either clause (i) or clause (ii) above, the price determined in good faith by the Company's board of directors or upon the advice of an independent investment banking, financial advisory or valuation firm or appraiser as selection by the Company's board of directors.

"Fair Value" means the fair value of any securities or other distributed property determined as follows:

(i) in the case of securities listed on the New York Stock Exchange or the NASDAQ Stock Market, the volume weighted average price ("VWAP") of a single unit of such security for the 20 trading days ending on, but excluding, the date of valuation (or if the security has been listed for fewer than 20 trading days, the VWAP for such lesser period of time);

(ii) in the case of securities not listed on the New York Stock Exchange or the NASDAQ Stock Market, the VWAP of a single unit of such security in composite trading for the principal United States national or regional securities exchange on which such securities are then listed for the 20 trading days ending on, but excluding, the date of valuation (or if the security has been listed for fewer than 20 trading days, the VWAP for such lesser period of time); or

(iii) in all other cases, the fair value as of a date not earlier than 10 Business Days preceding the specified date as determined in good faith by the Company's board of directors or upon the advice of an independent investment banking, financial advisory or valuation firm or appraiser as selection by the Company's board of directors;

provided, however, that notwithstanding the foregoing, if the Company's board of directors determines in good faith that the application of clause (i) or (ii) of this definition would result in a VWAP based on the trading prices of a thinly-traded security such that the price resulting therefrom may not represent an accurate measurement of the fair value of such security, the board of directors at its election may apply the provisions of clause (iii) of this definition in lieu of the applicable clause (i) or (ii) with respect to the determination of the fair value of such security.

"Governmental Authority" means any nation, government, branch of power (whether executive, legislative or judicial), state, province or municipality or other political subdivision thereof or any entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including, without limitation, regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-making, rule-making or regulation-making organizations or entities of any state, territory, county, city or other political subdivision of the United States.

"Holder" has the meaning set forth in the preamble hereto.

"Laws" means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority.

"Marketable Securities" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and is then current in its filing of all required reports and other information under the Securities Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by the Holder in connection with the Change of Control were the Holder to exercise this Warrant on or prior to the closing thereof is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market; and (iii) following the closing of such Change of Control, the Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by the Holder in such Change of Control were the Holder to exercise or convert this Warrant in full on or prior to the closing of such Change of Control, except to the extent that any such restriction (x) arises solely under U.S. federal or state securities Laws, (y) does not extend beyond six months from the closing of such Change of Control or (z) relates to the Holder's status as an affiliate of such issuer prior to such Change of Control.

"Notice of Exercise" has the meaning set forth in Section 2(a) hereof.

"Offer Expiration Date" has the meaning set forth in Section 5(a)(iii) hereof.

"Person" means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

"Piggyback Registration Statement" has the meaning set forth in Section 10(a) hereof.

"Principal Office" means the Company's principal office as set forth in Section 16 hereof or such other principal office of the Company in the United States of America the address of which first shall have been set forth in a notice to the Holder.

"Purchase Agreement" has the meaning set forth in the recitals hereto.

"Purchase Rights" has the meaning set forth in Section 6(a) hereof.

"Rule 144" means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule 144 may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule 144.

"Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Senior Notes" has the meaning set forth in the recitals hereto.

"Special Registration Statement" means (i) a registration statement relating to any employee benefit plan, (ii) with respect to any corporate reorganization or transaction under Rule 145 promulgated under the Securities Act, any registration statement related solely to the issuance or resale of securities issued in such a transaction, (iii) a registration statement related solely to stock issued upon conversion of debt securities, (iv) any registration statement filed under Rule 462(b) promulgated under the Securities Act or (v) any registration statement on Form S-4 or Form S-8 not contemplated by clauses (i) – (iv) hereof.

"Trigger Event" has the meaning set forth in Section 5(c) hereof.

"Underwriter Cutback" has the meaning set forth in Section 10(a) hereof.

"Warrant" has the meaning set forth in the preamble hereto.

"Warrant Securities" means, collectively, this Warrant and the Warrant Shares.

"Warrant Shares" means (i) the shares of Common Stock issued or issuable upon exercise of this Warrant in accordance with its terms and (ii) all other shares of the Company's capital stock issued with respect to such shares by way of stock dividend, stock split or other reclassification or in connection with any merger, consolidation, recapitalization or other reorganization affecting the Company's capital stock.

**SECTION 12.** **Survival of Provisions**. Upon the full exercise by the Holder of its rights to purchase Common Stock under this Warrant, all of the provisions of this Warrant shall terminate (other than the provisions of Sections 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23 hereof, which shall expressly survive such exercise until the later of (a) the Expiration Date and (b) the time when the Holder no longer holds any Warrant Shares).

**SECTION 13.** **Delays, Omissions and Indulgences**. It is agreed that no delay or omission to exercise any right, power or remedy accruing to the Holder upon any breach or default of the Company under this Warrant shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach or default, or any acquiescence therein, or of or in any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. It is further agreed that any waiver, permit, consent or approval of any kind or character on the Holder's part of any breach or default under this Warrant, or any waiver on the Holder's part of any provisions or conditions of this Warrant, must be in writing and that all remedies under this Warrant, by Law or otherwise afforded to the Holder shall be cumulative and not alternative.

**SECTION 14.** **Rights of Transferees**. Subject to Section 7 hereof, the rights granted under this Warrant to the Holder shall pass to and inure to the benefit of all subsequent transferees of all or any portion of this Warrant (*provided*, that the Holder and any transferee shall hold such rights in proportion to their respective ownership of this Warrant and the Warrant Shares) until extinguished pursuant to the terms hereof.

**SECTION 15.** **Captions**. The section headings and other captions appearing herein

are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Warrant.

**SECTION 16.** **Notices**. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, this Warrant) shall be given or made in writing (including by email with PDF attachment) delivered to the applicable addresses specified below or at such other address as shall be designated by the Company or the Holder, as applicable, in a notice to the other. Except as otherwise provided in this Warrant, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof (except in the case of an email with PDF attachment not given during normal business hours for the recipient, which shall be deemed to have been given at the opening of business on the next Business Day for the recipient), in each case given or addressed as aforesaid.

(a) If to the Company:

VIVUS, Inc.
900 East Hamilton Avenue, Suite 550
Campbell, California 95008
Attention: Chief Financial Officer and General Counsel
Electronic mail: cfo@vivus.com;
generalcounsel@vivus.com

with a copy to:

Weil, Gotshal & Manges LLP
767 Fifth Avenue
New York, New York 10153
Attention: Faiza N. Rahman, Esq.
Email: faiza.rahman@weil.com

(b) if to the Holder:

[ ]
c/o Athyrium Capital Management, LP
530 Fifth Avenue, Floor 25
New York, New York 10036
Attention: Andrew C. Hyman and Laurent Hermouet

with a copy to:

Pillsbury Winthrop Shaw Pittman LLP
1540 Broadway
New York, New York 10036
Attention: David S. Baxter, Esq.
Email: david.baxter@pillsburylaw.com

**SECTION 17.** **Successors and Assigns**. This Warrant shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, *provided*, that the Company shall have no right to assign its rights, or to delegate its obligations, hereunder without the prior written consent of the Holder. The Company shall not require the Holder to provide an opinion of counsel if any transfer by the Holder is to an Affiliate of the Holder; *provided*, that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Securities Act and the Holder and such transferee each comply in all respects with the transfer procedures set forth in Section 7 hereof, as applicable.

**SECTION 18.** **Amendments**. Neither this Warrant nor any term hereof may be amended, changed, waived, discharged or terminated without the prior written consent of the Holder and the Company to such action.

**SECTION 19.** **Severability**. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable Law the parties hereto agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

**SECTION 20.** **Governing Law**. This Warrant and the rights and obligations of the Holder and the Company hereunder shall be governed by, and construed in accordance with, the Law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the Laws of any other jurisdiction; *provided*, that Section 5-1401 of the New York General Obligations Law shall apply.

**SECTION 21.** **Entire Agreement**. This Warrant, together with the Purchase Agreement and the other documents contemplated thereby, are intended by the parties as a final expression of their agreement and are intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein.

**SECTION 22.** **Rules of Construction**. Unless the context otherwise requires, "or" is not exclusive, and references to sections or subsections refer to sections or subsections of this

Warrant. All pronouns and any variations thereof refer to the masculine, feminine or neuter, singular or plural, as the context may require.

**SECTION 23.** **No Effect Upon Lending Relationship**. Notwithstanding anything herein to the contrary, nothing contained in this Warrant shall affect, limit or impair the rights and remedies of the Holder or any of its Affiliates in its capacity as a lender to the Company pursuant to any agreement under which the Company has borrowed money from the Holder or any of its Affiliates, including, without limitation, the Purchase Agreement and the Senior Notes. Without limiting the generality of the foregoing, neither the Holder nor any Affiliate of the Holder, in exercising its rights as a lender, including making its decision on whether to foreclose on any collateral security, will have any duty to consider (a) its status or the status of any of its Affiliates as a direct or indirect equity holder of the Company, (b) the equity of the Company or (c) any duty it may have to any other direct or indirect equity holder of the Company, except as may be required by commercial Law applicable to creditors generally.

{Remainder of Page Intentionally Left Blank}

**IN WITNESS WHEREOF**, the Company has caused this Warrant to be issued and executed in its corporate name by a duly authorized officer as of the date first written above.

**VIVUS, INC.**

By: _____
Name:
Title:

Accepted and agreed:

**[Holder]**

*{Signature Page to Warrant}*

Form of
NOTICE OF EXERCISE

To: VIVUS, Inc.
900 East Hamilton Avenue, Suite 550
Campbell, California 95008
Attention: Chief Financial Officer and General Counsel

1. The undersigned, pursuant to the provisions of the attached Warrant, hereby elects to exercise this Warrant with respect to _____ shares of Common Stock (the "Exercise Amount"). Capitalized terms used but not otherwise defined herein have the meanings ascribed thereto in the attached Warrant.

2. The undersigned herewith tenders payment for such shares in the following manner (please check type, or types, of payment and indicate the portion of the Exercise Price to be paid by each type of payment):

_____Exercise for Cash
_____Cashless Exercise

3. Please issue a certificate or certificates representing the shares issuable in respect hereof under the terms of the attached Warrant, as follows:

_____
(Name of Record Holder/Transferee)

and deliver such certificate or certificates to the following address:

_____
(Address of Record Holder/Transferee)

4. The undersigned represents that the aforesaid shares are being acquired for the account of the undersigned for investment purposes and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

5. The undersigned represents that, as of the date hereof, the undersigned (together with the undersigned's affiliates, and any other persons acting as a group together with the undersigned or any of the undersigned's affiliates) owns _____ shares of Common Stock (as such ownership is calculated pursuant to the rules of the NASDAQ Global Select Market).

6. If the Exercise Amount is less than all of the shares of Common Stock purchasable under the attached Warrant, please issue a new warrant representing the remaining balance of such shares, as follows:

_____
(Name of Record Holder/Transferee)

and deliver such warrant to the following address:

(Address of Record Holder/Transferee)

(Signature)

(Date)

EXHIBIT B

Form of
NOTICE OF ASSIGNMENT

FOR VALUE RECEIVED, the Holder (the "Assignor") hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of VIVUS, Inc. (the "Company") covered thereby set forth below, to the following "Assignee" and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 7 of the Warrant and applicable U.S. federal and state securities laws:

_____
(Name of Assignee)

_____
(Address of Assignee)

_____
(Number of Shares)

_____
(Dated)

_____
(Signature)

ASSIGNEE ACKNOWLEDGMENT

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 7 thereof.

By: _____
Name:
Title:
Address:

**EXHIBIT B**

**FORM OF INDENTURE**

See attached.

VIVUS, INC.,

as Issuer,

and any Guarantor that becomes party hereto pursuant to Section 4.12 hereof

10.375% Senior Secured Notes due 2024

_____

INDENTURE

Dated as of [ ], 2018

_____

U.S. BANK NATIONAL ASSOCIATION,
as Trustee and as Collateral Agent

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INDENTURE dated as of June 8, 2018 among VIVUS, Inc., a Delaware corporation with an address at 900 East Hamilton Avenue, Suite 550, Campbell, California 95008 (the "Issuer"), any Guarantor that becomes party hereto pursuant to Section 4.12, and U.S. Bank National Association, a national banking association, as trustee (as more fully defined in Section 1.01, the "Trustee") and as collateral agent (as more fully defined in Section 1.01, the "Collateral Agent").

Each party agrees as follows for the benefit of the other parties and for the equal and ratable benefit of the Holders of the Issuer's 10.375% Senior Secured Notes due 2024 (as more fully defined in Section 1.01, the "Securities").

## ARTICLE 1

## DEFINITIONS AND INCORPORATION BY REFERENCE

SECTION 1.01. Definitions.

"Accredited Investors" means "accredited investors" as defined in Rule 501(a)(1), (a)(2), (a)(3) or (a)(7) of Regulation D under the Securities Act.

"Acquired Indebtedness" means, with respect to any specified Person:

(1) Indebtedness of any other Person existing at the time such other Person is merged, amalgamated or consolidated with or into or became a Restricted Subsidiary of such specified Person; and

(2) Indebtedness secured by a Lien encumbering any asset acquired by such specified Person.

"Additional Conditional Securities" means the Issuer's 10.375% Senior Secured Notes due 2024 that may be issued after the Issue Date pursuant to Section 2.01(c).

"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling", "controlled by" and "under common control with"), as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise.

"Applicable Premium" means, with respect to any Security (or portion thereof) to be redeemed on any redemption date, the amount, if any, by which (a) the sum of (1) 105% of the amount of principal of such Security to be redeemed plus (2) the present value at such redemption date of all required interest payments due on the amount of principal of such Security to be redeemed through the First Call Date (excluding accrued but unpaid interest, if any, to the redemption date), computed using a discount rate equal to the Treasury Rate in respect of such redemption date plus 50 basis points, exceeds (b) the amount of principal of such Security to be

redeemed. The Trustee shall have no duty to calculate or verify the calculation of the Applicable Premium.

"Article 9 Collateral" means Collateral with respect to which a Lien thereon may be perfected by the filing of (i) a UCC-1 financing statement pursuant to the Uniform Commercial Code as adopted in any applicable jurisdiction or (ii) any similar or comparable filing in a non-U.S. jurisdiction.

"Average Monthly Balance" means, with respect to any Indebtedness incurred by the Issuer or the Restricted Subsidiaries under a revolving credit facility, the quotient of (i) the sum of each Individual Monthly Balance for each fiscal month ended on or prior to the relevant date of determination and included in the applicable Reference Period divided by (ii) 12.

"Board of Directors" means, as to any Person, the board of directors, board of managers or similar governing body, as applicable, of such Person (or, if such Person is a partnership, the board of directors or other governing body of the general partner of such Person) or any duly authorized committee thereof. References in this Indenture to directors (on a Board of Directors) shall also be deemed to refer to managers (on a Board of Managers).

"Business Day" means a day other than a Saturday, Sunday or other day on which banking institutions are authorized or required by law to close in New York City or the city in which the Corporate Trust Office is located.

"Capital Stock" means:

(1) in the case of a corporation or company, corporate stock or shares;

(2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;

(3) in the case of a partnership or limited liability company, partnership interests (whether general or limited) and membership interests; and

(4) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person;

in each case to the extent treated as equity in accordance with GAAP.

"Capitalized Lease Obligation" means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease (or a finance lease upon adoption by the Issuer of *ASU No. 2016-02, Leases (Topic 842)*) that would at such time be required to be capitalized and reflected as a liability on a balance sheet (excluding the footnotes thereto) in accordance with GAAP.

"Cash Equivalents" means:

(1) U.S. Dollars, Canadian dollars, pounds sterling, euros or the national currency of any member state in the European Union;

(2) securities issued or directly and fully guaranteed or insured by the U.S. government, Canada, the United Kingdom or any country that is a member of the European Union or any agency or instrumentality thereof, in each case maturing not more than two years from the date of acquisition;

(3) certificates of deposit, time deposits and eurodollar time deposits with maturities of one year or less from the date of acquisition, bankers' acceptances with maturities not exceeding one year and overnight bank deposits, in each case with any commercial bank having capital and surplus in excess of $250,000,000 and whose long-term debt is rated "A" or the equivalent thereof by Moody's or S&P (or reasonably equivalent ratings of another nationally recognized statistical rating organization);

(4) repurchase obligations for underlying securities of the types described in clauses (2) and (3) above entered into with any financial institution meeting the qualifications specified in clause (3) above;

(5) commercial paper issued by a Person (other than an Affiliate of the Issuer) rated at least "A-1" or the equivalent thereof by Moody's or S&P (or reasonably equivalent ratings of another nationally recognized statistical rating organization), and in each case maturing within one year after the date of acquisition;

(6) readily marketable direct obligations issued by any state of the United States of America or any political subdivision thereof having one of the two highest rating categories obtainable from either Moody's or S&P (or reasonably equivalent ratings of another nationally recognized statistical rating organization), in each case with maturities not exceeding two years from the date of acquisition;

(7) Indebtedness issued by Persons (other than an Affiliate of the Issuer) with a rating of "A" or higher from S&P or "A-2" or higher from Moody's (or reasonably equivalent ratings of another nationally recognized statistical rating organization), in each case with maturities not exceeding two years from the date of acquisition; and

(8) investment funds investing at least 95% of their assets in securities of the types described in clauses (1) through (7) above.

"CFC" means a "controlled foreign corporation" within the meaning of Section 957 of the Code.

"CFC Holdco" means (a) any direct or indirect Domestic Subsidiary that has no material assets other than the Capital Stock or Indebtedness of one or more CFCs and (b) any direct or indirect Domestic Subsidiary that has no material assets other than the Capital Stock or Indebtedness of one or more Persons of the type described in the immediately preceding clause (a).

"Change of Control" means the occurrence of any of the following events:

(i) the sale, lease or transfer, in one or a series of related transactions, of all or substantially all the assets of the Issuer and its Subsidiaries, taken as a whole, to a Person other than any of the Issuer or its Restricted Subsidiaries;

(ii) the Issuer becomes aware (by way of a report or any other filing pursuant to Section 13(d) of the Exchange Act, proxy, vote, written notice or otherwise) of the acquisition by any Person or group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, or any successor provision), including any group acting for the purpose of acquiring, holding or disposing of securities (within the meaning of Rule 13d-5(b)(1) under the Exchange Act or any successor provision), in a single transaction or in a related series of transactions, by way of merger, amalgamation, consolidation or other business combination or purchase of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act, or any successor provision), of more than 50% of the total voting power of the issued and outstanding Voting Stock of the Issuer; or

(iii) the adoption of a plan relating to the Issuer's dissolution or liquidation in accordance with the Issuer's organizational documents.

Notwithstanding the foregoing, the acquisition, directly or indirectly, of 100% of the total voting power of the issued and outstanding Voting Stock of the Issuer by any Person who, immediately after such acquisition, has no material assets other than the Capital Stock of the Issuer or its direct or indirect parent company will not, by itself, constitute a Change of Control.

"Code" means the United States Internal Revenue Code of 1986, as amended.

"Collateral" means all property subject, or purported to be subject from time to time, to a Lien under any Security Documents. The Collateral does not include the Excluded Assets.

"Collateral Agent" means U.S. Bank National Association in its capacity as "Collateral Agent" under this Indenture and under the Security Documents and any successor thereto in such capacity.

"Collateral Agreement" means the Collateral Agreement dated as of the date hereof among the Issuer, the Guarantors party thereto from time to time, the Trustee and the Collateral Agent, as may be amended, extended, renewed, restated, supplemented, waived or otherwise modified from time to time.

"Consolidated First Lien Indebtedness" means, as at any date of determination, an amount equal to (i) Consolidated Total Indebtedness as of such date, minus (ii) Consolidated Total Indebtedness that is secured on a junior basis to the Securities as of such date, minus (iii) Consolidated Total Indebtedness that is unsecured as of such date.

"Consolidated First Lien Leverage Ratio" means, with respect to any Person, at any date (the "Consolidated First Lien Leverage Calculation Date"), the ratio of (i) Consolidated First Lien Indebtedness of such Person and its Restricted Subsidiaries as of the Consolidated First Lien Leverage Calculation Date (determined on a consolidated basis in accordance with

GAAP) to (ii) EBITDA of such Person for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding such Consolidated First Lien Leverage Calculation Date. In the event that the Issuer or any of its Restricted Subsidiaries Incurs, repays, repurchases, defeases or redeems any Indebtedness subsequent to such last day but prior to the Consolidated First Lien Leverage Calculation Date, then the Consolidated First Lien Leverage Ratio shall be calculated giving *pro forma* effect to such Incurrence, repayment, repurchase, defeasance or redemption of Indebtedness as if the same had occurred at the beginning of the applicable four-quarter period; *provided* that the Issuer may elect pursuant to an Officers' Certificate delivered to the Trustee to treat all or any portion of the commitment under any agreement evidencing Indebtedness as being Incurred on the first day of the applicable four-quarter measurement period, in which case any subsequent Incurrence of Indebtedness under such commitment shall not be deemed, for purposes of this calculation, to be an Incurrence at such subsequent time; *provided, further*, that any Cash Equivalent proceeds received in connection with or as a result of such Incurrence or other transaction for which the Consolidated First Lien Leverage Ratio is being calculated shall not be subtracted from Indebtedness for purposes of calculating the Consolidated First Lien Leverage Ratio.

For purposes of making the computation referred to above, Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (as determined in accordance with GAAP), in each case with respect to a business, a division or an operating unit of a business, as applicable, that the Issuer or any of its Restricted Subsidiaries has determined to make or made during the applicable four-quarter measurement period or subsequent to such measurement period and on or prior to or simultaneously with the Consolidated First Lien Leverage Calculation Date shall be calculated on a *pro forma* basis assuming that all such Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (and the change of any associated Indebtedness and the change in EBITDA resulting therefrom) had occurred on the first day of the applicable four-quarter measurement period. If since the beginning of such period any Person that subsequently became a Restricted Subsidiary or was merged with or into the Issuer or any Restricted Subsidiary since the beginning of such period shall have made any Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation, in each case, with respect to a business, a division or an operating unit of a business, as applicable, that would have required adjustment pursuant to this definition, then the Consolidated First Lien Leverage Ratio shall be calculated giving *pro forma* effect thereto for such period as if such Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation had occurred on the first day of the applicable four-quarter measurement period.

For purposes of this definition, whenever *pro forma* effect is to be given to any event, the *pro forma* calculations shall be made in good faith by a responsible financial or accounting officer of the Issuer in accordance with the SEC's Regulation S-X. Any such *pro forma* calculation may include adjustments appropriate, in the reasonable good faith determination of the Issuer in accordance with the SEC's Regulation S-X, to reflect operating expense reductions, cost savings and other operating improvements or synergies reasonably expected to result from the applicable event; *provided*, that, notwithstanding anything herein to the contrary, the amount of any such expected operating expense reductions, cost savings, operating improvements or synergies shall not increase EBITDA by more than 20% in the

aggregate for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Consolidated First Lien Leverage Calculation Date.

For purposes of this definition, any amount in a currency other than U.S. Dollars will be converted to U.S. Dollars based on the average exchange rate for such currency for the most recent four full fiscal quarters immediately prior to the date of determination in a manner consistent with that used in calculating EBITDA for the applicable period.

"Consolidated Interest Expense" means, with respect to any Person for any period, the sum, without duplication, of:

(1) consolidated interest expense of such Person and its Restricted Subsidiaries for such period, to the extent such expense was deducted in computing Consolidated Net Income (including amortization of original issue discount, the interest component of Capitalized Lease Obligations, and net payments and receipts (if any) pursuant to interest rate Hedging Obligations, amortization of deferred financing fees, debt issuance costs, commissions, fees and expenses, non-cash interest expense, all commissions, discounts and other fees and charges owed with respect to letters of credit or bankers acceptances and expensing of any bridge, commitment or other financing fees); plus

(2) consolidated capitalized interest of such Person and its Restricted Subsidiaries for such period, whether paid or accrued; minus

(3) interest income for such period.

For purposes of this definition, interest on a Capitalized Lease Obligation shall be deemed to accrue at an interest rate reasonably determined by the Issuer to be the rate of interest implicit in such Capitalized Lease Obligation in accordance with GAAP.

"Consolidated Leverage Ratio" means, with respect to any Person, at any date (the "Consolidated Leverage Calculation Date"), the ratio of (i) Indebtedness of such Person and its Restricted Subsidiaries as of the Consolidated Leverage Calculation Date (determined on a consolidated basis in accordance with GAAP) to (ii) EBITDA of such Person for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding such Consolidated Leverage Calculation Date. In the event that the Issuer or any of its Restricted Subsidiaries Incurs, repays, repurchases, defeases or redeems any Indebtedness subsequent to such last day but prior to the Consolidated Leverage Calculation Date, then the Consolidated Leverage Ratio shall be calculated giving *pro forma* effect to such Incurrence, repayment, repurchase, defeasance or redemption of Indebtedness as if the same had occurred at the beginning of the applicable four-quarter period; *provided* that the Issuer may elect pursuant to an Officers' Certificate delivered to the Trustee to treat all or any portion of the commitment under any agreement evidencing Indebtedness as being Incurred on the first day of the applicable four-quarter measurement period, in which case any subsequent Incurrence of Indebtedness under such commitment shall not be deemed, for purposes of this calculation, to be an Incurrence at such subsequent time;

*provided, further*, that any Cash Equivalent proceeds received in connection with or as a result of such Incurrence or other transaction for which the Consolidated Leverage Ratio is being calculated shall not be subtracted from Indebtedness for purposes of calculating the Consolidated Leverage Ratio.

For purposes of making the computation referred to above, Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (as determined in accordance with GAAP), in each case with respect to a business, a division or an operating unit of a business, as applicable, that the Issuer or any of its Restricted Subsidiaries has determined to make or made during the applicable four-quarter measurement period or subsequent to such measurement period and on or prior to or simultaneously with the Consolidated Leverage Calculation Date shall be calculated on a *pro forma* basis assuming that all such Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (and the change of any associated Indebtedness and the change in EBITDA resulting therefrom) had occurred on the first day of the applicable four-quarter measurement period. If since the beginning of such period any Person that subsequently became a Restricted Subsidiary or was merged with or into the Issuer or any Restricted Subsidiary since the beginning of such period shall have made any Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation, in each case, with respect to a business, a division or an operating unit of a business, as applicable, that would have required adjustment pursuant to this definition, then the Consolidated Leverage Ratio shall be calculated giving *pro forma* effect thereto for such period as if such Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation had occurred on the first day of the applicable four-quarter measurement period.

For purposes of this definition, whenever *pro forma* effect is to be given to any event, the *pro forma* calculations shall be made in good faith by a responsible financial or accounting officer of the Issuer in accordance with the SEC's Regulation S-X. Any such *pro forma* calculation may include adjustments appropriate, in the reasonable good faith determination of the Issuer in accordance with the SEC's Regulation S-X, to reflect operating expense reductions, cost savings and other operating improvements or synergies reasonably expected to result from the applicable event; *provided*, that, notwithstanding anything herein to the contrary, the amount of any such expected operating expense reductions, cost savings, operating improvements or synergies shall not increase EBITDA by more than 20% in the aggregate for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Consolidated Leverage Calculation Date.

For purposes of this definition, any amount in a currency other than U.S. Dollars will be converted to U.S. Dollars based on the average exchange rate for such currency for the most recent four full fiscal quarters immediately prior to the date of determination in a manner consistent with that used in calculating EBITDA for the applicable period.

"Consolidated Net Income" means, with respect to any Person for any period, the aggregate of the Net Income of such Person and its Restricted Subsidiaries for such period, on a consolidated basis; *provided, however*, that:

(1) any net after-tax extraordinary, non-recurring or unusual gains or losses (less all fees and expenses relating thereto) shall be excluded;

(2) effects of purchase accounting adjustments (including the effects of such adjustments pushed down to such Person and such Subsidiaries) in amounts required or permitted by GAAP, resulting from the application of purchase accounting in relation to any consummated acquisition or the amortization or write-off of any amounts thereof, net of taxes, shall be excluded;

(3) the Net Income for such period shall not include the cumulative effect of a change in accounting principles during such period;

(4) any net after-tax income or loss from disposed, abandoned, transferred, closed or discontinued operations and any net after-tax gains or losses on disposal of disposed, abandoned, transferred, closed or discontinued operations shall be excluded;

(5) any net after-tax gains or losses (less all fees and expenses or charges relating thereto) attributable to business dispositions or asset dispositions other than in the ordinary course of business (as determined in good faith by the Issuer) shall be excluded;

(6) any net after-tax gains or losses (less all fees and expenses or charges relating thereto) attributable to the early extinguishment of Indebtedness, and any unrealized gains and losses relating to Hedging Obligations or other derivative instruments, shall be excluded;

(7) the Net Income for such period of any Person that is not a Subsidiary of such Person, or is an Unrestricted Subsidiary, or that is accounted for by the equity method of accounting, shall be included only to the extent of the amount of dividends or distributions or other payments paid in cash (or to the extent converted into cash) to the referent Person or a Restricted Subsidiary thereof in respect of such period;

(8) any impairment charges or asset write-offs, in each case pursuant to GAAP, and the amortization of intangibles arising pursuant to GAAP shall be excluded;

(9) any non-cash expense realized or resulting from stock option plans, employee benefit plans or post-employment benefit plans, or grants or sales of stock, stock appreciation or similar rights, stock options, restricted stock, preferred stock or other rights shall be excluded;

(10) any one-time non-cash compensation charges shall be excluded;

(11) accruals and reserves that are established or adjusted within 12 months after the Issue Date and that are so required to be established or adjusted in accordance with GAAP or as a result of adoption or modification of accounting policies shall be excluded;

(12) non-cash gains, losses, income and expenses resulting from fair value accounting required by the applicable standard under GAAP and related interpretations shall be excluded;

(13) any currency translation gains and losses related to currency remeasurements of Indebtedness, and any net loss or gain resulting from Hedging Obligations, shall be excluded;

(14) solely for the purposes of calculating Restricted Payments, if positive, any permanent difference (but excluding, for the avoidance of doubt, any temporary difference the Issuer reasonably expects to be paid in cash in any future tax period) of (A) the Consolidated Taxes of the Issuer calculated in accordance with GAAP over (B) the actual Consolidated Taxes paid in cash by the Issuer during such period shall be excluded;

(15) any non-cash after-tax interest expense resulting from the application of Accounting Standards Codification Topic 470-20 "Debt — Debt With Conversion and Other Options" shall be excluded;

(16) to the extent covered by insurance and actually reimbursed, or, so long as such Person has made a determination that there exists reasonable evidence that such amount will in fact be reimbursed by the insurer and only to the extent that such amount is (a) not denied by the applicable carrier in writing and (b) in fact reimbursed within 365 days of the date of such evidence (with a deduction for any amount so added back to the extent not so reimbursed within 365 days), such loss or expense amounts as are so reimbursed, or reimbursable, by insurance providers in respect of liability or casualty events or business interruption shall be excluded; and

(17) to the extent covered by fees, costs, expenses and losses that are, or (without duplication) are required to be, covered by contractual indemnities, guaranty obligations, purchase price adjustments, insurance policies or other contractual reimbursement obligations of third parties, to the extent actually indemnified or reimbursed or with respect to which the Issuer has determined that a reasonable basis exists for indemnification or reimbursement, but only to the extent that such amount is actually indemnified or reimbursed within 365 days of such determination (with a deduction in the applicable future period of any amount so added back to the extent not so indemnified or reimbursed within such 365 days), shall be excluded.

"Consolidated Non-cash Charges" means, with respect to any Person for any period, the aggregate depreciation, amortization and other non-cash expenses of such Person and its Restricted Subsidiaries reducing Consolidated Net Income of such Person for such period on a consolidated basis and otherwise determined in accordance with GAAP, but excluding any such charge that consists of or requires an accrual of, or cash reserve for, anticipated cash charges for any future period.

"Consolidated Taxes" means, with respect to any Person for any period, the provision for taxes for such Person and its Restricted Subsidiaries based on income, profits or

capital, including state, franchise, property and similar taxes and foreign withholding taxes (including penalties and interest related to such taxes or arising from tax examinations).

"Consolidated Total Indebtedness" means, as at any date of determination, an amount equal to the sum of (1) the aggregate amount of all outstanding Indebtedness of the Issuer and the Restricted Subsidiaries on a consolidated basis consisting of Indebtedness for borrowed money, Obligations in respect of Capitalized Lease Obligations and debt obligations evidenced by promissory notes and similar instruments and (2) the aggregate amount of all outstanding Disqualified Stock of the Issuer and all Preferred Stock of the Restricted Subsidiaries on a consolidated basis, with the amount of such Disqualified Stock and Preferred Stock equal to the greater of their respective voluntary or involuntary liquidation preferences and maximum fixed repurchase prices, in each case determined on a consolidated basis in accordance with GAAP; *provided*, that Indebtedness of the Issuer and the Restricted Subsidiaries under any revolving credit facility as at any date of determination shall be determined using the Average Monthly Balance of such Indebtedness for the most recently ended four fiscal quarters for which internal financial statements are available as of such date of determination (the "Reference Period"). For purposes hereof, the maximum fixed repurchase price of any Disqualified Stock or Preferred Stock that does not have a fixed repurchase price shall be calculated in accordance with the terms of such Disqualified Stock or Preferred Stock as if such Disqualified Stock or Preferred Stock were purchased on any date on which Consolidated Total Indebtedness shall be required to be determined pursuant to this Indenture, and if such price is based upon, or measured by, the fair market value of such Disqualified Stock or Preferred Stock, such fair market value shall be determined in good faith by the Issuer.

"Contingent Obligations" means, with respect to any Person, any obligation of such Person guaranteeing any leases, dividends or other obligations that do not constitute Indebtedness ("primary obligations") of any other Person (the "primary obligor") in any manner, whether directly or indirectly, including any obligation of such Person, whether or not contingent:

(1) to purchase any such primary obligation or any property constituting direct or indirect security therefor;

(2) to advance or supply funds:

(a) for the purchase or payment of any such primary obligation; or

(b) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor; or

(3) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation against loss in respect thereof.

"Convertible Notes" means the Issuer's 4.50% Convertible Senior Notes due May 1, 2020.

"Corporate Trust Office" means the address of the Trustee specified in Section 12.01 or such other address as to which the Trustee may give notice to the Holders and the Issuer.

"Default" means any event that is, or after notice or passage of time or both would be, an Event of Default.

"Disposition" means the sale, conveyance, transfer, license or other disposition (whether in a single transaction or a series of related transactions) of property or assets (including by way of a Sale/Leaseback Transaction) of the Issuer or any Restricted Subsidiary of the Issuer.

"Disqualified Stock" means, with respect to any Person, any Capital Stock of such Person that, by its terms (or by the terms of any security into which it is convertible or for which it is redeemable or exchangeable), or upon the happening of any event:

(1) matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise (other than solely as a result of change of control, asset sale, casualty, condemnation or eminent domain provisions);

(2) is convertible or exchangeable for Indebtedness or Disqualified Stock of such Person; or

(3) is redeemable at the option of the holder thereof, in whole or in part (other than solely as a result of change of control, asset sale, casualty, condemnation or eminent domain provisions),

in each case prior to 91 days after the earlier of the Stated Maturity of the Securities and the date the Securities are no longer outstanding; *provided*, *however*, that only the portion of Capital Stock that so matures or is mandatorily redeemable, is so convertible or exchangeable or is so redeemable at the option of the holder thereof prior to such date shall be deemed to be Disqualified Stock; *provided*, *further*, *however*, that if such Capital Stock is issued to any employee or to any plan for the benefit of employees of the Issuer or its Subsidiaries or by any such plan to such employees, such Capital Stock shall not constitute Disqualified Stock solely because it may be required to be repurchased by the Issuer in order to satisfy applicable statutory or regulatory obligations or as a result of such employee's termination, death or disability; *provided*, *further*, that any class of Capital Stock of such Person that by its terms authorizes such Person to satisfy its obligations thereunder by delivery of Capital Stock that is not Disqualified Stock shall not be deemed to be Disqualified Stock.

"Disregarded Domestic Person" means any direct or indirect Domestic Subsidiary that (a) did not become a Subsidiary of the Issuer until after the Issue Date, (b) is not a CFC Holdco, (c) is treated as a disregarded entity for U.S. federal income tax purposes and (d) holds (directly or through another Disregarded Domestic Person) equity in one or more Foreign Subsidiaries that are CFCs.

"Domestic Subsidiary" means any Restricted Subsidiary of the Issuer incorporated or organized under the laws of the United States, any state thereof or the District of Columbia.

"EBITDA" means, with respect to any Person for any period, the Consolidated Net Income of such Person for such period plus, without duplication, to the extent the same was deducted (or otherwise not included) in calculating Consolidated Net Income:

(1) Consolidated Taxes; plus

(2) Consolidated Interest Expense plus all cash dividend payments (excluding items eliminated in consolidation) on a series of Preferred Stock or Disqualified Stock of such Person and its Subsidiaries; plus

(3) Consolidated Non-cash Charges; plus

(4) Consolidated Net Income attributable to, or adding to the losses attributable to, the minority equity interests of third parties in any Restricted Subsidiary that is not a Wholly Owned Restricted Subsidiary of such Person, except to the extent of dividends declared or paid with respect to such period or any prior period on the shares of Capital Stock of such Restricted Subsidiary held by such third parties;

less, without duplication,

(5) non-cash items increasing Consolidated Net Income for such period (excluding the recognition of deferred revenue or any items that represent the reversal of any accrual of, or cash reserve for, anticipated cash charges that reduced EBITDA in any prior period and any items for which cash was received in a prior period).

"Equity Interests" means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

"Exchange Act" means the United States Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

"Excluded Assets" means, subject to Section 4.13, (i) any license, contract, permit or agreement of the Issuer or any of the Guarantors, if and only for so long as and to the extent that the grant of a security interest therein under the Security Documents would result in a breach or default under, or abandonment, invalidation or unenforceability of, that license, contract, permit or agreement (except (a) to the extent the relevant term that would result in such breach, default, abandonment, invalidation or unenforceability is rendered ineffective pursuant to Section 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or equivalent statutes of any jurisdiction) or any other applicable law or (b) any such license, contract, permit or agreement between the Issuer and any Subsidiary of the Issuer or between Subsidiaries of the Issuer) (such licenses, contracts, permits and agreements, the "Excluded Agreements"), (ii) (a) any fee interest in real property (excluding fixtures) if the greater of the cost and the book value of such interest is less than $500,000 or (b) any leasehold interest in real property if the annual base rent is less

than $500,000, (iii) any asset or property to the extent that the grant of a security interest in such asset or property is prohibited by any applicable law or requires a consent not obtained of any Governmental Authority pursuant to applicable law (except to the extent the law prohibiting such grant or requiring such consent is rendered ineffective pursuant to Section 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or equivalent statutes of any jurisdiction) or any other applicable law), (iv) any assets or property as to which the Issuer or the Collateral Agent (at the direction of the Holders of a majority in principal amount of the Securities then outstanding) reasonably determines in good faith that the costs of obtaining such a security interest are excessive in relation to the value of the security to be afforded thereby, (v) any Equity Interests of any Unrestricted Subsidiaries, (vi) any payroll accounts, payroll withholding tax accounts, pension and pension reserve accounts and employee benefit accounts to the extent funded or maintained in accordance with prudent business practice or as required by law, (vii) any Intellectual Property of the Issuer or any of its Subsidiaries unless and until a Lien on such Intellectual Property is granted in favor of the Collateral Agent pursuant to Section 4.13, (viii) any net operating losses of the Issuer, (ix) any vehicle that is (a) subject to a certificate of title and (b) obtained and used in the ordinary course of business and (x) the Capital Stock of any Foreign Subsidiary, CFC Holdco and/or Disregarded Domestic Person, in each case (a) in excess of 65% of the issued and outstanding Voting Stock and 100% of the other Capital Stock of any such Person or (b) to the extent such Person is not a first-tier Subsidiary of the Issuer or of any Restricted Subsidiary of the Issuer. Notwithstanding the foregoing, the inclusion of net operating losses within the definition of Excluded Assets shall not, and shall not be deemed to, impair or adversely affect the exercise of any right or remedy otherwise available to the Collateral Agent hereunder or under any Security Document.

"Fair Market Value" means, with respect to any asset or property, the price (after taking into account any liabilities related to such asset or property) that could be negotiated in an arm's-length transaction, for cash, between a willing seller and a willing and able buyer, neither of whom is under undue pressure or compulsion to complete the transaction.

"FDA" means the United States Food and Drug Administration or any successor thereto.

"Federal Deposit Insurance Corporation" means the Federal Deposit Insurance Corporation or any successor thereto.

"First Amortization Date" means, with respect to any security, the date specified in such security as the fixed date on which the first payment of principal of such security is due and payable.

"Fixed Charge Coverage Ratio" means, with respect to any Person, at any date (the "Fixed Charge Coverage Calculation Date"), the ratio of (i) EBITDA of such Person for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding such Fixed Charge Coverage Calculation Date to (ii) Fixed Charges of such Person for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding such Fixed Charge Coverage Calculation Date. In the event that the Issuer or any of its Restricted Subsidiaries Incurs, repays, repurchases,

defeases or redeems any Indebtedness subsequent to such last day but prior to the Fixed Charge Coverage Calculation Date, then the Fixed Charge Coverage Ratio shall be calculated giving *pro forma* effect to such Incurrence, repayment, repurchase, defeasance or redemption of Indebtedness as if the same had occurred at the beginning of the applicable four-quarter period; *provided* that the Issuer may elect pursuant to an Officers' Certificate delivered to the Trustee to treat all or any portion of the commitment under any agreement evidencing Indebtedness as being Incurred on the first day of the applicable four-quarter measurement period, in which case any subsequent Incurrence of Indebtedness under such commitment shall not be deemed, for purposes of this calculation, to be an Incurrence at such subsequent time; *provided, further*, that any Cash Equivalent proceeds received in connection with or as a result of such Incurrence or other transaction for which the Fixed Charge Coverage Ratio is being calculated shall not be subtracted from Indebtedness for purposes of calculating the Fixed Charge Coverage Ratio.

For purposes of making the computation referred to above, Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (as determined in accordance with GAAP), in each case with respect to a business, a division or an operating unit of a business, as applicable, that the Issuer or any of its Restricted Subsidiaries has determined to make or made during the applicable four-quarter measurement period or subsequent to such measurement period and on or prior to or simultaneously with the Fixed Charge Coverage Calculation Date shall be calculated on a *pro forma* basis assuming that all such Investments, acquisitions, dispositions, mergers, amalgamations, consolidations and discontinued operations (and the change of any associated Indebtedness and the change in EBITDA resulting therefrom) had occurred on the first day of the applicable four-quarter measurement period. If since the beginning of such period any Person that subsequently became a Restricted Subsidiary or was merged with or into the Issuer or any Restricted Subsidiary since the beginning of such period shall have made any Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation, in each case, with respect to a business, a division or an operating unit of a business, as applicable, that would have required adjustment pursuant to this definition, then the Fixed Charge Coverage Ratio shall be calculated giving *pro forma* effect thereto for such period as if such Investment, acquisition, disposition, merger, amalgamation, consolidation or discontinued operation had occurred on the first day of the applicable four-quarter measurement period.

For purposes of this definition, whenever *pro forma* effect is to be given to any event, the *pro forma* calculations shall be made in good faith by a responsible financial or accounting officer of the Issuer in accordance with the SEC's Regulation S-X. Any such *pro forma* calculation may include adjustments appropriate, in the reasonable good faith determination of the Issuer in accordance with the SEC's Regulation S-X, to reflect operating expense reductions, cost savings and other operating improvements or synergies reasonably expected to result from the applicable event; *provided*, that notwithstanding anything herein to the contrary, the amount of any such expected operating expense reductions, cost savings, operating improvements or synergies shall not increase EBITDA by more than 20% in the aggregate for the most recent four full fiscal quarters ended on the last day of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Fixed Charge Coverage Calculation Date.

For purposes of this definition, any amount in a currency other than U.S. Dollars will be converted to U.S. Dollars based on the average exchange rate for such currency for the most recent four full fiscal quarters immediately prior to the date of determination in a manner consistent with that used in calculating EBITDA for the applicable period.

"Fixed Charges" means, with respect to any period, the sum, without duplication, of:

(1) Consolidated Interest Expense for such period;

(2) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Preferred Stock by the Issuer and the Restricted Subsidiaries during such period; and

(3) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Disqualified Stock by the Issuer and the Restricted Subsidiaries during such period.

"Foreign Subsidiary" means any Restricted Subsidiary that is not a Domestic Subsidiary.

"GAAP" means generally accepted accounting principles in the United States that are in effect on the Issue Date set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession.

"Governmental Authority" means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"guarantee" means a guarantee or other provision of credit support (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including letters of credit and reimbursement agreements in respect thereof), of all or any part of any Indebtedness or other obligations, including by providing security therefor or by becoming a co-obligor with respect thereto. The term "guarantee", when used as a verb, shall mean to provide a guarantee.

"Guarantee" means any guarantee of the obligations of the Issuer under this Indenture and the Securities by any Person in accordance with the provisions of this Indenture.

"Guarantor" means any Person that Incurs a Guarantee pursuant to Section 4.12; *provided*, *however*, that upon the release or discharge of such Person from its Guarantee in accordance with this Indenture, such Person ceases to be a Guarantor.

"Hedging Obligations" means, with respect to any Person, the obligations of such Person under:

(1) currency exchange, interest rate or commodity swap agreements, currency exchange, interest rate or commodity cap agreements and currency exchange, interest rate or commodity collar agreements; and

(2) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange, interest rates or commodity prices or to otherwise manage interest rate risk or currency exchange risk.

"Holder" means the Person in whose name a Security is registered on the Registrar's books.

"Incur" means issue, assume, guarantee, incur or otherwise become liable for; *provided*, *however*, that any Indebtedness or Capital Stock of a Person existing at the time such Person becomes a Subsidiary (whether by merger, amalgamation, consolidation, acquisition or otherwise) shall be deemed to be Incurred by such Person at the time it becomes a Subsidiary; and "Incurrence" has a correlative meaning.

"Indebtedness" means, with respect to any Person:

(1) the principal and premium (if any) of any indebtedness of such Person, whether or not contingent, (a) in respect of borrowed money, (b) evidenced by bonds, notes, debentures or similar instruments or letters of credit or bankers' acceptances (or, without duplication, reimbursement agreements in respect thereof), (c) representing the deferred and unpaid purchase price of any property (except (i) any such balance that constitutes a trade payable or similar obligation to a trade creditor Incurred in the ordinary course of business and (ii) any liabilities accrued in the ordinary course of business), which purchase price is due more than six months after the date of placing the property in service or taking delivery and title thereto, (d) in respect of Capitalized Lease Obligations or (e) representing any Hedging Obligations, if and to the extent that any of the foregoing indebtedness (other than letters of credit and Hedging Obligations) would appear as a liability on a balance sheet (excluding the footnotes thereto) of such Person prepared in accordance with GAAP;

(2) to the extent not otherwise included, any obligation of such Person to be liable for, or to pay, as obligor, guarantor or otherwise, on the Indebtedness of another Person (other than by endorsement of negotiable instruments for collection in the ordinary course of business); and

(3) to the extent not otherwise included, Indebtedness of another Person secured by a Lien on any asset owned by such Person (whether or not such Indebtedness is assumed by such Person); *provided*, *however*, that the amount of such Indebtedness will be the lesser of: (a) the Fair Market Value (as determined in good faith by the Issuer) of such asset at such date of determination; and (b) the amount of such Indebtedness of such other Person;

*provided*, *however*, that notwithstanding the foregoing, Indebtedness shall be deemed not to include: (i) Contingent Obligations incurred in the ordinary course of business and not in respect of borrowed money; (ii) deferred or prepaid revenues; (iii) purchase price holdbacks in respect of a portion of the purchase price of an asset to satisfy warranty or other unperformed obligations of the respective seller; or (iv) any earn-out obligations, purchase price adjustments, deferred purchase money amounts, milestone or bonus payments (whether performance or time-based), and royalty, licensing, revenue or profit sharing arrangements, in each case, characterized as such and arising expressly out of purchase and sale contracts, development arrangements or licensing arrangements.

Notwithstanding anything in this Indenture to the contrary, Indebtedness shall not include, and shall be calculated without giving effect to, the effects of Accounting Standards Codification section 815 and related interpretations to the extent such effects would otherwise increase or decrease the amount of Indebtedness deemed outstanding for purposes of this Indenture (so that such outstanding amount differs from the principal amount of such Indebtedness payable at maturity) as a result of accounting for any embedded derivatives created by the terms of such Indebtedness; and any such amounts that would have constituted Indebtedness under this Indenture but for the application of this sentence shall not be deemed an Incurrence of Indebtedness under this Indenture.

"Indenture" means this Indenture, as amended, restated or supplemented from time to time.

"Independent Financial Advisor" means an accounting, appraisal or investment banking firm or consultant, in each case of recognized standing in the United States, that is, in the good faith determination of the Issuer, qualified to perform the task for which it has been engaged.

"Individual Monthly Balance" means, with respect to any Indebtedness incurred by the Issuer or the Restricted Subsidiaries under a revolving credit facility during any fiscal month of the Issuer, the quotient of (x) the sum of the aggregate outstanding principal amount of all such Indebtedness at the end of each day of such fiscal month divided by (y) the number of days in such fiscal month.

"Intellectual Property" means, with respect to any Person, all intellectual property and proprietary rights in any jurisdiction throughout the world, including: (i) all inventions (whether or not patentable or reduced to practice), all improvements thereto, and all patents, patent applications, industrial designs, industrial design applications, and patent disclosures, together with all reissues, continuations, continuations-in-part, revisions, divisionals, extensions, and reexaminations in connection therewith; (ii) all trademarks, trademark applications, trade names, service marks, service mark applications, trade dress, logos and designs, business names, company names, Internet domain names, and all other indicia of origin, all applications, registrations, and renewals in connection therewith, and all goodwill associated with any of the foregoing; (iii) all copyrights and other works of authorship, database rights and moral rights, and all applications, registrations, and renewals in connection therewith; (iv) all trade secrets, technologies, processes, techniques, new drug applications, abbreviated new drug applications, biologic license applications or 351(k) biologic license applications (or equivalent non-U.S.

applications of any of the foregoing), protocols, methods, industrial models, designs, drawings, plans, specifications, research and development, and confidential information (including technical data, customer and supplier lists, manufacturing processes, pricing and cost information, and business and marketing plans and proposals); (v) all software (including source code, executable code, data, databases, and related documentation); and (vi) all copies and tangible embodiments of any of the foregoing (in whatever form or medium).

"Investment Grade Securities" means:

(1) securities issued or directly and fully guaranteed or insured by the U.S. government or any agency or instrumentality thereof (other than Cash Equivalents);

(2) securities that have a rating equal to or higher than "Baa3" (or equivalent) by Moody's or "BBB-" (or equivalent) by S&P, or an equivalent rating by any other Rating Agency, but excluding any debt securities or loans or advances between and among the Issuer and its Subsidiaries;

(3) investments in any fund that invests exclusively in investments of the type described in clauses (1) and (2) above, which fund may also hold immaterial amounts of cash pending investment or distribution; and

(4) corresponding instruments in countries other than the United States customarily utilized for high quality investments and in each case with maturities not exceeding two years from the date of acquisition.

"Investments" means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the form of loans (including guarantees), advances or capital contributions (excluding accounts receivable, trade credit and advances to customers and commission, travel and similar advances to officers, employees and consultants made in the ordinary course of business), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities issued by any other Person and investments that are required by GAAP to be classified on the balance sheet of the Issuer in the same manner as the other investments included in this definition to the extent such transactions involve the transfer of cash or other property. Except as otherwise provided in this Indenture, the outstanding amount of any Investment shall be deemed to be the initial cost of such Investment when made, purchased or acquired (without giving effect to any adjustments for subsequent increases or decreases in value), but giving effect to any repayments, interest, returns, profits, dividends, distributions, proceeds, fees, income and other amounts actually received by the Issuer or any Restricted Subsidiary of the Issuer in respect of such Investment and determined without regard to any write-downs or write-offs of any investments, loans or advances in connection therewith. For purposes of the definition of "Unrestricted Subsidiary" and Section 4.04:

(1) "Investments" shall include the portion (proportionate to the Issuer's equity interest in such Subsidiary) of the Fair Market Value (as determined in good faith by the Issuer) of the net assets of a Subsidiary of the Issuer at the time that such Subsidiary is designated an Unrestricted Subsidiary or ceases to be a Subsidiary (to the extent the Issuer retains an Investment in such Person); and

(2) any property transferred to or from an Unrestricted Subsidiary shall be valued at its Fair Market Value (as determined in good faith by the Issuer) at the time of such transfer, in each case as determined in good faith by the Board of Directors of the Issuer.

"IRS" means the U.S. Internal Revenue Service.

"Issue Date" means [ ], 2018.

"Issuer" has the meaning set forth in the preamble hereof but, for the avoidance of doubt, shall not include any of its Subsidiaries.

"Lien" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law (including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell, or give a security interest in, such asset and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes of any jurisdiction)); *provided* that in no event shall an operating lease be deemed to constitute a Lien.

"Moody's" means Moody's Investors Service, Inc. or any successor to the rating agency business thereof.

"Net Income" means, with respect to any Person, the net income (loss) of such Person and its Subsidiaries, determined in accordance with GAAP and before any reduction in respect of Preferred Stock dividends.

"Noteholder Obligations" means the Obligations under this Indenture and the Securities.

"Obligations" means any principal, interest, penalties, fees, indemnifications, reimbursements (including reimbursement obligations with respect to letters of credit and bankers' acceptances), damages and other liabilities payable under the documentation governing any Indebtedness; *provided*, *however*, that Obligations with respect to the Securities shall not include fees or indemnifications in favor of the Trustee and the Collateral Agent.

"Officer" means the Chairman of the Board, the Chief Executive Officer, the Chief Financial Officer, the President, any Executive Vice President, any Senior Vice President, any Vice President, the Treasurer or the Secretary of the Issuer.

"Officers' Certificate" means a certificate signed on behalf of the Issuer by two Officers of the Issuer, one of whom must be the principal executive officer, the principal financial officer, the treasurer or the principal accounting officer of the Issuer that meets the requirements set forth in this Indenture.

"Opinion of Counsel" means a written opinion from legal counsel who is acceptable to the Trustee and may be an employee of or counsel to the Issuer or the Trustee.

"Original Securities" means the Issuer's 10.375% Senior Secured Notes due 2024 issued on the Issue Date pursuant to Section 2.01(b).

"Pancreaze®" means the product referred to as Pancreaze® (whether marketed under such name or any other name and including any authorized generic).

"Pancreaze® Assets" means the Intellectual Property in respect of Pancreaze® and any other business, operations or assets (including contractual rights, licenses and related payments and any Excluded Agreements, but excluding any such contractual rights, licenses and related payments for purposes of distributing or commercializing Pancreaze® in Canada) related to Pancreaze®.

"Pancreaze® Net Sales" means for any period the gross sales of Pancreaze® in arm's length sales by the Issuer, any of its Affiliates or their licensees, sublicensees, assignees, transferees or other commercial partners (or any of their respective Affiliates) to independent, unrelated third parties, less the following deductions from such gross amounts that are actually incurred, allowed, accrued or specifically allocated in such period: (i) credits, price adjustments or allowances for damaged products (to the extent not covered by insurance), defective goods, returns or rejections of Pancreaze®; (ii) normal and customary trade, cash and quantity discounts, allowances, rebates, coupons and credits (other than price discounts granted at the time of invoicing that have been already reflected in the gross amount invoiced); (iii) chargeback payments, rebates and similar allowances (or the equivalent thereof) granted to group purchasing organizations, managed health care organizations, distributors or wholesalers or to federal, state/provincial, local and other governments, including their agencies, or to trade customers; (iv) any fees paid to any third party logistics providers, wholesalers and distributors; (v) any freight, postage, shipping, insurance and other transportation charges incurred by the selling Person in connection with shipping Pancreaze® to third party logistics providers, wholesalers and distributors and to customers; (vi) adjustments for billing errors or recalls; (vii) sales, value-added (to the extent not refundable in accordance with applicable law), excise and other Taxes (including annual fees due under Section 9008 of the United States Patient Protection and Affordable Care Act of 2010 (Pub. L. No. 111-48) and other comparable laws) levied on, absorbed, determined or imposed with respect to such sale (but not including Taxes assessed against the income derived from such sale); and (viii) amounts written off by reason of uncollectible debt, *provided* that if the debt is thereafter paid, the corresponding amount shall be added to the Pancreaze® Net Sales of the period during which it is paid. Pancreaze® Net Sales, as set forth in this definition, shall be calculated applying, in accordance with GAAP, the standard accounting practices the selling Person customarily applies to other branded products sold by it or its Affiliates under similar trade terms and conditions. For purposes of this definition and for the avoidance of doubt, no sale of a particular unit of Pancreaze® following the first arm's length sale of such unit to an independent, unrelated third party shall be included within such definition.

"Permitted Asset Sale" means:

(a) a Disposition of (i) Cash Equivalents or Investment Grade Securities, (ii) obsolete, damaged or worn-out assets, property or equipment in the ordinary course of business (including the abandonment or other Disposition of Intellectual Property that is,

in the reasonable judgment of the Issuer, no longer economically practicable or commercially reasonable to maintain or useful in any material respect, taken as a whole, in the conduct of the business of the Issuer and its Restricted Subsidiaries taken as a whole) (but in any case other than Intellectual Property in respect of Pancreaze®), (iii) Inventory (as defined in the Uniform Commercial Code) or goods, products or services (or other assets) held for sale in the ordinary course of business or (iv) equipment or other assets as part of a trade-in for replacement equipment;

(b) the Disposition of all or substantially all of the assets of the Issuer in a manner permitted pursuant to Section 5.01 or any Disposition that constitutes a Change of Control;

(c) any Restricted Payment that is permitted to be made, and is made, under Section 4.04 or any Permitted Investment;

(d) any Disposition of assets or issuance or sale of Equity Interests of the Issuer or any Restricted Subsidiary, which assets or Equity Interests so Disposed or issued have an aggregate Fair Market Value (as determined in good faith by the Issuer) of less than $1,000,000 (but in any case other than Pancreaze® Assets);

(e) any Disposition of property or assets, or the issuance of securities, by (i) a Restricted Subsidiary of the Issuer to the Issuer, (ii) by the Issuer or a Restricted Subsidiary of the Issuer to a Guarantor (or to an entity that will become a Guarantor in accordance with Section 4.12) or (iii) by a Restricted Subsidiary of the Issuer that is not a Guarantor (and will not become a Guarantor pursuant to Section 4.12) to another Restricted Subsidiary of the Issuer that is not a Guarantor (and will not become a Guarantor pursuant to Section 4.12);

(f) any exchange of assets (including a combination of assets and Cash Equivalents) (other than Intellectual Property) for assets related to a Similar Business of comparable or greater market value or usefulness to the business of the Issuer and its Restricted Subsidiaries as a whole, as determined in good faith by the Issuer, which in the event of an exchange of assets with a Fair Market Value in excess of (A) $1,000,000 shall be evidenced by an Officers' Certificate and (B) $5,000,000 shall be set forth in a resolution approved by a majority of the Board of Directors of the Issuer, evidenced by an Officers' Certificate certifying as to such approval (but in any case other than Pancreaze® Assets);

(g) foreclosure on assets of the Issuer or any of its Restricted Subsidiaries;

(h) any sale of Equity Interests in, or Indebtedness or other securities of, an Unrestricted Subsidiary;

(i) the lease, assignment or sublease of any real or personal property in the ordinary course of business;

(j) any non-exclusive license (other than with respect to exclusivity for specific geographic locations and, with respect to licenses relating to Pancreaze® or

Qsymia®, exclusivity for specific geographic locations outside the United States or otherwise subject to compliance with Section 4.22), collaboration agreement, strategic alliance or similar arrangement in the ordinary course of business providing for the licensing of Intellectual Property or the development or commercialization of Intellectual Property that, at the time of such non-exclusive license, collaboration agreement, strategic alliance or similar arrangement, does not materially and adversely affect the business of the Issuer and its Restricted Subsidiaries taken as a whole (but in any case other than in respect of Pancreaze® Assets);

(k) any surrender or waiver of contract rights or the settlement of, release of, recovery on or surrender of contract, tort or other claims of any kind;

(l) in the ordinary course of business, any swap of assets, or lease, assignment or sublease of any real or personal property, in each case, other than Intellectual Property, in exchange for services (including in connection with any outsourcing arrangements) of comparable or greater value or usefulness to the business of the Issuer and its Restricted Subsidiaries taken as a whole, as determined in good faith by the Issuer;

(n) the incurrence of Permitted Liens;

(o) any Disposition of Capital Stock of any Restricted Subsidiary pursuant to an agreement or other obligation with or to a Person (other than the Issuer or a Restricted Subsidiary of the Issuer) from whom such Restricted Subsidiary was acquired or from whom such Restricted Subsidiary acquired its business and assets (having been newly formed in connection with such acquisition), made as part of such acquisition and in each case comprising all or a portion of the consideration in respect of such sale or acquisition;

(p) Dispositions of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements;

(q) the issuance of Disqualified Stock pursuant to Section 4.03;

(r) the Disposition resulting from any involuntary loss of title or damage to, involuntary loss or destruction of, or condemnation or other taking of, any property or assets of the Issuer or any Restricted Subsidiary; and

(s) any Disposition contemplated by clause (3) of the definition of "Special Proceeds"; *provided*, that such Disposition does not materially or adversely affect the Issuer's business, condition (financial or otherwise) or prospects or the value of the Collateral taken as a whole; *provided, further*, that if the cash payments or other proceeds described in such clause (3) are less than $5,000,000, the Issuer has determined in good faith that such transaction is fair to the Issuer or the applicable Restricted Subsidiary of the Issuer from a financial point of view.

"Permitted Investments" means:

(1) any Investment (a) existing on the Issue Date in the Issuer or any Restricted Subsidiary or (b) made after the Issue Date (i) in the Issuer or any Guarantor (or in an entity that will become a Guarantor in accordance with Section 4.12) or (ii) by a Restricted Subsidiary of the Issuer that is not a Guarantor (and will not become a Guarantor pursuant to Section 4.12) in another Restricted Subsidiary of the Issuer that is not a Guarantor (and will not become a Guarantor pursuant to Section 4.12);

(2) any Investment in Cash Equivalents or Investment Grade Securities;

(3) any Investment by the Issuer or any Restricted Subsidiary of the Issuer in a Person if as a result of such Investment (a) such Person becomes a Guarantor in accordance with Section 4.12 or (b) such Person, in one transaction or a series of related transactions, is merged, amalgamated or consolidated with or into, or transfers or conveys all or substantially all of its assets to, or is liquidated into, the Issuer or a Guarantor (or an entity that will become a Guarantor in accordance with Section 4.12);

(4) any Investment in securities or other assets not constituting Cash Equivalents and received in connection with a Permitted Asset Sale;

(5) any Investment existing on, or made pursuant to binding commitments existing on, the Issue Date or an Investment consisting of any extension, modification or renewal of any Investment existing on the Issue Date; *provided* that the amount of any such Investment may be increased as required by the terms of such Investment as in existence on the Issue Date;

(6) advances to employees not in excess of $100,000 outstanding at any one time in the aggregate;

(7) any Investment acquired by the Issuer or any of its Restricted Subsidiaries (a) in exchange for any other Investment or accounts receivable held by the Issuer or any such Restricted Subsidiary in connection with or as a result of a bankruptcy, workout, reorganization or recapitalization of the issuer of such other Investment or accounts receivable or (b) as a result of a foreclosure by the Issuer or any of its Restricted Subsidiaries with respect to any secured Investment or other transfer of title with respect to any secured Investment in default;

(8) Hedging Obligations permitted under Section 4.03(b)(viii);

(9) Investments (but in any case not relating to the Disposition of Pancreaze® Assets) by the Issuer or any of its Restricted Subsidiaries having an aggregate Fair Market Value, taken together with all other Investments made pursuant to this clause (9) that are at that time outstanding, not to exceed $1,000,000 (with the Fair Market Value of each Investment being measured at the time made and without giving effect to subsequent changes in value); *provided, however*, that if any Investment pursuant to this clause (9) is made in any Person that is not a Restricted Subsidiary at the date of the making of such Investment and such Person becomes a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clause

(1) above and shall cease to have been made pursuant to this clause (9) for so long as such Person continues to be a Restricted Subsidiary;

(10) advances to officers, directors and employees for business-related travel expenses, moving expenses and other similar expenses, in each case Incurred in the ordinary course of business or consistent with past practice or to fund such person's purchase of Equity Interests of the Issuer or any direct or indirect parent of the Issuer, not to exceed $500,000 at any one time outstanding pursuant to this clause (10);

(11) Investments the payment for which consists of Equity Interests of the Issuer (other than Disqualified Stock) or any direct or indirect parent of the Issuer, as applicable;

(12) any transaction to the extent it constitutes an Investment (but in any case not relating to the Disposition of Pancreaze® Assets) that is permitted by and made in accordance with the provisions of Section 4.07(b) (except transactions described in clauses (ii) and (iv) of such Section);

(13) Investments consisting of the non-exclusive licensing (other than with respect to exclusivity for specific geographic locations and, with respect to licenses relating to Pancreaze® or Qsymia®, exclusivity for specific geographic locations outside the United States or otherwise subject to compliance with Section 4.22) of Intellectual Property or collaboration agreements, strategic alliances or similar arrangements in respect of Intellectual Property, in each case, for the development or commercialization of Intellectual Property in the ordinary course of business that, at the time of such non-exclusive license, collaboration agreement, strategic alliance or similar arrangement, does not materially and adversely affect the business of the Issuer and its Restricted Subsidiaries taken as a whole (but in any case other than in respect of Pancreaze® Assets);

(14) guarantees issued in accordance with Sections 4.03 and 4.12;

(15) Investments consisting of or to finance purchases and acquisitions of inventory, supplies, materials, services or equipment or purchases of contract rights or non-exclusive licenses or leases of Intellectual Property (where the Issuer or applicable Restricted Subsidiary is the licensee or lessee), in each case in the ordinary course of business;

(16) Investments of a Guarantor (or an entity that will become a Guarantor in accordance with Section 4.12) acquired after the Issue Date or of an entity merged into, amalgamated with, or consolidated with a Guarantor (or an entity that will become a Guarantor in accordance with Section 4.12) in a transaction that is not prohibited by Article 5 after the Issue Date to the extent that such Investments were not made in contemplation of such acquisition, merger, amalgamation or consolidation and were in existence on the date of such acquisition, merger, amalgamation or consolidation;

(17) any Investment in any Restricted Subsidiary of the Issuer or any joint venture in connection with intercompany cash management arrangements or related activities arising in the ordinary course of business;

(18) any Investment in connection with a Sale/Leaseback Transaction not prohibited by this Indenture;

(19) any Investment (but in any case not relating to Pancreaze® Assets) by the Issuer or any of its Restricted Subsidiaries in respect of the Issuer's pulmonary arterial hypertension program in a joint venture or Similar Business having an aggregate Fair Market Value (as determined in good faith by the Issuer), taken together with all other Investments made pursuant to this clause (19) that are at that time outstanding, not to exceed $6,000,000 (with the Fair Market Value of each Investment being measured at the time made and without giving effect to subsequent changes in value); *provided*, *however*, that if any Investment pursuant to this clause (19) is made in any Person that is not a Guarantor at the date of the making of such Investment and such Person becomes a Guarantor after such date, such Investment shall thereafter be deemed to have been made pursuant to clause (1) above and shall cease to have been made pursuant to this clause (19) for so long as such Person continues to be a Guarantor; and

(20) guarantees of operating leases (but not capital leases) or of other obligations not constituting Indebtedness, in each case in the ordinary course of business.

In the event that any Investment (or any portion thereof) meets the criteria of more than one of the categories of Permitted Investments described in clauses (1) through (20) above, or is entitled to be Incurred or made pursuant to Section 4.04, the Issuer shall, in its sole discretion, classify or reclassify, or later divide, classify or reclassify, such Investment (or any portion thereof) in any manner that complies with such categories above or Section 4.04. In addition, at the time of Incurrence or making of any Investment, the Issuer shall be entitled to divide and classify such Investment in more than one of the categories of Permitted Investments described above or described in Section 4.04.

"Permitted Liens" means, with respect to any Person:

(1) pledges or deposits by such Person under workmen's compensation laws, unemployment insurance laws or similar legislation, or good faith deposits in connection with bids, tenders, contracts (other than for the payment of Indebtedness) or leases to which such Person is a party, or deposits to secure public or statutory obligations of such Person or deposits of cash or U.S. government bonds to secure surety or appeal bonds to which such Person is a party, or deposits as security for contested taxes or import duties or for the payment of rent, in each case Incurred in the ordinary course of business;

(2) Liens imposed by law, such as carriers', warehousemen's and mechanics' Liens, in each case for sums not yet due or being contested in good faith by appropriate proceedings or other Liens arising out of judgments or awards against such Person with respect to which such Person shall then be proceeding with an appeal or other proceedings for review;

(3) Liens for taxes, assessments or other governmental charges not yet due or payable or subject to penalties for nonpayment or that are being contested in good faith by appropriate proceedings if adequate reserves with respect thereto are maintained on the books of such Person in accordance with GAAP;

(4) Liens in favor of issuers of performance and surety bonds or bid bonds or with respect to other regulatory requirements or letters of credit issued pursuant to the request of and for the account of such Person in the ordinary course of its business (including any Liens securing Indebtedness permitted to be Incurred pursuant to Section 4.03(b)(iv) and Section 4.03(b)(ix));

(5) minor survey exceptions, minor encumbrances, easements or reservations of, or rights of others for, licenses, rights-of-way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning or other restrictions as to the use of real properties or Liens incidental to the conduct of the business of such Person or to the ownership of its properties that were not Incurred in connection with Indebtedness and that do not in the aggregate materially adversely affect the value of said properties or materially impair their use in the operation of the business of such Person;

(6) Liens securing Indebtedness permitted to be Incurred pursuant to Section 4.03(b)(iii);

(7) (A) Liens existing on the Issue Date, (B) Liens securing the Securities or the Guarantees, including Liens arising under or relating to the Security Documents, and (C) the Lien securing the Issuer's and the Guarantors' payment obligations under Section 7.06;

(8) Liens on assets, property or shares of stock of a Person at the time such Person becomes a Subsidiary; *provided*, *however*, that such Liens are not created or Incurred in connection with, or in contemplation of, such other Person becoming such a Subsidiary; *provided*, *further*, *however*, that such Liens may not extend to any other property owned by the Issuer or any Restricted Subsidiary of the Issuer;

(9) Liens on assets or property at the time the Issuer or a Restricted Subsidiary of the Issuer acquired the assets or property, including any acquisition by means of a merger, amalgamation or consolidation with or into the Issuer or any Restricted Subsidiary of the Issuer; *provided*, *however*, that such Liens are not created or Incurred in connection with, or in contemplation of, such acquisition; *provided*, *further*, *however*, that the Liens may not extend to any other property owned by the Issuer or any Restricted Subsidiary of the Issuer;

(10) Liens securing Indebtedness or other obligations of a Restricted Subsidiary owing to the Issuer or a Guarantor permitted to be Incurred in accordance with Section 4.03;

(11) Liens securing Hedging Obligations not Incurred in violation of this Indenture; *provided* that with respect to Hedging Obligations relating to Indebtedness, such Lien extends only to the property securing such Indebtedness;

(12) Liens on specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(13) leases and subleases of real property that do not materially interfere with the ordinary conduct of the business of the Issuer or any of its Restricted Subsidiaries;

(14) Liens arising from Uniform Commercial Code financing statement filings regarding operating leases entered into by the Issuer and its Restricted Subsidiaries in the ordinary course of business;

(15) Liens in favor of the Issuer or any Guarantor;

(16) deposits made in the ordinary course of business to secure liability to insurance carriers;

(17) Liens on the Equity Interests of Unrestricted Subsidiaries;

(18) any non-exclusive license (other than with respect to exclusivity for specific geographic locations and, with respect to licenses relating to Pancreaze® or Qsymia®, exclusivity for specific geographic locations outside the United States or otherwise subject to compliance with Section 4.22), collaboration agreement, strategic alliance or similar arrangement providing for the licensing of Intellectual Property or the development or commercialization of Intellectual Property that, at the time of the grant thereof, would not reasonably be expected to have a material adverse effect on the business of the Issuer and its Restricted Subsidiaries taken as a whole (but in any case other than in respect of Pancreaze® Assets);

(19) Liens to secure any refinancing, refunding, extension, renewal or replacement (or successive refinancings, refundings, extensions, renewals or replacements) as a whole, or in part, of any Indebtedness ("Refinancing Secured Indebtedness") (i) secured by any Lien referred to in the foregoing clauses (6) (in the case of Liens to secure any Refinancing Secured Indebtedness under such clause (6), such Liens shall be deemed to have also been incurred under such clause (6), and not this clause (19), for purposes of determining amounts outstanding under such clause (6)), (7), (8) and (9) or (ii) not in excess of $30,000,000 that was outstanding on the Issue Date; *provided, however*, that (x) such new Lien shall be limited to (A) all or part of the same property that secured (or, under the written arrangements under which the original Lien arose, could secure) the Lien then securing such Indebtedness being refinanced, refunded, extended, renewed or replaced (plus improvements, accessions, proceeds, dividends or distributions in respect thereof) or (B) in the case of clause (ii) above, Liens on Collateral, where such Liens on such Collateral rank junior to the Liens securing the Securities in all respects (including in right of payment, in enforcement and in lien priority) and where such Indebtedness is not secured by any property or assets that do not secure the Securities and is not guaranteed by any Restricted Subsidiary that does not provide a guarantee of the Securities, (y) the Indebtedness secured by such Lien at such

time is not increased to any amount greater than the sum of (a) the outstanding principal amount or, if greater, committed amount of the Indebtedness described under such clauses (6), (7), (8) and (9), or the principal amount of such Indebtedness described in clause (ii) above, as the case may be, at the time the original Lien became a Permitted Lien under this Indenture, and (b) an amount necessary to pay any fees and expenses, including premiums, related to such refinancing, refunding, extension, renewal or replacement and (z) any refinancing, refunding, extension, renewal or replacement (or successive refinancings, refundings, extensions, renewals or replacements) as a whole, or in part, of any Indebtedness secured by any Lien referred to in clause 7(B) above shall, at the election of the Issuer, be secured by and entitled to the benefits of the Security Documents and rank *pari passu* with the Indebtedness that is refinanced, refunded, extended, renewed or replaced;

(20) Liens on equipment of the Issuer or any Restricted Subsidiary granted in the ordinary course of business to the Issuer's or such Restricted Subsidiary's client at which such equipment is located;

(21) judgment and attachment Liens not giving rise to an Event of Default and notices of lis pendens and associated rights related to litigation being contested in good faith by appropriate proceedings and for which adequate reserves have been made;

(22) Liens arising out of conditional sale, title retention, consignment or similar arrangements for the sale of goods entered into in the ordinary course of business;

(23) Liens Incurred to secure cash management services or to implement cash pooling arrangements in the ordinary course of business that do not, individually or in the aggregate, materially impair the value of the Collateral;

(24) any encumbrance or restriction (including put and call arrangements) with respect to Capital Stock of any joint venture or similar arrangement pursuant to any joint venture or similar agreement; *provided*, *however*, that this clause (24) shall not apply to any Liens securing Indebtedness;

(25) any amounts held by a trustee in the funds and accounts under an indenture securing any revenue bonds issued for the benefit of the Issuer or any Restricted Subsidiary;

(26) Liens arising by virtue of any statutory or common law provisions relating to banker's Liens, rights of set-off or similar rights and remedies as to Deposit Accounts (as defined in the Uniform Commercial Code) or other funds maintained with a depository or financial institution;

(27) Liens on property subject to any Sale/Leaseback Transactions not prohibited under this Indenture;

(28) Liens that secure Indebtedness Incurred in the ordinary course of business not to exceed $1,000,000 at any one time outstanding (but not in respect of Pancreaze® Assets);

(29) any interest of title of a lessor under any lease of real or personal property;

(30) Liens securing any Optional Secured Notes issued in compliance with Section 4.14;

(31) Liens securing Indebtedness permitted to be Incurred pursuant to Section 4.03(b)(x); *provided*, that such Indebtedness shall be secured by Liens on Collateral ranking junior to the Liens securing the Securities in all respects (including in right of payment, in enforcement and in lien priority); and

(32) Liens on the identifiable proceeds of any property or asset subject to a Lien otherwise constituting a Permitted Lien.

"Person" means any individual, corporation, company, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

"Preferred Stock" means any Equity Interest with preferential right of payment of dividends or upon liquidation, dissolution or winding up.

"Qsymia®" means the product referred to as Qsymia® (whether marketed under such name or any other name and including any authorized generic).

"Rating Agency" means (i) Moody's, (ii) S&P or (iii) any "nationally recognized statistical rating organization" within the meaning of Section 3(a)(62) of the Exchange Act selected by the Issuer or any direct or indirect parent of the Issuer as a replacement agency for Moody's or S&P, as the case may be.

"Representative" means the trustee(s), agent(s) or representative(s) (if any) for an issue of Indebtedness; *provided*, *however*, that if, and for so long as, such Indebtedness lacks such a Representative, then the Representative for such Indebtedness shall at all times constitute the holder or holders of a majority in outstanding principal amount of obligations under such Indebtedness.

"Restricted Investment" means an Investment other than a Permitted Investment.

"Restricted Subsidiary" means, with respect to any Person, any Subsidiary of such Person other than an Unrestricted Subsidiary of such Person. Unless otherwise indicated in this Indenture, all references to Restricted Subsidiaries shall mean Restricted Subsidiaries of the Issuer.

"S&P" means Standard & Poor's Ratings Services or any successor to the rating agency business thereof.

"Sale/Leaseback Transaction" means an arrangement relating to property now owned or acquired after the Issue Date by the Issuer or a Restricted Subsidiary whereby the Issuer or such Restricted Subsidiary transfers such property to a Person and the Issuer or such

Restricted Subsidiary leases it from such Person, other than leases between the Issuer and a Restricted Subsidiary of the Issuer or between Restricted Subsidiaries of the Issuer.

"SEC" means the United States Securities and Exchange Commission or any successor thereto.

"Secured Indebtedness" means any Indebtedness secured by a Lien.

"Securities" means the Issuer's 10.375% Senior Secured Notes due 2024 and shall include, for the avoidance of doubt, the Original Securities issued on the Issue Date and the Additional Conditional Securities that may be issued after the Issue Date, in each case, as and to the extent issued pursuant to the terms and conditions of this Indenture.

"Securities Act" means the United States Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder.

"Security Documents" means the security agreements, pledge agreements, mortgages, collateral assignments and related agreements, as amended, supplemented, restated, renewed, refunded, replaced, restructured, repaid, refinanced or otherwise modified from time to time, creating, perfecting or otherwise evidencing the security interests granted by the Issuer, any Guarantor or any other Subsidiary of the Issuer in favor of the Collateral Agent in the Collateral as contemplated by this Indenture, including the Collateral Agreement and all documentation required pursuant thereto.

"Similar Business" means a business, the majority of whose revenues are derived from the activities of the Issuer and its Subsidiaries as of the Issue Date or any business or activity that is reasonably similar or complementary thereto or a reasonable extension, development or expansion thereof or ancillary or complementary thereto.

"Special Proceeds" means an amount equal to:

(1) (a) any cash payments or proceeds received by or for the account of the Issuer or any of its Restricted Subsidiaries (i) under any casualty insurance policy in respect of a covered loss thereunder or (ii) as a result of the taking of any assets of the Issuer or any of its Restricted Subsidiaries by any Person pursuant to the power of eminent domain, condemnation or otherwise, or pursuant to a sale of any such assets to a purchaser with such power under threat of such a taking, minus (b) (i) any actual and reasonable costs incurred by the Issuer or any of its Restricted Subsidiaries in connection with the adjustment or settlement of any claims of the Issuer or such Restricted Subsidiary in respect thereof, (ii) any *bona fide* direct costs incurred in connection with any taking of such assets as referred to in clause (a)(ii) of this definition, including sales, transfer, income, gains or other Taxes payable (or estimated in good faith by the Issuer to become payable) in connection therewith, (iii) payment of the outstanding principal amount of, and premium and penalty, if any, and interest on, any Indebtedness (other than the Securities) that is secured by a Lien on the assets in question and that is required to be repaid under the terms thereof as a result of such event, (iv) amounts required to be turned over to landlords (or their mortgagees) pursuant to the terms of any lease to which the Issuer or any of its Restricted Subsidiaries is party and (v) in the case of any casualty

event or taking involving an asset of a Restricted Subsidiary that is not a Wholly Owned Restricted Subsidiary, the pro rata portion of the Special Proceeds (calculated without regard to this clause (v)) attributable to minority interests and not available for distribution to or for the account of the Issuer or a Wholly Owned Restricted Subsidiary as a result thereof; plus

(2) any other cash payment or proceeds received by or for the account of the Issuer or any of its Restricted Subsidiaries that arises out of a purchase price, working capital or other monetary adjustment or an indemnification obligation under that certain Asset Purchase Agreement dated as of April 30, 2018 between Janssen Pharmaceuticals, Inc. and the Issuer; plus

(3) any cash payment or proceeds received by or for the account of the Issuer or any of its Restricted Subsidiaries from the Disposition of all or a portion of the business, operations or assets (including contractual rights, licenses or related payments) related to the product referred to as Qsymia® in the United States;

*provided*, *however*, that Special Proceeds shall not be deemed to exist for purposes of this Indenture unless and until the aggregate amount of clauses (1), (2) and (3) above are equal to or greater than $5,000,000.

"Stated Maturity" means, with respect to any security, the date specified in such security as the fixed date on which the final payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such security at the option of the holder thereof upon the happening of any contingency beyond the control of the issuer unless such contingency has occurred).

"Subordinated Indebtedness" means (a) with respect to the Issuer, any Indebtedness of the Issuer that is (i) unsecured, (ii) by its terms subordinated in right of payment to the Securities or (iii) secured by Liens on Collateral ranking junior to the Liens securing the Securities or (b) with respect to any Guarantor, any Indebtedness of such Guarantor that is (i) unsecured, (ii) by its terms subordinated in right of payment to its Guarantee or (iii) secured by Liens on Collateral ranking junior to the Liens securing its Guarantee. For the avoidance of doubt, Subordinated Indebtedness shall be deemed to include any Indebtedness reflecting the payment subordination terms set forth in Exhibit D.

"Subsidiary" means, with respect to any Person, (i) any corporation, association or other business entity (other than a partnership, joint venture, limited liability company or similar entity) of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time of determination owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof, and (ii) any partnership, joint venture, limited liability company or similar entity of which (a) more than 50% of the capital accounts, distribution rights, total equity and voting interests or general and limited partnership interests, as applicable, are owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that

Person or a combination thereof, whether in the form of membership, general, special or limited partnership interests or otherwise, and (b) such Person or any Subsidiary of such Person is a controlling general partner or otherwise controls such entity. For purposes of clarity, a Subsidiary of a Person shall not include any Person that is under common control with the first Person solely by virtue of having directors, managers or trustees in common and shall not include any Person that is solely under common control with the first Person (i.e., a sister company with a common parent).

"Taxes" means any present or future tax, fee, duty, levy, tariff, impost, assessment or other governmental charge (including penalties, interest and other liabilities related thereto).

"TIA" means the Trust Indenture Act of 1939 (15 U.S.C. Sections 77aaa-77bbbb) as interpreted and in effect on the Issue Date; *provided*, *however*, that in the event the Trust Indenture Act of 1939 is amended or there is a change in its interpretation after the Issue Date, the term "TIA" shall mean, to the extent required by such amendment or such change in interpretation, the Trust Indenture Act of 1939, as so amended or interpreted. It is acknowledged that this Indenture will not be qualified under the TIA.

"Treasury Rate" means, in respect of any redemption date, the weekly average yield as of such redemption date of actually traded United States Treasury securities adjusted to a constant maturity of three months (as compiled and published in the most recent Federal Reserve Statistical Release H.15 that has become publicly available at least two Business Days prior to such redemption date (or, if such Federal Reserve Statistical Release H.15 is no longer published, any publicly available source of similar market data)).

"Trust Officer" means:

(1) any officer within the Corporate Trust Office of the Trustee, including any vice president, assistant vice president, assistant secretary, assistant treasurer, trust officer or any other officer of the Trustee to whom any corporate trust matter relating to this Indenture is referred because of such Person's knowledge of and familiarity with the particular subject; and

(2) who shall have direct responsibility for the administration of this Indenture.

"Trustee" means the party named as such in this Indenture until a successor replaces it in accordance with the applicable provisions of this Indenture and, thereafter, means such successor.

"Uniform Commercial Code" means the Uniform Commercial Code as in effect from time to time in the State of New York.

"Unrestricted Subsidiary" means:

(1) any Subsidiary of the Issuer that at the time of determination shall be designated an Unrestricted Subsidiary by the Board of Directors of such Person in the manner provided below; and

(2) any Subsidiary of an Unrestricted Subsidiary.

The Issuer may designate any Subsidiary of the Issuer (including any newly acquired or newly formed Subsidiary of the Issuer) to be an Unrestricted Subsidiary unless such Subsidiary or any of its Subsidiaries owns any Equity Interests or Indebtedness of, or owns or holds any Lien on any property of, the Issuer or any other Subsidiary of the Issuer that is not a Subsidiary of the Subsidiary to be so designated; *provided*, *however*, that the Subsidiary to be so designated and its Subsidiaries (i) do not at the time of designation have and do not thereafter Incur any Indebtedness that is guaranteed by the Issuer or any of its Restricted Subsidiaries (or that otherwise has recourse to the property or assets of the Issuer or any of its Restricted Subsidiaries) and (ii) do not at the time of designation and do not thereafter guarantee any other Indebtedness of the Issuer or any of its Restricted Subsidiaries; *provided*, *further*, *however*, that either:

(a) the Subsidiary to be so designated has total consolidated assets of $1,000 or less; or

(b) if such Subsidiary has consolidated assets greater than $1,000, then such designation would be permitted under Section 4.04.

The Issuer may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; *provided*, *however*, that immediately after giving effect to such designation:

(x) the Fixed Charge Coverage Ratio for the Issuer and its Restricted Subsidiaries would be greater than such ratio for the Issuer and its Restricted Subsidiaries immediately prior to such designation, in each case on a *pro forma* basis taking into account such designation; and

(y) no Event of Default shall have occurred and be continuing.

Any such designation by the Issuer shall be evidenced to the Trustee by promptly filing with the Trustee a copy of the resolution of the Board of Directors of the Issuer or any committee thereof giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing provisions.

"U.S. Government Obligations" means securities that are:

(1) direct obligations of the United States of America for the timely payment of which its full faith and credit is pledged; or

(2) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America, the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America,

which, in each case, are not callable or redeemable at the option of the issuer thereof, and shall also include a depository receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act) as custodian with respect to any such U.S. Government Obligations or a specific payment of

principal of or interest on any such U.S. Government Obligations held by such custodian for the account of the holder of such depository receipt; *provided* that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the U.S. Government Obligations or the specific payment of principal of or interest on the U.S. Government Obligations evidenced by such depository receipt.

"Voting Stock" of any Person as of any date means the Capital Stock of such Person that is at the time entitled to vote in the election of the Board of Directors of such Person.

"Weighted Average Life to Maturity" means, when applied to any Indebtedness or Disqualified Stock, as the case may be, at any date, the quotient obtained by dividing (i) the sum of the products of the number of years from the date of determination to the date of each successive scheduled principal payment of such Indebtedness or redemption or similar payment with respect to such Disqualified Stock multiplied by the amount of such payment, by (ii) the sum of all such payments.

"Wholly Owned Restricted Subsidiary" means any Wholly Owned Subsidiary that is a Restricted Subsidiary.

"Wholly Owned Subsidiary" of any Person means a Subsidiary of such Person 100% of the outstanding Capital Stock or other ownership interests of which (other than directors' qualifying shares) shall at the time be owned by such Person or by one or more Wholly Owned Subsidiaries of such Person.

SECTION 1.02. Other Definitions.

| Term | Defined in Section |
|---|---|
| "Acceleration" | 6.02 |
| "Affiliate Transaction" | 4.07(a) |
| "After-Acquired Property" | 4.16 |
| "Bankruptcy Law" | 6.01 |
| "Base Currency" | 12.14(b)(i) |
| "Change of Control Offer" | 4.08(b) |
| "Consolidated First Lien Leverage Calculation Date" | "Consolidated First Lien Leverage Ratio" definition |
| "Consolidated Leverage Calculation Date" | "Consolidated Leverage Ratio" definition |
| "covenant defeasance option" | 8.01(c) |
| "Custodian" | 6.01 |
| "Definitive Security" | Appendix A |
| "Depository" | Appendix A |
| "Event of Default" | 6.01 |
| "Excluded Agreements" | "Excluded Assets" definition |
| "First Call Date" | Exhibit A |
| "Fixed Charge Coverage Calculation Date" | "Fixed Charge Coverage Ratio" definition |

| Term | Defined in Section |
|---|---|
| “Global Security” | Appendix A |
| “Guaranteed Obligations” | 10.01(a) |
| “Increased Amount” | 4.13 |
| “Judgment Currency” | 12.14(b)(i) |
| “legal defeasance option” | 8.01(c) |
| “Optional Secured Notes” | 4.14 |
| “Paying Agent” | 2.04(a) |
| “Payment Date” | Exhibit A |
| “primary obligations” | “Contingent Obligations” definition |
| “primary obligor” | “Contingent Obligations” definition |
| “protected purchaser” | 2.08 |
| “Purchase Agreement” | Appendix A |
| “QIB” | Appendix A |
| “rate(s) of exchange” | 12.14(d) |
| “Record Date” | Exhibit A |
| “Reference Period” | “Consolidated Total Indebtedness” definition |
| “Refinancing Indebtedness” | 4.03(b)(xii) |
| “Refinancing Secured Indebtedness” | “Permitted Liens” definition |
| “Refunding Capital Stock” | 4.04(b)(ii) |
| “Registrar” | 2.04(a) |
| “Restricted Payments” | 4.04(a) |
| “Retired Capital Stock” | 4.04(b)(ii) |
| “Securities” | Preamble |
| “Securities Custodian” | Appendix A |
| “Security Document Order” | 11.10(h) |
| “Special Proceeds Offer” | 4.22(a) |
| “Special Proceeds Offer Period” | 4.22(c) |
| “Special Proceeds Repurchase Date” | 4.22(a) |
| “Successor Company” | 5.01(a)(i) |
| “Successor Guarantor” | 5.02(a)(i) |

SECTION 1.03. Rules of Construction. Unless the context otherwise requires:

(a) a term has the meaning assigned to it;

(b) except as otherwise set forth in this Indenture, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared in accordance with GAAP as defined herein, and an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP as defined herein;

(c) the word “or” is not exclusive;

(d) the word “including” means including without limitation, and any item or list of items set forth following the word “including”, “include” or “includes” in this

Indenture is set forth only for the purpose of indicating that, regardless of whatever other items are in the category in which such item or items are "included", such item or items are in such category and shall not be construed as indicating the items in the category in which such item or items are "included" are limited to such item or items similar to such items;

(e) all references in this Indenture to any designated "Article", "Section", "Appendix", "Exhibit", definition and other subdivision are to the designated Article, Section, Appendix, Exhibit, definition and other subdivision, respectively, of this Indenture;

(f) all references in this Indenture to (i) the words "herein", "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section, Appendix, Exhibit and other subdivision, respectively, and (ii) the term "this Indenture" means this Indenture as a whole, including the Appendix and Exhibits;

(g) words in the singular include the plural and words in the plural include the singular;

(h) the principal amount of any non-interest bearing or other discount security at any date shall be the principal amount thereof that would be shown on a balance sheet of the issuer dated such date prepared in accordance with GAAP as defined herein;

(i) the principal amount of any Preferred Stock shall be (i) the maximum liquidation value of such Preferred Stock or (ii) the maximum mandatory redemption or mandatory repurchase price with respect to such Preferred Stock, whichever is greater;

(j) "$" and "U.S. Dollars" each refers to United States dollars, or such other money of the United States of America that at the time of payment is legal tender for payment of public and private debts;

(k) the words "asset" or "property" shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights;

(l) unless otherwise specified, all references to an agreement or other document include references to such agreement or document as from time to time amended, restated, reformed, supplemented or otherwise modified in accordance with the terms thereof (subject to any restrictions on such amendments, restatements, reformations, supplements or modifications set forth herein);

(m) all references to any Person shall be construed to include such Person's successors and permitted assigns (subject to any restrictions on assignment, transfer or delegation set forth herein), and any reference to a Person in a particular capacity excludes such Person in other capacities; and

(n) the word “will” shall be construed to have the same meaning and effect as the word “shall”.

## ARTICLE 2

## THE SECURITIES

SECTION 2.01. Amount of Securities.

(a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is limited to $120,000,000.

(b) On the Issue Date, the Issuer shall issue and deliver, in accordance with this Article 2, Original Securities in an aggregate principal amount of $110,000,000.

(c) On any Business Day on or prior to the one-year anniversary of the Issue Date that does not fall between a Record Date and its related Payment Date (but, for the avoidance of doubt, only one Business Day, but not more than one Business Day), the Issuer may issue and deliver, in accordance with this Article 2, without the consent of any Holder or any holder of beneficial interests in the Original Securities, upon five Business Days’ written notice to the Trustee, Additional Conditional Securities in an aggregate principal amount of up to $10,000,000; *provided*, that, as of such Business Day, as conditions to the issuance of such Additional Conditional Securities, (i) no Event of Default has occurred and is continuing, (ii) the Issuer shall certify to the initial purchaser(s) of such Additional Conditional Securities that the representations and warranties provided to such initial purchaser(s) (or its or their Affiliates) on the Issue Date shall remain true and correct, (iii) either (A) if the Issuer has repurchased on or after April 4, 2018 (or will repurchase concurrently with the issuance of such Additional Conditional Securities) Convertible Notes owned or beneficially owned by any Person other than an initial purchaser of the Original Securities (or any Affiliate thereof) at a price no greater than 85% of the principal amount of such Convertible Notes, the initial aggregate principal amount of such Additional Conditional Securities is no greater than such price, or (B) at the end of the most recently completed fiscal quarter preceding such Business Day, the Issuer had, for the 12 months ended with the end of such most recently completed fiscal quarter, EBITDA of at least $18,500,000, and (iv) the Issuer shall deliver to the Trustee, in addition to the written order of the Issuer pursuant to Section 2.03, an Officers’ Certificate of the Issuer certifying as to the satisfaction of the foregoing clause (i), clause (ii) and clause (iii), describing in sufficient detail the basis for satisfying such clause (iii). Such Additional Conditional Securities shall have the same terms as the Original Securities, except that the issue date, the initial Payment Date and the initial date from which interest shall accrue may vary. If the Issuer determines that such Additional Conditional Securities are issued as part of a “qualified reopening” for U.S. federal income tax purposes, such Additional Conditional Securities will have the same CUSIP number as the Original Securities and for U.S. federal income tax purposes will have the same issue date and issue price as the Original Securities. If the Issuer determines that such Additional Conditional Securities are not issued as part of a “qualified reopening” for U.S. federal income tax purposes, such Additional Conditional Securities will be

required to have a CUSIP number that is different than the CUSIP number of the Original Securities.

(d) The Securities, including any Additional Conditional Securities, shall be treated as a single class for all purposes under this Indenture, including directions provided to the Trustee pursuant to Section 6.05, waivers, amendments, redemptions and offers to purchase, and shall rank on a parity basis in right of payment and security.

SECTION 2.02. Form and Dating. Provisions relating to the Securities are set forth in Appendix A hereto, which is hereby incorporated in and expressly made a part of this Indenture. The Securities and the Trustee's certificate of authentication shall each be substantially in the form of Exhibit A, which is hereby incorporated in and expressly made a part of this Indenture. The Securities may have notations, legends or endorsements required by law, stock exchange rule, agreements to which the Issuer or any Guarantor is subject, if any, or usage (*provided* that any such notation, legend or endorsement is in a form acceptable to the Issuer). Each Security shall be dated the date of its authentication. The Securities shall be issuable only in registered form, without interest coupons, and in minimum denominations of $250,000 and any integral multiple of $1,000 in excess thereof.

SECTION 2.03. Execution and Authentication. The Trustee shall authenticate and make available for delivery upon a written order of the Issuer signed by one Officer (i) Original Securities for original issue on the Issue Date in an aggregate principal amount of $110,000,000 and (ii) Additional Conditional Securities for original issue pursuant to Section 2.01(c). Such order shall specify the amount of the Securities to be authenticated, the form in which the Securities are to be authenticated and the date on which the original issue of Securities is to be authenticated.

One Officer shall sign the Securities for the Issuer by manual or facsimile signature.

If an Officer whose signature is on a Security no longer holds that office at the time the Trustee authenticates the Security, the Security shall be valid nevertheless.

A Security shall not be valid until an authorized signatory of the Trustee manually signs the certificate of authentication on the Security. The signature shall be conclusive evidence that the Security has been authenticated under this Indenture.

The Trustee may appoint one or more authenticating agents reasonably acceptable to the Issuer to authenticate the Securities. Any such appointment shall be evidenced by an instrument signed by a Trust Officer, a copy of which shall be furnished to the Issuer. Unless limited by the terms of such appointment, an authenticating agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as any Registrar, Paying Agent or agent for service of notices and demands.

SECTION 2.04. Registrar and Paying Agent.

(a) The Issuer shall maintain (i) an office or agency where Securities may be presented for registration of transfer or for exchange (the "Registrar") and (ii) an office or agency where Securities may be presented for payment (the "Paying Agent"). The Registrar shall keep a register of the Securities and of their transfer and exchange. The Issuer may have one or more co-registrars and one or more additional paying agents. The term "Registrar" includes any co-registrars. The term "Paying Agent" includes the Paying Agent and any additional paying agents. The Issuer initially appoints the Trustee as Registrar, Paying Agent and the Securities Custodian with respect to the Global Securities and as Registrar and Paying Agent with respect to the Definitive Securities.

(b) The Issuer may enter into an appropriate agency agreement with any Registrar or Paying Agent not a party to this Indenture. The agreement shall implement the provisions of this Indenture that relate to such agent. The Issuer shall notify the Trustee of the name and address of any such agent. If the Issuer fails to maintain a Registrar or Paying Agent, the Trustee shall act as such and shall be entitled to appropriate compensation therefor pursuant to Section 7.06. The Issuer or any of its domestically organized Wholly Owned Restricted Subsidiaries may act as Paying Agent or Registrar. Upon any Event of Default as described in Section 6.01(e) or Section 6.01(f), the Trustee shall automatically be the Paying Agent.

(c) The Issuer may remove any Registrar or Paying Agent upon written notice to such Registrar or Paying Agent and to the Trustee; *provided, however*, that no such removal shall become effective until (i) if applicable, acceptance of an appointment by a successor as evidenced by an appropriate agreement entered into by the Issuer and such successor Registrar or Paying Agent, as the case may be, and delivered to the Trustee or (ii) notification to the Trustee that the Trustee shall serve as Registrar or Paying Agent until the appointment of a successor in accordance with clause (i) above. The Registrar or Paying Agent may resign at any time upon written notice to the Issuer and the Trustee; *provided, however*, that the Trustee may resign as Paying Agent or Registrar only if the Trustee also resigns as Trustee in accordance with Section 7.07.

(d) The Issuer shall promptly deliver to the Trustee (and any Holder upon written request) following the end of each calendar year a written notice specifying the amount of original issue discount, if any, accrued on the outstanding Securities for the previous calendar year, including daily rates and accrual periods, and such other information relating to original issue discount as may be required under the Code and applicable regulations, as amended from time to time.

SECTION 2.05. Paying Agent to Hold Money in Trust. On or prior to each due date of the principal of and interest on any Security, the Issuer shall deposit with each Paying Agent (or if the Issuer or a Wholly Owned Restricted Subsidiary is acting as Paying Agent, segregate and hold in trust for the benefit of the Persons entitled thereto) a sum sufficient to pay such principal and interest (and any related fees contemplated by this Indenture) when so becoming due. The Issuer shall require each Paying Agent (other than the Trustee) to agree in writing that a Paying Agent shall hold in trust for the benefit of Holders or the Trustee all money held by a Paying Agent for the payment of principal of and interest on the Securities (and any

such related fees), and shall notify the Trustee of any default by the Issuer in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. If the Issuer or a Wholly Owned Restricted Subsidiary of the Issuer acts as Paying Agent, it shall segregate the money held by it as Paying Agent and hold it in trust for the benefit of the Persons entitled thereto. Upon any bankruptcy or reorganization proceedings relating to the Issuer, the Trustee will serve as Paying Agent if not otherwise so acting. The Issuer at any time may require a Paying Agent to pay all money held by it to the Trustee and to account for any funds disbursed by such Paying Agent. Upon complying with this Section 2.05, a Paying Agent shall have no further liability for the money delivered to the Trustee.

SECTION 2.06. Holder Lists. The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Holders. If the Trustee is not the Registrar, the Issuer shall furnish, or cause the Registrar to furnish, to the Trustee, in writing at least five Business Days before each Payment Date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of Holders. The Issuer shall also maintain a copy of such list of the names and addresses of Holders at its registered office.

SECTION 2.07. Transfer and Exchange. The Securities shall be issued in registered form and shall be transferable only upon the surrender of a Security for registration of transfer and in compliance with Appendix A. When a Security is presented to the Registrar with a request to register a transfer, the Registrar shall register the transfer as requested if its requirements therefor are met. When Securities are presented to the Registrar with a request to exchange them for an equal principal amount of Securities of other denominations, the Registrar shall make the exchange as requested if the same requirements are met. To permit registration of transfers and exchanges, the Issuer shall execute and the Trustee shall authenticate Securities at the Registrar's request. No service charge will be made for any registration of transfer or exchange of the Securities, but the Issuer may require payment from the Holder of a sum sufficient to pay all taxes (including transfer taxes), assessments or other governmental charges in connection with any transfer or exchange pursuant to this Section 2.07. Upon any transfer or exchange, the Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents. The Issuer shall not be required to make, and the Registrar need not register, transfers or exchanges of Securities selected for redemption (except, in the case of Securities to be redeemed in part, the portion thereof not to be redeemed) or of any Securities for a period of 15 days prior to a selection of Securities to be redeemed.

Prior to the due presentation for registration of transfer of any Security, the Issuer, the Guarantors, the Trustee, the Paying Agent and the Registrar may deem and treat the Person in whose name a Security is registered as the absolute owner of such Security for the purpose of receiving payment of principal of and interest, if any, on such Security (and any related fees contemplated by this Indenture) and for all other purposes whatsoever, whether or not such Security is overdue, and none of the Issuer, any Guarantor, the Trustee, the Paying Agent or the Registrar shall be affected by notice to the contrary.

Any holder of a beneficial interest in a Global Security shall, by acceptance of such beneficial interest, agree that transfers of beneficial interests in such Global Security may

be effected only through a book-entry system maintained by (a) the Holder of such Global Security (or its agent) or (b) any holder of a beneficial interest in such Global Security, and that ownership of a beneficial interest in such Global Security shall be required to be reflected in a book entry.

All Securities issued upon any transfer or exchange pursuant to the terms of this Indenture shall evidence the same debt and shall be entitled to the same benefits under this Indenture as the Securities surrendered upon such transfer or exchange.

SECTION 2.08. Replacement Securities. If a mutilated Security is surrendered to the Registrar or if the Holder of a Security claims that the Security has been lost, destroyed or wrongfully taken, the Issuer shall issue and the Trustee shall authenticate a replacement Security if the requirements of Section 8-405 of the Uniform Commercial Code are met, such that the Holder (a) satisfies the Issuer or the Trustee within a reasonable time after such Holder has notice of such loss, destruction or wrongful taking and the Registrar does not register a transfer prior to receiving such notification, (b) makes such request to the Issuer or the Trustee prior to the Security being acquired by a protected purchaser as defined in Section 8-303 of the Uniform Commercial Code (a "protected purchaser") and (c) satisfies any other reasonable requirements of the Issuer and the Trustee. If required by the Trustee or the Issuer, such Holder shall furnish an indemnity bond sufficient in the judgment of the Trustee to protect the Trustee, the Paying Agent and the Registrar (if the Registrar also serves as the Paying Agent) and of the Issuer to protect the Issuer, each Guarantor, the Paying Agent and the Registrar (if the Trustee is not serving in the role of Paying Agent or Registrar, as the case may be) from any loss that any of them may suffer if a Security is replaced. The Issuer and the Trustee may charge the Holder for their expenses in replacing a Security (including attorneys' fees and disbursements in replacing such Security). In the event any such mutilated, lost, destroyed or wrongfully taken Security has become or is about to become due and payable, the Issuer in its discretion may pay such Security instead of issuing a new Security in replacement thereof.

Every replacement Security is an additional obligation of the Issuer and will be entitled to all of the benefits of this Indenture equally and proportionately with all other Securities duly issued hereunder.

The provisions of this Section 2.08 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, lost, destroyed or wrongfully taken Securities.

SECTION 2.09. Outstanding Securities. Securities outstanding at any time are all Securities authenticated by the Trustee except for those canceled by it, those delivered to it for cancellation and those described in this Section 2.09 as not outstanding. Subject to Section 12.04, a Security does not cease to be outstanding because the Issuer or an Affiliate of the Issuer holds the Security.

If a Security is replaced pursuant to Section 2.08 (other than a mutilated Security surrendered for replacement), it ceases to be outstanding unless the Trustee and the Issuer receive proof satisfactory to them that the replaced Security is held by a protected purchaser. A

mutilated Security ceases to be outstanding upon surrender of such Security and replacement thereof pursuant to Section 2.08.

If the principal amount of any Securities (or portions thereof) and any related fees contemplated by this Indenture are considered paid under Section 4.01, such Securities (or portions thereof) cease to be outstanding and interest on them ceases to accrue.

If a Paying Agent segregates and holds in trust, in accordance with this Indenture, on a redemption date or maturity date money sufficient to pay all principal and interest payable on that date with respect to the Securities (or portions thereof) to be redeemed or maturing and any related fees contemplated by this Indenture, as the case may be, and no Paying Agent is prohibited from paying such money to the Holders on that date pursuant to the terms of this Indenture, then on and after that date such Securities (or portions thereof) cease to be outstanding and interest on them ceases to accrue.

SECTION 2.10. Temporary Securities. In the event that Definitive Securities are to be issued under the terms of this Indenture, until such Definitive Securities are ready for delivery, the Issuer may prepare and the Trustee shall authenticate temporary Securities. Temporary Securities shall be substantially in the form of Definitive Securities but may have variations that the Issuer considers appropriate for temporary Securities. Without unreasonable delay, the Issuer shall prepare and the Trustee shall authenticate Definitive Securities and make them available for delivery in exchange for temporary Securities upon surrender of such temporary Securities at the office or agency of the Issuer, without charge to the Holder. Until such exchange, temporary Securities shall be entitled to the same rights, benefits and privileges as Definitive Securities under this Indenture.

SECTION 2.11. Cancellation. The Issuer at any time may deliver Securities to the Trustee for cancellation. The Registrar and each Paying Agent shall forward to the Trustee any Securities surrendered to them for registration of transfer, exchange, payment or cancellation. The Trustee and no one else shall cancel all Securities surrendered for registration of transfer, exchange, payment or cancellation and shall dispose of canceled Securities in accordance with its customary procedures. Certification of the destruction of all cancelled Securities shall be delivered to the Issuer. The Issuer may not issue new Securities to replace Securities it has redeemed, paid or delivered to the Trustee for cancellation. The Trustee shall not authenticate Securities in place of canceled Securities other than pursuant to the terms of this Indenture.

SECTION 2.12. Defaulted Interest. If the Issuer defaults in a payment of interest on the Securities, the Issuer shall pay the defaulted interest then borne by the Securities (plus interest on such defaulted interest to the extent lawful) in any lawful manner. The Issuer may pay the defaulted interest to the Persons who are Holders on a subsequent special record date. The Issuer shall fix or cause to be fixed any such special record date and payment date and shall promptly provide or cause to be provided to each affected Holder a written notice that states the special record date, the payment date and the amount of defaulted interest to be paid. The special record date for the payment of such defaulted interest shall not be more than 15 days and shall not be less than 10 days prior to the proposed payment date and shall not be less than 10 days after the receipt by the Trustee of the notice of the proposed payment.

SECTION 2.13. CUSIP Numbers, ISINs, etc. The Issuer in issuing the Securities may use CUSIP numbers, ISINs and "Common Code" numbers (if then generally in use) and, if so, the Trustee shall use CUSIP numbers, ISINs and "Common Code" numbers in notices (including notices of redemption) as a convenience to Holders; *provided*, *however*, that any such notice may state that no representation is made as to the correctness of such numbers, either as printed on the Securities or as contained in any notice that reliance may be placed only on the other identification numbers printed on the Securities and that any such notice shall not be affected by any defect in or omission of such numbers. The Issuer shall advise the Trustee of any change in the CUSIP numbers, ISINs and "Common Code" numbers.

SECTION 2.14. Calculation of Principal Amount of Securities. The aggregate principal amount of the Securities, at any date of determination, shall be the aggregate principal amount of the Securities outstanding at such date of determination. With respect to any matter requiring consent, waiver, approval or other action of the Holders of a specified percentage of the principal amount of all the Securities, such percentage shall be calculated, on the relevant date of determination, by dividing (a) the principal amount, as of such date of determination, of Securities, the Holders of which have so consented, waived, approved or taken other action by (b) the aggregate principal amount, as of such date of determination, of the Securities then outstanding, in each case, as determined in accordance with the preceding sentence, Section 2.09 and Section 12.04. Any such calculation made pursuant to this Section 2.14 shall be made by the Issuer and delivered to the Trustee pursuant to an Officers' Certificate. The Issuer and the Trustee agree that any action of the Holders may be evidenced by the Depository applicable procedures or by such other procedures as the Issuer and Trustee may agree.

SECTION 2.15. Statement to Holders. After the end of each calendar year but not later than the latest date permitted by applicable law, the Trustee shall (or shall instruct any Paying Agent to) furnish to each Person who at any time during such calendar year was a Holder a statement (for example, a Form 1099 or any other means required by applicable law) prepared by the Trustee containing the interest and original issue discount paid (based solely upon information provided by the Issuer) with respect to the Securities for such calendar year or, in the event such Person was a Holder during only a portion of such calendar year, for the applicable portion of such calendar year, and such other items as may be (a) required pursuant to the then-applicable regulations under the Code or (b) readily available to the Trustee and that a Holder shall reasonably request as necessary for the purpose of such Holder's preparation of its U.S. federal income or other tax returns. In the event that any such information has been provided by any Paying Agent directly to such Person through other tax-related reports or otherwise, the Trustee in its capacity as Paying Agent shall not be obligated to comply with such request for information.

## ARTICLE 3

## REDEMPTION

SECTION 3.01. Redemption. The Securities may be redeemed by the Issuer at its option, in whole, or from time to time in part, on any Business Day specified by the Issuer, subject to the conditions and at the redemption prices set forth in Paragraph 5 of the form of

Security set forth in Exhibit A, which is hereby incorporated by reference and made a part of this Indenture, together with accrued and unpaid interest to the redemption date.

SECTION 3.02. Applicability of Article. Redemption of Securities at the election of the Issuer or otherwise, as permitted or required by any provision of this Indenture, shall be made in accordance with such provision and this Article 3.

SECTION 3.03. Notices to Trustee. If the Issuer elects to redeem Securities pursuant to the optional redemption provisions of Paragraph 5 of the Security, it shall notify the Trustee and the Holders in writing of (i) the Section of this Indenture and the Paragraph of the Security (if any) pursuant to which the redemption shall occur, (ii) the redemption date, (iii) the principal amount of Securities to be redeemed, (iv) the amount of any related fees contemplated by this Indenture and (v) the redemption price (if then ascertainable).

The Issuer shall provide written notice to the Trustee provided for in this Section 3.03 at least 30 days but not more than 60 days (or such shorter period as may be acceptable to the Trustee) before a redemption date if the redemption is pursuant to Paragraph 5 of the Security. Such notice shall be accompanied by an Officers' Certificate and Opinion of Counsel from the Issuer to the effect that such redemption will comply with the conditions herein. If fewer than all the Securities are to be redeemed, the record date relating to such redemption shall be selected by the Issuer and given to the Trustee, which record date shall be not fewer than 15 days after the date of notice to the Trustee. Any such notice may be canceled at any time prior to written notice of such redemption being provided to any Holder and shall thereby be void and of no effect.

SECTION 3.04. Selection of Securities to Be Redeemed. In the case of any partial redemption, and if the Securities are Global Securities held by the Depository, the particular Securities or portions thereof to be redeemed shall be allocated on a pro rata pass-through distribution of principal basis in accordance with Depository procedures; *provided*, that, so long as the Securities are held in book-entry form, the selection for redemption of such Securities shall be made in accordance with the operational arrangements of the Depository then in effect, and if the Depository operational arrangements do not allow for redemption on a pro rata pass-through distribution of principal basis, the Securities will be selected for redemption, in accordance with Depository procedures, by lot. If the Securities are not Global Securities held by the Depository, selection of the Securities for redemption will be made by the Trustee on a pro rata basis to the extent practicable or such other method the Trustee deems fair and appropriate; *provided* that no Securities of $2,000 or less shall be redeemed in part. The Trustee shall make the selection from outstanding Securities not previously called for redemption. The Trustee may select for redemption portions of the principal of Securities that have denominations larger than $2,000. Securities and portions of them the Trustee selects shall be in amounts of $2,000 or any integral multiple of $1,000 in excess thereof. Provisions of this Indenture that apply to Securities called for redemption also apply to portions of Securities called for redemption. The Trustee shall notify the Issuer promptly of the Securities or portions of Securities to be redeemed and the principal amount thereof.

SECTION 3.05. Notice of Optional Redemption.

(a) At least 30 days but not more than 60 days before a redemption date pursuant to Paragraph 5 of the Security, the Issuer shall provide or cause to be provided a written notice of redemption to each Holder whose Securities are to be redeemed.

Any such notice shall identify the Securities to be redeemed and shall state:

(i) the redemption date;

(ii) the redemption price (or manner of calculation thereof if not then known) and the amount of accrued and unpaid interest to the redemption date;

(iii) the name and address of the Paying Agent;

(iv) that Securities called for redemption must be surrendered to the Paying Agent to collect the redemption price, plus accrued and unpaid interest;

(v) that all outstanding Securities are to be redeemed or, if fewer than all the outstanding Securities are to be redeemed, the certificate numbers and principal amounts of the particular Securities to be redeemed, the aggregate principal amount of Securities to be redeemed and the aggregate principal amount of Securities to be outstanding after such partial redemption;

(vi) that, unless the Issuer defaults in making such redemption payment or the Paying Agent is prohibited from making such payment pursuant to the terms of this Indenture, interest on Securities (or portion thereof) called for redemption ceases to accrue on and after the redemption date;

(vii) the CUSIP number, ISIN or "Common Code" number, if any, printed on the Securities being redeemed;

(viii) that no representation is made as to the correctness or accuracy of the CUSIP number or ISIN or "Common Code" number, if any, listed in such notice or printed on the Securities; and

(ix) such other matters as the Issuer deems desirable or appropriate.

Notice of any redemption pursuant to this Section 3.05 may, at the Issuer's direction, be revocable and be subject to one or more conditions precedent, including the receipt by the Trustee, on or prior to the redemption date, of money sufficient to pay the principal of, and premium, if any, and interest on, the Securities being redeemed and any related fees contemplated by this Indenture.

(b) At the Issuer's request, the Trustee shall give the notice of redemption in the Issuer's name and at the Issuer's expense. In such event, the Issuer shall provide the Trustee a notice containing the information required by this Section 3.05 at least five Business Days (unless the Trustee consents to a shorter period) prior to the date such notice is to be provided to

Holders and such notice may not be canceled but may be subject to such conditions precedent as shall be set forth in such notice.

SECTION 3.06. Effect of Notice of Redemption. Once written notice of redemption is provided in accordance with Section 3.05, Securities called for redemption become due and payable on the redemption date and at the redemption price stated in the notice, subject to the satisfaction or waiver of any conditions precedent in the notice of redemption. Upon surrender to the Paying Agent, such Securities shall be paid at the redemption price stated in the notice, plus accrued and unpaid interest, to, but not including, the redemption date; *provided, however*, that if the redemption date is after a Record Date and on or prior to the related Payment Date, the accrued and unpaid interest shall be payable to the Holder of the redeemed Securities registered on such Record Date. Failure to give notice or any defect in the notice to any Holder shall not affect the validity of the notice to any other Holder.

SECTION 3.07. Deposit of Redemption Price. With respect to any Securities, prior to 10:00 a.m., New York City time, on the redemption date (*provided* that the Issuer shall have confirmed in writing to the Trustee the satisfaction or waiver of all conditions to such redemption pursuant to Section 3.05(a)), the Issuer shall deposit with the Paying Agent (or, if the Issuer or a Wholly Owned Restricted Subsidiary is the Paying Agent, shall segregate and hold in trust) money sufficient to pay the redemption price of and accrued and unpaid interest on all Securities or portions thereof to be redeemed on that date other than Securities or portions of Securities called for redemption that have been delivered by the Issuer to the Trustee for cancellation. On and after the redemption date, interest shall cease to accrue on Securities or portions thereof called for redemption so long as the Issuer has deposited with the Paying Agent funds sufficient to pay the principal of, plus accrued and unpaid interest on, the Securities to be redeemed and any related fees contemplated by this Indenture, unless the Paying Agent is prohibited from making such payment pursuant to the terms of this Indenture, *provided* that the Issuer has provided an Officers' Certificate to the Trustee stating that all conditions precedent (if any) to which such redemption has been made subject have been satisfied. Upon redemption of any Securities by the Issuer, such redeemed Securities will be cancelled.

SECTION 3.08. Securities Redeemed in Part. Upon surrender of a Security that is redeemed in part, the Issuer shall execute and the Trustee shall authenticate for the Holder (at the Issuer's expense) a new Security equal in principal amount to the unredeemed portion of the Security surrendered.

## ARTICLE 4

## COVENANTS

SECTION 4.01. Payment of Securities.

(a) The Issuer shall promptly pay the principal of and interest on the Securities and any related fees contemplated by this Indenture on the dates and in the manner provided in the Securities and in this Indenture. An installment of principal or interest and related fees shall be considered paid on the date due if on such date the Trustee or the Paying Agent holds as of 12:00 noon New York City time money sufficient to pay all principal and interest and

related fees then due and the Trustee or the Paying Agent, as the case may be, is not prohibited from paying such money to the Holders on that date pursuant to the terms of this Indenture. The Issuer shall pay interest on the outstanding principal and related fees at the rate specified therefor in the Securities plus 2.625% per annum during the continuance of an Event of Default, and the Issuer shall pay interest on overdue installments of interest at the same rate borne by the Securities to the extent lawful.

(b) On each Payment Date, commencing on June 30, 2021, or on the succeeding Business Day if any such date is not a Business Day, the Issuer shall pay to the Holders (x) an installment of principal of the Securities in accordance with the table below corresponding to the applicable Payment Date, where the applicable percentage is the percentage of (i) the initial aggregate principal amount of Original Securities issued on the Issue Date plus (ii) the initial aggregate principal amount of any Additional Conditional Securities issued on their date of issuance minus (iii) the aggregate principal amount of Securities redeemed or repurchased pursuant to this Indenture prior to such Payment Date, plus (y) a fee equal to 1.00% of the principal paid on such Payment Date:

| **Payment Date** | **Amount** |
|---|---|
| June 30, 2021 | 7.69% |
| September 30, 2021 | 7.69% |
| December 31, 2021 | 7.69% |
| March 31, 2022 | 7.69% |
| June 30, 2022 | 7.69% |
| September 30, 2022 | 7.69% |
| December 31, 2022 | 7.69% |
| March 31, 2023 | 7.69% |
| June 30, 2023 | 7.69% |
| September 30, 2023 | 7.69% |
| December 31, 2023 | 7.69% |
| March 31, 2024 | 7.69% |
| June 30, 2024 | All remaining outstanding principal of the Securities at such date |

All payments calculated from the principal installment percentages set forth above shall be rounded to two decimal places.

SECTION 4.02. Reports and Other Information.

(a) Financial Statements. Whether or not the Issuer is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, so long as any Securities are outstanding, the Issuer shall furnish to the Trustee all such reports and other information as the Issuer would be required to file with the SEC by Section 13(a) or 15(d) of the Exchange Act if the Issuer were subject thereto within the time periods specified by the SEC's rules and regulations. Subject to the last sentence of this Section 4.02(a), if the Issuer is not subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and has ceased filing periodic reports and other information with the SEC, then the Issuer shall deliver such information and such reports to any Holder of Securities and, upon request, to any beneficial owner of the

Securities, in each case by posting such information on a password-protected online data system that will require a confidentiality acknowledgment, and the Issuer will make such information readily available to any prospective investor in the Securities that certifies that it is an eligible purchaser of such Securities or to any securities analyst (to the extent providing analysis of investment in the Securities), in each case (i) who agrees to treat such information as confidential or (ii) who accesses such information on such password-protected online data system that will require a confidentiality acknowledgment; *provided*, that the Issuer shall post such information thereon and make readily available any password or other login information to any such prospective investor in the Securities or any such securities analyst (to the extent providing analysis of investment in the Securities). The Issuer will be deemed to have furnished the reports referred to in this Section 4.02(a) if the Issuer has filed reports containing such information with the SEC.

(b) Compliance with Indenture. The Issuer shall deliver to the Trustee, within 120 days after the end of each fiscal year of the Issuer, commencing with respect to the fiscal year ending December 31, 2018, an Officers' Certificate certifying that to each such Officer's actual knowledge there is no Default or Event of Default that has occurred and is continuing or, if either such Officer does know of any such Default or Event of Default, such Officer shall include in such certificate a description of such Default or Event of Default and its status with particularity.

(c) Certain Certifications. The Issuer shall deliver to the Trustee, within 10 days after each fiscal quarter, an Officers' Certificate certifying (i) as to compliance at all times since the period covered by the most recent certificate delivered pursuant to this Section 4.02(c) (or, if no such certificate has been delivered, since the Issue Date) with Section 4.09 and (ii) as to compliance with Section 4.10 in respect of such prior fiscal quarter.

(d) Rule 144A Information. To the extent not satisfied by the other paragraphs of this Section 4.02, the Issuer will furnish to the Holders, securities analysts (to the extent providing analysis of investment in the Securities) and prospective purchasers of the Securities, upon request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

(e) Information to the Trustee. Delivery of information under this Section 4.02 to the Trustee shall be for informational purposes only, and the Trustee's receipt thereof shall not constitute constructive notice of any information contained therein or determinable from any information contained therein, including compliance by the Issuer with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates or certificates or statements delivered to the Trustee pursuant to Section 4.02(b)).

SECTION 4.03. Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock.

(a) The Issuer (i) shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly, Incur any Indebtedness (including Acquired Indebtedness) or issue any shares of Disqualified Stock and (ii) shall not permit any of its Restricted Subsidiaries (other than a Guarantor) to issue any shares of Preferred Stock.

(b) Section 4.03(a) shall not apply to:

(i) the Incurrence by any of the Issuer and the Guarantors of Indebtedness represented by the Securities and the Guarantees;

(ii) Indebtedness existing on the Issue Date;

(iii) Indebtedness (including Capitalized Lease Obligations) Incurred by the Issuer or any Guarantor, and Disqualified Stock issued by the Issuer or any Guarantor, to finance (whether prior to or within 270 days after) the acquisition, lease, construction, repair, replacement or improvement of property (real or personal) or equipment (whether through the direct purchase of assets or the Capital Stock of any Person owning such assets) that (A) is without recourse to any property or assets of the Issuer or any Restricted Subsidiary other than the assets so acquired, leased, constructed, repaired, replaced or improved and (B) is in an aggregate principal amount that, when aggregated with the principal amount of all other Indebtedness and Disqualified Stock then outstanding that was Incurred pursuant to this clause (iii), does not exceed $2,000,000;

(iv) Indebtedness Incurred by the Issuer or any of its Restricted Subsidiaries constituting reimbursement obligations with respect to letters of credit and bank guarantees issued in the ordinary course of business, including letters of credit in respect of workers' compensation claims, health, disability or other benefits to employees or former employees or their families or property, casualty or liability insurance or self-insurance, and letters of credit in connection with the maintenance of, or pursuant to the requirements of, environmental or other permits or licenses from Governmental Authorities, or other Indebtedness with respect to reimbursement type obligations regarding workers' compensation claims;

(v) Indebtedness arising from agreements of the Issuer or a Restricted Subsidiary providing for indemnification, adjustment of purchase price or similar obligations, in each case, Incurred in connection with any acquisition or disposition of any business, any assets or a Subsidiary of the Issuer in accordance with the terms of this Indenture, other than guarantees of Indebtedness Incurred by any Person acquiring all or any portion of such business, assets or Subsidiary for the purpose of financing such acquisition;

(vi) Indebtedness of the Issuer to a Restricted Subsidiary; *provided*, that any such Indebtedness owed to a Restricted Subsidiary that is not a Guarantor is subordinated in right of payment to the obligations of the Issuer under the Securities; *provided*, *further*, that any subsequent issuance or transfer of any Capital Stock or any other event that results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any other subsequent transfer of any such Indebtedness (except to the Issuer or another Restricted Subsidiary or any pledge of such Indebtedness constituting a Permitted Lien) shall be deemed, in each case, to be an Incurrence of such Indebtedness not permitted by this clause (vi);

(vii) Indebtedness of a Restricted Subsidiary to the Issuer or a Guarantor; *provided*, that any subsequent issuance or transfer of any Capital Stock or any other event that results in any such Guarantor holding such Indebtedness ceasing to be a Guarantor or any other subsequent transfer of any such Indebtedness (except to the Issuer or a Guarantor or any pledge of such Indebtedness constituting a Permitted Lien) shall be deemed, in each case, to be an Incurrence of such Indebtedness not permitted by this clause (vii);

(viii) Hedging Obligations of the Issuer or any Restricted Subsidiary entered into in the ordinary course of business that are not Incurred for speculative purposes but: (1) for the purpose of fixing or hedging interest rate risk with respect to any Indebtedness that is permitted by the terms of this Indenture to be outstanding; (2) for the purpose of fixing or hedging currency exchange rate risk with respect to any currency exchanges; or (3) for the purpose of fixing or hedging commodity price risk with respect to any commodity purchases or sales;

(ix) obligations (including reimbursement obligations with respect to letters of credit and bank guarantees) in respect of performance, bid, appeal and surety bonds and completion guarantees provided by the Issuer or any Restricted Subsidiary in the ordinary course of business or consistent with past practice or industry practice;

(x) Indebtedness or Disqualified Stock of the Issuer or any Guarantor not otherwise permitted under this Indenture in an aggregate principal amount or liquidation preference, which when aggregated with the principal amount or liquidation preference of all other Indebtedness and Disqualified Stock then outstanding and Incurred pursuant to this clause (x), does not exceed $1,000,000 at any one time outstanding;

(xi) any guarantee by the Issuer or a Guarantor of Indebtedness or other obligations of the Issuer or any other Guarantor so long as the Incurrence of such Indebtedness Incurred by the Issuer or such other Guarantor is permitted under the terms of this Indenture; *provided* that if such Indebtedness is by its express terms unsecured and subordinated in right of payment to the Securities or the Guarantee of such other Guarantor, as applicable, any such guarantee of such Guarantor with respect to such Indebtedness shall be unsecured and subordinated in right of payment to such Guarantor's Guarantee with respect to the Securities substantially to the same extent as such Indebtedness is subordinated to the Securities or the Guarantee of such other Guarantor, as applicable;

(xii) the Incurrence by the Issuer or any Guarantor of Indebtedness or Disqualified Stock of a Guarantor that serves to refund, refinance or defease any Indebtedness Incurred or Disqualified Stock issued as permitted under clauses (i), (ii), (iii), (x) and (xii) of this Section 4.03(b) or any Indebtedness or Disqualified Stock Incurred to so refund or refinance such Indebtedness or Disqualified Stock, including any additional Indebtedness or Disqualified Stock Incurred to pay premiums (including tender premiums and paid-in-kind interest), fees, expenses

and defeasance costs in connection therewith (subject to the following proviso, "Refinancing Indebtedness") prior to its respective maturity; *provided* that such Refinancing Indebtedness:

(1) has a Weighted Average Life to Maturity at the time such Refinancing Indebtedness is Incurred that is not less than the remaining Weighted Average Life to Maturity of the Indebtedness or Disqualified Stock being refunded, refinanced or defeased;

(2) has a Stated Maturity that is not earlier than the earlier of (x) the Stated Maturity of the Indebtedness being refunded or refinanced and (y) 91 days following the Stated Maturity of the Securities;

(3) to the extent such Refinancing Indebtedness refunds, refinances or defeases (a) Indebtedness junior in right of payment to the Securities or a Guarantee, as applicable, such Refinancing Indebtedness is junior in right of payment to the Securities or a Guarantee to the same extent as such Indebtedness being refunded, refinanced or defeased, as applicable, or (b) Disqualified Stock, such Refinancing Indebtedness is Disqualified Stock;

(4) is Incurred in an aggregate principal amount (or if issued with original issue discount, an aggregate issue price) that is equal to or less than the aggregate principal amount (or if issued with original issue discount, the aggregate accreted value) then outstanding of the Indebtedness being refunded, refinanced or defeased plus premium (including tender premiums and paid-in-kind interest), fees, expenses and defeasance costs Incurred in connection with such refinancing;

(5) shall not include Indebtedness of the Issuer or a Guarantor that refunds, refinances or defeases Indebtedness of an Unrestricted Subsidiary; and

(6) in the case of any Refinancing Indebtedness Incurred to refund, refinance or defease Indebtedness outstanding under clause (iii) or (x) of this Section 4.03(b), shall be deemed to have been Incurred and to be outstanding under such clause (iii) or (x) of this Section 4.03(b), as applicable, and not this clause (xii) for purposes of determining amounts outstanding under such clause (iii) or (x) of this Section 4.03(b);

(xiii) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds in the ordinary course of business; *provided* that such Indebtedness is extinguished within five Business Days after its Incurrence;

(xiv) Indebtedness of the Issuer or any Restricted Subsidiary consisting of (x) the financing of insurance premiums or (y) take-or-pay obligations contained in supply arrangements, in each case, in the ordinary course of business;

(xv) Indebtedness of the Issuer or any Guarantor issued to (x) any joint venture (regardless of the form of legal entity) that is not a Subsidiary or (y) any Unrestricted Subsidiary, in each case arising in the ordinary course of business in connection with the cash management operations (including with respect to intercompany self-insurance arrangements) of the Issuer or any Guarantor;

(xvi) Indebtedness of the Issuer or any Guarantor with a Stated Maturity and, if applicable, a First Amortization Date no earlier than 91 days following the Stated Maturity of the Securities, *provided* that (A) at the time such Indebtedness is Incurred, the Consolidated Leverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available immediately preceding the date on which such Indebtedness is Incurred would have been no greater than 5.0 to 1.0 determined on a *pro forma* basis (including a *pro forma* application of the net proceeds therefrom), as if the Indebtedness had been Incurred and the application of proceeds therefrom had occurred at the beginning of such four-quarter period, (B) the Fixed Charge Coverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available immediately preceding the date on which such Indebtedness is Incurred would have been at least 2.0 to 1.0 determined on a *pro forma* basis (including a *pro forma* application of the net proceeds therefrom), as if such Indebtedness had been Incurred and the application of proceeds therefrom had occurred at the beginning of such four-quarter period, and (C) after such Incurrence and so long as such Indebtedness remains outstanding, the Issuer will not permit the Consolidated Leverage Ratio (calculated on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available) to be greater than 6.0 to 1.0; or

(xvii) Optional Secured Notes issued in accordance with Section 4.14 and any guarantees thereof by Subsidiaries of the Issuer provided in accordance with Section 4.14.

(c) For purposes of determining compliance with this Section 4.03, in the event that an item of Indebtedness or Disqualified Stock (or any portion thereof) meets the criteria of more than one of the categories of permitted Indebtedness described in clauses (i) through (xvii) of Section 4.03(b), the Issuer shall, in its sole discretion, classify or reclassify, or later divide, classify or reclassify, such item of Indebtedness or Disqualified Stock (or any portion thereof) in any manner that complies with this Section 4.03.

(d) Accrual of interest, the accretion of accreted value, the payment of interest in the form of additional Indebtedness with the same terms, the payment of dividends on Disqualified Stock or Preferred Stock in the form of additional shares of Disqualified Stock or Preferred Stock of the same class, amortization or accretion of original issue discount or liquidation preference and increases in the amount of Indebtedness outstanding solely as a result of fluctuations in the exchange rate of currencies shall not be deemed to be an Incurrence of Indebtedness, Disqualified Stock or Preferred Stock for purposes of this Section 4.03.

Guarantees of, or obligations in respect of letters of credit relating to, Indebtedness that is otherwise included in the determination of a particular amount of Indebtedness shall not be included in the determination of such amount of Indebtedness; *provided* that the Incurrence of the Indebtedness represented by such guarantee or letter of credit, as the case may be, was in compliance with this Section 4.03.

(e) For purposes of determining compliance with any U.S. Dollar-denominated restriction on the Incurrence of Indebtedness, the U.S. Dollar-equivalent principal amount of Indebtedness denominated in a non-U.S. currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was Incurred, in the case of term debt, or first committed or first Incurred (whichever yields the higher U.S. Dollar equivalent), in the case of revolving credit debt.

(f) Notwithstanding any other provision of this Section 4.03, the maximum amount of Indebtedness that the Issuer or any Restricted Subsidiary of the Issuer may Incur pursuant to this Section 4.03 shall not be deemed to be exceeded solely as a result of fluctuations in exchange rates or currency values following the Incurrence of such Indebtedness.

SECTION 4.04. Limitation on Restricted Payments.

(a) The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly:

(i) declare or pay any dividend or make any distribution on account of the Issuer's or any of its Restricted Subsidiaries' Equity Interests, including any payment made in connection with any merger, amalgamation or consolidation involving the Issuer (other than (A) dividends or distributions by the Issuer payable solely in Equity Interests (other than Disqualified Stock) of the Issuer or (B) dividends or distributions by a Restricted Subsidiary, *provided* that, in the case of any dividend or distribution payable on or in respect of any class or series of securities issued by a Restricted Subsidiary other than a Wholly Owned Restricted Subsidiary, the Issuer or a Restricted Subsidiary receives at least its pro rata share of such dividend or distribution in accordance with its Equity Interests in such class or series of securities);

(ii) purchase or otherwise acquire or retire for value any Equity Interests (other than Disqualified Stock) of the Issuer or any direct or indirect parent of the Issuer;

(iii) purchase or otherwise acquire or retire for value any Disqualified Stock of the Issuer or any direct or indirect parent of the Issuer;

(iv) make any principal payment on, or redeem, repurchase, defease or otherwise acquire or retire for value, in each case prior to any scheduled repayment or scheduled maturity, any Subordinated Indebtedness of the Issuer or any of its Restricted Subsidiaries (other than the payment, redemption, repurchase, defeasance, acquisition or retirement of Indebtedness permitted under clauses (vi) and (vii) of Section 4.03(b)); or

(v) make any Restricted Investment

(all such payments and other actions set forth in clauses (i) through (v) above being collectively referred to as "Restricted Payments").

(b) The provisions of Section 4.04(a) shall not prohibit:

(i) the payment of any dividend or distribution within 60 days after the date of declaration thereof, if at the date of declaration such payment would have complied with the provisions of this Indenture;

(ii) (A) the redemption, repurchase, retirement or other acquisition of any Equity Interests ("Retired Capital Stock") of the Issuer or any direct or indirect parent of the Issuer or Subordinated Indebtedness of the Issuer, any direct or indirect parent of the Issuer or any Guarantor in exchange for, or out of the proceeds of, the substantially concurrent sale of, Equity Interests of the Issuer or any direct or indirect parent of the Issuer or contributions to the equity capital of the Issuer (other than any Disqualified Stock or any Equity Interests sold to a Subsidiary of the Issuer or to an employee stock ownership plan or any trust established by the Issuer or any of its Subsidiaries) (collectively, including any such contributions, "Refunding Capital Stock"); and (B) the declaration and payment of accrued dividends on the Retired Capital Stock out of the proceeds of the substantially concurrent sale (other than to a Subsidiary of the Issuer or to an employee stock ownership plan or any trust established by the Issuer or any of its Subsidiaries) of Refunding Capital Stock;

(iii) the redemption, repurchase, defeasance or other acquisition or retirement of Subordinated Indebtedness of the Issuer or any Guarantor made by exchange for, or out of the proceeds of the substantially concurrent sale of, new Indebtedness of the Issuer or a Guarantor that is Incurred in accordance with Section 4.03 so long as:

(A) the principal amount (or accreted value, if applicable) of such new Indebtedness does not exceed the principal amount (or accreted value, if applicable), plus any accrued and unpaid interest, of the Subordinated Indebtedness being so redeemed, repurchased, acquired or retired for value (plus the amount of any premium required to be paid under the terms of the instrument governing the Subordinated Indebtedness being so redeemed, repurchased, acquired or retired, plus any paid-in-kind interest, any tender premiums or any defeasance costs, fees and expenses Incurred in connection therewith);

(B) such Indebtedness by its terms is subordinated to the Securities or the related Guarantee, as the case may be, in right of payment and either unsecured or secured by a Lien junior as to priority with respect to the Collateral, at least to the same extent as such Subordinated Indebtedness so purchased, exchanged, redeemed, repurchased, defeased, acquired or retired for value;

(C) such Indebtedness has a Stated Maturity and, if applicable, a First Amortization Date equal to or later than the earlier of (x) the Stated Maturity of the Subordinated Indebtedness being so redeemed, repurchased, acquired or retired and (y) 91 days following the Stated Maturity of any Securities then outstanding; and

(D) such Indebtedness has a Weighted Average Life to Maturity at the time Incurred that is not less than the remaining Weighted Average Life to Maturity of the Subordinated Indebtedness being so redeemed, repurchased, defeased, acquired or retired;

(iv) the repurchase, retirement or other acquisition (or dividends to any direct or indirect parent of the Issuer to finance any such repurchase, retirement or other acquisition) for value of Equity Interests of the Issuer or any direct or indirect parent of the Issuer held by any future, present or former employee, director or consultant of the Issuer or any direct or indirect parent of the Issuer or any Subsidiary of the Issuer pursuant to any management equity plan or stock option plan or any other management or employee benefit plan or other agreement or arrangement; *provided* that the aggregate amounts paid under this clause (iv) do not exceed $100,000 in any calendar year (with unused amounts in any calendar year being permitted to be carried over for the two succeeding calendar years subject to a maximum payment (without giving effect to the following proviso) of $250,000 in any calendar year); *provided*, *further*, that such amount in any calendar year may be increased by an amount not to exceed:

(A) the cash proceeds received by the Issuer or any of its Restricted Subsidiaries from the sale of Equity Interests (other than Disqualified Stock) of the Issuer or any direct or indirect parent of the Issuer (to the extent contributed to the Issuer) to members of management, directors or consultants of the Issuer and its Restricted Subsidiaries or any direct or indirect parent of the Issuer that occurs after the Issue Date; plus

(B) the cash proceeds of key man life insurance policies received by the Issuer or any direct or indirect parent of the Issuer (to the extent contributed to the Issuer) or the Issuer's Restricted Subsidiaries after the Issue Date;

*provided* that the Issuer may elect to apply all or any portion of the aggregate increase contemplated by clauses (A) and (B) above in any one or more calendar years; and *provided*, *further*, that cancellation of Indebtedness owing to the Issuer or any Restricted Subsidiary from any present or former employees, directors, officers or consultants of the Issuer or any Restricted Subsidiary or the direct or indirect parent of the Issuer will not be deemed to constitute a Restricted Payment for purposes of this Section 4.04 or any other provision of this Indenture;

(v) the declaration and payment of dividends or distributions to holders of any class or series of Disqualified Stock of the Issuer or any Guarantor Incurred in accordance with Section 4.03;

(vi) payments or distributions to dissenting stockholders or equityholders pursuant to applicable law, pursuant to or in connection with a merger, amalgamation, consolidation or transfer of all or substantially all of the assets of the Issuer and the Restricted Subsidiaries, taken as a whole, that complies with Article 5, *provided* that as a result of such merger, amalgamation, consolidation or transfer of assets, the Issuer shall have made a Change of Control Offer (if required by this Indenture) and that all Securities tendered by Holders in connection with such Change of Control Offer have been repurchased, redeemed or acquired for value;

(vii) other Restricted Payments in an aggregate amount not to exceed $1,000,000;

(viii) the distribution, as a dividend or otherwise, of (i) shares of Capital Stock of, or (ii) Indebtedness owed to the Issuer or a Restricted Subsidiary of the Issuer by, Unrestricted Subsidiaries (other than Unrestricted Subsidiaries the primary assets of which are Cash Equivalents);

(ix) repurchases of Equity Interests deemed to occur upon exercise of stock options or warrants if such Equity Interests represent a portion of the exercise price of such options or warrants;

(x) (A) Restricted Payments by the Issuer or any Restricted Subsidiary to allow the payment of cash in lieu of the issuance of fractional shares upon the exercise of options or warrants or upon the conversion or exchange of Capital Stock or Indebtedness convertible into the Capital Stock of any such Person or (B) the issuance of Capital Stock upon conversion of Indebtedness convertible into the Capital Stock of the Issuer or the exercise of stock options or warrants;

(xi) the repurchase, redemption or other acquisition or retirement for value of any Subordinated Indebtedness pursuant to provisions similar to those described under Section 4.08 or Section 4.22; *provided* that all Securities tendered by Holders in connection with a Change of Control Offer or Special Proceeds Offer, as applicable, have been repurchased, redeemed or acquired for value;

(xii) the payment of principal of and premium, if any, and interest on and any other payments required pursuant to the Convertible Notes;

(xiii) the payment of principal of and premium, if any, and interest on and any other payments required pursuant to the Optional Secured Notes;

(xiv) any Permitted Investment; and

(xv) any Restricted Payment (but in any case other than Pancreaze® Assets) by the Issuer or a Restricted Subsidiary of the Issuer to a Restricted Subsidiary that is not a Guarantor (and will not become a Guarantor pursuant to Section 4.12) not to exceed $1,000,000 in the aggregate.

*provided*, that at the time of, and after giving effect to, any Restricted Payment permitted under clauses (vii), (viii) and (xi) of this Section 4.04(b), no Default shall have occurred and be continuing or would occur as a consequence thereof.

(c) For purposes of designating any Restricted Subsidiary as an Unrestricted Subsidiary, all outstanding Investments by the Issuer and its Restricted Subsidiaries (except to the extent repaid) in the Subsidiary so designated shall be deemed to be Restricted Payments in an amount determined as set forth in the last sentence of the definition of "Investments". Such designation shall only be permitted if a Restricted Payment or Permitted Investment in such amount would be permitted at such time and if such Subsidiary otherwise meets the definition of "Unrestricted Subsidiary".

(d) For purposes of determining compliance with this Section 4.04, in the event that a Restricted Payment (or any portion thereof) meets the criteria of more than one of the categories described in Section 4.04(b), the Issuer may, in its sole discretion, classify or reclassify, or later divide, classify or reclassify, such Restricted Payment (or any portion thereof) in any manner that complies with this Section 4.04.

SECTION 4.05. Dividend and Other Payment Restrictions Affecting Subsidiaries. The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly, create or otherwise cause or suffer to exist or become effective any consensual encumbrance or consensual restriction on the ability of any Restricted Subsidiary to:

(a) (i) pay dividends or make any other distributions to the Issuer or any of its Restricted Subsidiaries (1) on its Capital Stock or (2) with respect to any other interest or participation in, or measured by, its profits or (ii) pay any Indebtedness owed to the Issuer or any of its Restricted Subsidiaries;

(b) make loans or advances to the Issuer or any of its Restricted Subsidiaries; or

(c) sell, lease or transfer any of its properties or assets to the Issuer or any of its Restricted Subsidiaries, except in each case for such encumbrances or restrictions existing under or by reason of:

(1) contractual encumbrances or restrictions in effect on the Issue Date;

(2) this Indenture, the Guarantees, the Securities or the Security Documents;

(3) applicable law or any applicable rule, regulation or order;

(4) any agreement or other instrument relating to Indebtedness of a Person acquired by the Issuer or any Restricted Subsidiary that was in existence at the time of such acquisition (but not created in contemplation thereof or to provide all or any portion of the funds or guarantees utilized to consummate such acquisition), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired;

(5) contracts or agreements for the sale of assets, including any restriction with respect to a Restricted Subsidiary imposed pursuant to an agreement entered into for the sale or disposition of the Capital Stock or assets of such Restricted Subsidiary pending the closing of such sale or disposition;

(6) documents relating to any Secured Indebtedness otherwise permitted to be Incurred pursuant to Sections 4.03 and 4.13, which restrictions are restrictions on the transfer of assets securing such Secured Indebtedness;

(7) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business;

(8) customary provisions in joint venture agreements, collaboration agreements, intellectual property licenses and other similar agreements entered into in the ordinary course of business;

(9) purchase money obligations for property acquired and Capitalized Lease Obligations in the ordinary course of business;

(10) customary provisions contained in leases, licenses and other similar agreements entered into in the ordinary course of business;

(11) other Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or any Guarantor, *provided*, that such Indebtedness, Disqualified Stock or Preferred Stock is permitted to be Incurred subsequent to the Issue Date under Section 4.03;

(12) any Permitted Investment (to the extent such encumbrance or restriction was not made in contemplation of such Permitted Investment and was in existence on the date of such Permitted Investment); or

(13) any encumbrances or restrictions of the type referred to in clauses (a), (b) and (c) above imposed by any amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings of the contracts, instruments or obligations referred to in clauses (1) through (12) above; *provided* that such amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings are, in the good faith judgment of the Issuer, no more restrictive with respect to such dividend and other payment restrictions than those contained in the dividend or other payment restrictions prior to such amendment, modification, restatement, renewal, increase, supplement, refunding, replacement or refinancing.

For purposes of determining compliance with this Section 4.05, (i) the priority of any Preferred Stock in receiving dividends or liquidating distributions prior to dividends or liquidating distributions being paid on other Capital Stock shall not be deemed a restriction on the ability to make distributions on Capital Stock and (ii) the subordination of loans or advances made to the Issuer or a Restricted Subsidiary of the Issuer to other Indebtedness Incurred by the Issuer or any such Restricted Subsidiary shall not be deemed a restriction on the ability to make loans or advances.

SECTION 4.06. Asset Sales. The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly, (a) make a Disposition or (b) issue or sell Equity Interests (other than directors' qualifying shares and shares issued to foreign nationals or other third parties to the extent required by applicable law) of any Restricted Subsidiary (other than to the Issuer or a Guarantor) (whether in a single transaction or a series of related transactions), in each case except for Permitted Asset Sales.

SECTION 4.07. Transactions with Affiliates.

(a) The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any transaction or series of transactions, contract, agreement, understanding, loan, advance or guarantee with, or for the benefit of, any Affiliate of the Issuer (each of the foregoing, an "Affiliate Transaction") involving aggregate consideration in excess of $1,000,000, unless:

(i) such Affiliate Transaction is on terms that are not less favorable to the Issuer or the relevant Restricted Subsidiary than those that could have been obtained in a comparable transaction by the Issuer or such Restricted Subsidiary with an unrelated Person; and

(ii) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of $5,000,000, the Issuer delivers to the Trustee a resolution adopted by the majority of the disinterested members of the Board of Directors of the Issuer, approving such Affiliate Transaction, evidenced by an Officers' Certificate certifying that such Affiliate Transaction complies with clause (i) above.

(b) The provisions of Section 4.07(a) shall not apply to the following:

(i) (A) any transaction or series of transactions between or among any of the Issuer and its Restricted Subsidiaries (or an entity that becomes a Restricted Subsidiary as a result of such transaction), including any payment to, or sale, lease, transfer or other disposition of any properties or assets to, or purchase of any property or assets from, or any contract, agreement, amendment, understanding, loan, advance or guarantee with, or for the benefit of, any of the Issuer and its Restricted Subsidiaries (or an entity that becomes a Restricted Subsidiary as a result of such transaction), or (B) any merger, amalgamation or consolidation of the Issuer and any direct parent of the Issuer; *provided* that such parent shall have no material liabilities and no material assets other than cash, Cash Equivalents and the Capital Stock of the Issuer and such merger, amalgamation or consolidation is otherwise not prohibited by the terms of this Indenture and is effected for a *bona fide* business purpose;

(ii) Restricted Payments permitted by Section 4.04 and Permitted Investments (without giving effect to clause (12) of the definition of "Permitted Investments");

(iii) the payment of reasonable and customary compensation, benefits, fees and reimbursement of expenses paid to, and indemnity, contribution and insurance provided on behalf of, officers, directors, employees or consultants of the Issuer or any Restricted Subsidiary;

(iv) transactions in which the Issuer or any of its Restricted Subsidiaries, as the case may be, delivers to the Trustee a letter from an Independent Financial Advisor stating that such transaction is fair to the Issuer or such Restricted Subsidiary from a financial point of view or meets the requirements of Section 4.07(a)(i);

(v) payments or loans (or cancellation of loans) to officers, directors, employees or consultants of the Issuer or any of the Restricted Subsidiaries of the Issuer and employment agreements, stock option plans and other similar arrangements with such officers, directors, employees or consultants that, in each case, are approved by a majority of the disinterested members of the Board of Directors of the Issuer in good faith;

(vi) any agreement as in effect as of the Issue Date or any amendment thereto (so long as any such agreement together with all amendments thereto, taken as a whole, is not more disadvantageous to the Holders of the Securities in any material respect than the original agreement as in effect on the Issue Date) or any transaction contemplated thereby as determined in good faith by the Issuer;

(vii) the existence of, or the performance by the Issuer or any of its Restricted Subsidiaries of its obligations under the terms of, any stockholders or equityholders agreement (including any registration rights agreement or purchase agreement related thereto) to which it is a party as of the Issue Date and any amendment thereto or similar transactions, agreements or arrangements that it may enter into thereafter; *provided* that the existence of, or the performance by the Issuer or any of its Restricted Subsidiaries of its obligations under, any future amendment to any such existing transaction, agreement or arrangement or under any similar transaction, agreement or arrangement entered into after the Issue Date shall only be permitted by this clause (vii) to the extent that the terms of any such existing transaction, agreement or arrangement together with all amendments thereto, taken as a whole, or new transaction, agreement or arrangement are not otherwise more disadvantageous to the Holders of the Securities in any material respect than the original transaction, agreement or arrangement as in effect on the Issue Date;

(viii) (A) transactions with customers, clients, suppliers or purchasers or sellers of goods or services, or transactions otherwise relating to the purchase or sale of goods or services, in each case in the ordinary course of business and otherwise in compliance with the terms of this Indenture, which are fair to the Issuer and its Restricted Subsidiaries in the reasonable determination of the Board of Directors or the senior management of the Issuer, or are on terms at least as favorable as might reasonably have been obtained at such time from an

unaffiliated party or (B) transactions with joint ventures or Unrestricted Subsidiaries entered into in the ordinary course of business that are not otherwise prohibited by this Indenture;

(ix) the issuance of Equity Interests (other than Disqualified Stock) of the Issuer to any Person;

(x) the issuances of securities or other payments, awards or grants in cash, securities or otherwise pursuant to, or the funding of, employment arrangements, stock option and stock ownership plans or similar employee or director benefit plans approved by the Board of Directors of the Issuer or any direct or indirect parent of the Issuer or of a Restricted Subsidiary of the Issuer, as appropriate, in good faith;

(xi) any contribution to the capital of the Issuer;

(xii) transactions permitted by, and complying with, Article 5;

(xiii) pledges of Equity Interests of Unrestricted Subsidiaries;

(xiv) intercompany transactions undertaken in good faith (as certified by the Issuer in an Officers' Certificate) for the purpose of improving the consolidated tax efficiency of the Issuer and its Subsidiaries and not for the purpose of circumventing compliance with any covenant set forth in this Indenture; and

(xv) the formation and maintenance of any consolidated group or subgroup for tax, accounting or cash pooling or management purposes in the ordinary course of business.

SECTION 4.08. Change of Control.

(a) Upon a Change of Control, each Holder shall have the right to require the Issuer to repurchase all or any part of such Holder's then outstanding Securities at a repurchase price in cash equal to the redemption price set forth in Paragraph 5 of the Form of Security set forth in Exhibit A that would be applicable to such Securities at the time of such Change of Control, plus accrued and unpaid interest, if any, to the date of repurchase (subject to the right of the Holders of record on the relevant Record Date to receive interest due on the related Payment Date), plus a fee equal to 1.00% of the principal amount repurchased on such date of repurchase, in accordance with the terms contemplated in this Section 4.08; *provided*, *however*, that notwithstanding the occurrence of a Change of Control, the Issuer shall not be obligated to repurchase any Securities pursuant to this Section 4.08 in the event that it has exercised (i) its unconditional right to redeem such Securities in accordance with Article 3 or (ii) its legal defeasance option or covenant defeasance option in accordance with Article 8.

(b) Within 30 days following any Change of Control, except to the extent that the Issuer has exercised (x) its unconditional right to redeem the Securities by delivery of a notice of redemption in accordance with Article 3 or (y) its legal defeasance option or covenant

defeasance option in accordance with Article 8, the Issuer shall provide a written notice (a "Change of Control Offer") to each Holder with a copy to the Trustee stating:

(i) that a Change of Control has occurred and that such Holder has the right to require the Issuer to repurchase such Holder's Securities at a repurchase price in cash equal to the redemption price set forth in Paragraph 5 of the Form of Security set forth in Exhibit A that would be applicable to such Securities at the time of such Change of Control, plus accrued and unpaid interest, if any, to the date of repurchase (subject to the right of the Holders of record on the relevant Record Date to receive interest on the related Payment Date), plus a fee equal to 1.00% of the principal amount repurchased on such date of repurchase;

(ii) the circumstances and relevant facts and financial information regarding such Change of Control;

(iii) the date of repurchase (which shall be no earlier than 30 days nor later than 60 days from the date such written notice is provided); and

(iv) the instructions determined by the Issuer, consistent with this Section 4.08, that a Holder must follow in order to have its Securities repurchased.

(c) Holders electing to have a Security repurchased shall be required to surrender the Security, with an appropriate form duly completed, to the Issuer at the address specified in the Change of Control Offer (or otherwise in accordance with the applicable procedures of the Depository) at least three Business Days prior to the date of repurchase. The Holders shall be entitled to withdraw their election if the Issuer receives not later than one Business Day prior to the date of repurchase a facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Security that was delivered for repurchase by the Holder and a statement that such Holder is withdrawing its election to have such Security repurchased. Holders whose Securities are repurchased only in part shall be issued new Securities equal in principal amount to the portion of the Securities surrendered but not repurchased. If the Securities are Global Securities held by the Depository, then the applicable operational procedures of the Depository for tendering and withdrawing securities will apply.

(d) On the date of repurchase, all Securities repurchased by the Issuer under this Section 4.08 shall be delivered to the Trustee for cancellation, and the Issuer shall pay the repurchase price plus accrued and unpaid interest to the Holders entitled thereto.

(e) A Change of Control Offer may be made in advance of a Change of Control, and conditioned upon such Change of Control, if a definitive agreement is in place for the Change of Control at the time of making of the Change of Control Offer.

(f) Notwithstanding the foregoing provisions of this Section 4.08, the Issuer shall not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in this Section 4.08 applicable to a Change of Control

Offer made by the Issuer and purchases all Securities validly tendered and not withdrawn under such Change of Control Offer.

(g) Securities repurchased by the Issuer pursuant to a Change of Control Offer will have the status of Securities issued but not outstanding or will be retired and canceled at the option of the Issuer. Securities purchased by a third party pursuant to Section 4.08(f) will have the status of Securities issued and outstanding.

(h) At the time the Issuer delivers (or causes to be delivered) Securities to the Trustee that are to be accepted for repurchase, the Issuer shall also deliver an Officers' Certificate stating that such Securities are to be accepted by the Issuer pursuant to and in accordance with the terms of this Section 4.08 and confirming whether the Securities will be considered issued but not outstanding, or include orders to cancel the repurchased Securities. A Security shall be deemed to have been accepted for repurchase at the time the Trustee, directly or through an agent, provides payment therefor upon receipt from or on behalf of the Issuer to the surrendering Holder.

(i) Prior to providing written notice to the Holders of any Change of Control Offer, the Issuer shall deliver to the Trustee an Officers' Certificate and an Opinion of Counsel stating that all conditions precedent contained herein to the right of the Issuer to make such offer have been complied with.

(j) The Issuer shall comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Securities pursuant to this Section 4.08. To the extent that the provisions of any securities laws or regulations conflict with provisions of this Section 4.08, the Issuer shall comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations under this Section 4.08 by virtue thereof.

SECTION 4.09. Minimum Unrestricted Cash Equivalents. The Issuer shall maintain at all times an aggregate amount of Cash Equivalents of the Issuer and its Restricted Subsidiaries (other than Cash Equivalents held by Restricted Subsidiaries of the Issuer that are contractually restricted from being distributed to the Issuer) on a consolidated basis of at least $10,000,000.

SECTION 4.10. Minimum Quarterly Pancreaze® Net Sales. The Issuer shall maintain (a) for each fiscal quarter from the fiscal quarter ending June 30, 2018 to the fiscal quarter ending March 31, 2019, Pancreaze® Net Sales of at least $4,000,000, and (b) for each fiscal quarter starting with the fiscal quarter ending June 30, 2019, Pancreaze® Net Sales of at least $7,000,000.

SECTION 4.11. Further Instruments and Acts. The Issuer shall execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purpose of this Indenture.

SECTION 4.12. Future Guarantors. The Issuer shall cause each Domestic Subsidiary, within 30 days of becoming a Restricted Subsidiary, to execute and deliver to the Trustee a supplemental indenture substantially in the form of Exhibit C pursuant to which such

Restricted Subsidiary shall guarantee the Issuer's Obligations under the Securities and this Indenture.

SECTION 4.13. Liens. The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, directly or indirectly, create, Incur or suffer to exist any Lien on:

(a) any Intellectual Property or Excluded Agreements of the Issuer or any of its Restricted Subsidiaries unless the Securities have been previously or concurrently secured by such Intellectual Property or Excluded Agreements on a senior or parity basis, except for Permitted Liens described in clause (1), (2), (3) or (18) of the definition of "Permitted Liens"; or

(b) any other asset or property of the Issuer or such Restricted Subsidiary, except for Permitted Liens;

*provided*, that notwithstanding the foregoing, the last sentence of Section 4.17 shall be complied with at all times.

Except with respect to clause (ix) of the definition of "Excluded Asset", no property or asset shall constitute an Excluded Asset to the extent it is pledged to secure any Indebtedness of the Issuer or a Restricted Subsidiary of the Issuer.

For purposes of determining compliance with this Section 4.13, in the event that a Lien securing an item of Indebtedness (or any portion thereof) meets the criteria of more than one of the categories of Liens described in the foregoing paragraph or permitted by clauses (1) through (32) of the definition of "Permitted Liens", then the Issuer shall, in its sole discretion, classify or reclassify, or later divide, classify or reclassify, such Lien securing an item of Indebtedness (or any portion thereof) in any manner that complies with this Section 4.13.

With respect to any Lien securing Indebtedness that was permitted to secure such Indebtedness at the time of the Incurrence of such Indebtedness, such Lien shall also be permitted to secure any Increased Amount of such Indebtedness. The "Increased Amount" of any Indebtedness shall mean any increase in the amount of such Indebtedness in connection with any accrual of interest, the accretion of accreted value, the payment of interest or dividends in the form of additional Indebtedness, amortization of original issue discount and increases in the amount of Indebtedness outstanding solely as a result of fluctuations in the exchange rate of currencies, in each case in respect of such Indebtedness.

SECTION 4.14. Optional Secured Notes. On any Business Day (but, for the avoidance of doubt, only one Business Day, but not more than one Business Day), the Issuer may issue and deliver securities that rank *pari passu* in right of payment to the Securities and the Guarantees of the Guarantors and that are secured by Liens on the Collateral that rank *pari passu* as to Lien priority with the Liens on the Collateral securing the Securities and such Guarantors' Guarantees (the "Optional Secured Notes"), without the consent of any Holder or any holder of beneficial interests in the Securities; *provided*, that, as of such Business Day, as conditions to the issuance of such Optional Secured Notes (as certified by the Issuer to the Trustee in an Officers' Certificate, except where such conditions are required to be satisfactory to Holders of a majority in principal amount of Securities or the initial purchasers of the Original Securities or the

Additional Conditional Securities, which shall be evidenced by written instructions to the Trustee from such Holders and purchasers, as the case may be):

(a) no Event of Default has occurred and is continuing, and the representations and warranties provided to the initial purchaser(s) of the Securities and the Trustee on the Issue Date and of any Additional Conditional Securities on the date of issuance thereof shall remain true and correct;

(b) the Optional Secured Notes do not have economic terms (including warrants or other securities issued in connection therewith, total yield, prepayment penalties and fees), taken as a whole, that are more favorable to the holders of the Optional Secured Notes as compared to the Holders of the Securities (as such Securities may have been amended or otherwise modified as of the date of such issuance of Optional Secured Notes), where such determination shall be made exclusively by the Holders of a majority in principal amount of the Securities absent manifest error;

(c) such Optional Secured Notes have the same non-economic terms as the Securities (except that the issue date, the initial Payment Date and the initial date from which interest shall accrue may vary), including that (i) neither the assets or property pledged to secure the Optional Secured Notes nor the descriptions thereof shall be greater or broader than the Collateral or the description of the Collateral in the Security Documents and (ii) no Person (other than a Guarantor) shall guarantee the Obligations in respect of the Optional Secured Notes;

(d) the security agreements, pledge agreements and other collateral documentation that grant a Lien or purport to grant a Lien on any assets of property of the Issuer or any Guarantor to secure Obligations in respect of the Optional Secured Notes shall be in form and substance satisfactory to the initial purchasers of the Original Securities and the initial purchasers of any Additional Conditional Securities;

(e) if, immediately prior to the issuance of any Optional Secured Notes, the initial purchasers of the Original Securities (and their Affiliates) and the initial purchasers of the Additional Conditional Securities (and their Affiliates) beneficially own at least 75% of the aggregate principal amount of the Securities then outstanding, then, after giving effect to the issuance of such Optional Secured Notes, the initial purchasers of the Original Securities (and their Affiliates) and the initial purchasers of any Additional Conditional Securities (and their Affiliates) shall beneficially own a majority in aggregate principal amount of the Securities and the Optional Secured Notes, taken as a whole, then outstanding;

(f) if, immediately prior to the issuance of any Optional Secured Notes, the initial purchasers of the Original Securities (and their Affiliates) and the initial purchasers of the Additional Conditional Securities (and their Affiliates) beneficially own at least 75% of the aggregate principal amount of the Securities then outstanding, then such Optional Secured Notes shall have been purchased by the initial purchasers of the Original Securities (and their Affiliates) or the initial purchasers of any Additional Conditional Securities (and their Affiliates) or, to the extent not so purchased, such initial purchasers and their Affiliates shall have declined to purchase such Optional Secured Notes on terms set forth in agreements between the Issuer and such initial purchasers;

(g) the Consolidated First Lien Leverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available immediately preceding the date on which such Optional Secured Notes are issued would have been no greater than 4.0 to 1.0 determined on a *pro forma* basis (including a *pro forma* application of the net proceeds therefrom), as if such Optional Secured Notes had been issued and the application of proceeds therefrom had occurred at the beginning of such four-quarter period;

(h) there is maintained at all times after such issuance a Consolidated First Lien Leverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available of no greater than 5.0 to 1.0;

(i) the Consolidated Leverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available immediately preceding the date on which such Optional Secured Notes are issued would have been no greater than 5.0 to 1.0 determined on a *pro forma* basis (including a *pro forma* application of the net proceeds therefrom), as if such Optional Secured Notes had been issued and the application of proceeds therefrom had occurred at the beginning of such four-quarter period; and

(j) there is maintained at all times after such issuance a Consolidated Leverage Ratio on a consolidated basis for the Issuer and the Restricted Subsidiaries' most recently ended four fiscal quarters for which internal financial statements are available of no greater than 6.0 to 1.0.

In connection with the issuance of any Optional Secured Notes, the Issuer shall enter into an intercreditor agreement among the holders of Optional Secured Notes (or their Representative(s)), the Trustee, the Collateral Agent and each Guarantor party to this Indenture at such time, which intercreditor agreement shall be in a form reasonably satisfactory to the Trustee, the Collateral Agent and a majority in principal amount of the Securities, and the Trustee and the Collateral Agent shall (and are hereby authorized and directed to) enter into such intercreditor agreement.

SECTION 4.15. Maintenance of Office or Agency.

(a) The Issuer shall maintain an office or agency (which may be an office of the Trustee or an Affiliate of the Trustee or Registrar) where Securities may be surrendered for registration of transfer or for exchange and where notices and demands to or upon the Issuer in respect of the Securities and this Indenture may be made. The Issuer shall give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Issuer shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations and surrenders may be made at the corporate trust place of payment and notices and demands may be made at the Corporate Trust Office of the Trustee as set forth in Section 12.01.

(b) The Issuer may also from time to time designate one or more other offices or agencies where the Securities may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided, however*, that no such designation or rescission shall in any manner relieve the Issuer of its obligation to maintain an office or agency for such purposes. The Issuer shall give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

(c) The Issuer hereby designates the Corporate Trust Office of the Trustee or its agent as such office or agency of the Issuer in accordance with Section 2.04.

SECTION 4.16. After-Acquired Property. Upon the acquisition by any Issuer or any Guarantor of any assets or property, including any new Subsidiary of the Issuer or any Guarantor (in each case, other than Excluded Assets) ("After-Acquired Property"), the Issuer or such Guarantor shall promptly execute and deliver such mortgages, deeds of trust, security instruments, pledge agreements, financing statements and certificates and opinions of counsel as shall be reasonably necessary to vest in the Collateral Agent a perfected security interest or other Lien, subject only to Permitted Liens, in such After-Acquired Property and to have such After-Acquired Property (but subject to certain limitations, if applicable, including as described under Article 11) added to the Collateral, and shall promptly deliver such Officers' Certificates and Opinions of Counsel as are customary in secured financing transactions in the relevant jurisdictions or as are reasonably requested by the Trustee or the Collateral Agent (subject to customary assumptions, exceptions and qualifications), and thereupon all provisions of this Indenture relating to the Collateral shall be deemed to relate to such After-Acquired Property to the same extent and with the same force and effect; *provided* that if granting a security interest or Lien in such After-Acquired Property requires the consent of a third party, the Issuer shall use commercially reasonable efforts to obtain such consent with respect to the security interest or Lien for the benefit of the Collateral Agent on behalf of the Holders of the Securities; *provided, further*, that if such third party does not consent to the granting of such security interest or Lien after the use of such commercially reasonable efforts, the Issuer or such Guarantor, as the case may be, will not be required to provide such security interest or Lien (so long as no other Person is granted a Lien by the Issuer or such Guarantor on such After-Acquired Property securing any Indebtedness following such acquisition or in contemplation thereof). Notwithstanding the foregoing, if any property or assets of the Issuer or any Guarantor originally deemed to be an Excluded Asset at any point ceases to be an Excluded Asset pursuant to the definition of "Excluded Asset", all or the applicable portion of such property and assets shall be deemed to be After-Acquired Property and shall be added to the Collateral in accordance with the previous sentence.

SECTION 4.17. Intellectual Property and Excluded Agreements. The Issuer shall, at its sole expense, either directly or by using commercially reasonable efforts to cause any Restricted Subsidiary to do so, take any and all commercially reasonable actions to (a) maintain the Intellectual Property owned or otherwise held by the Issuer or any Restricted Subsidiary and (b) to the extent the Issuer or any Restricted Subsidiary in good faith determines appropriate, defend or assert the Intellectual Property against infringement or interference by any other Persons and against any claims of invalidity or unenforceability by any other Persons (including by bringing any legal action for infringement or defending any counterclaim of invalidity or

action for declaratory judgment of non-infringement) in each case where the failure to so act, prepare, execute, deliver or file would reasonably be expected to have a material adverse effect on the results of operations or financial condition of the Issuer and its Restricted Subsidiaries. The Issuer shall use commercially reasonable efforts to not, and shall use its commercially reasonable efforts to cause any Restricted Subsidiary not to, disclaim or abandon, or fail to take any action the Issuer in good faith determines appropriate to prevent the disclaimer or abandonment of, the Intellectual Property, in each case where such disclaimer, abandonment or failure to take any such action would reasonably be expected to have a material adverse effect on the results of operations or financial condition of the Issuer and its Restricted Subsidiaries. Notwithstanding anything in this Indenture to the contrary, in no event shall the Issuer or any Restricted Subsidiary sell, lease, convey, assign, transfer, license or otherwise dispose of its Intellectual Property or Excluded Agreements to any Person that is not the Issuer or a Guarantor, except as specifically permitted in the definition of "Permitted Asset Sale" or in connection with a merger, amalgamation, consolidation or transfer of all or substantially all of the assets of the Issuer and the Guarantors, taken as a whole, that complies with Article 5. Notwithstanding anything in this Indenture to the contrary, to the extent that the Issuer or any Restricted Subsidiary owns or license Intellectual Property or is party to any Excluded Agreements, then the Issuer or such Restricted Subsidiary, as the case may be, shall not provide a Lien in respect of, or guarantee, any Indebtedness (other than the Securities and the Guarantees).

SECTION 4.18. Line of Business. The Issuer shall not, and shall not permit any of its Restricted Subsidiaries to, engage in any line of business other than those businesses engaged in on the Issue Date and businesses reasonably related to the healthcare industry.

SECTION 4.19. Maintenance of FDA Approval. The Issuer shall maintain the FDA approval of Pancreaze®.

SECTION 4.20. Use of Proceeds. The Issuer shall use, or will cause its Restricted Subsidiaries to use, the net proceeds from the issuance and sale of the Securities (a) to pay fees, costs and expenses arising in connection with the issuance of the Securities, (b) to pay the fee contemplated by Section 6.17 of the Purchase Agreement, (c) to fund part of the consideration to acquire assets in respect of Pancreaze® and (d) for general corporate purposes.

SECTION 4.21. Existence. Subject to Article 5, each of the Issuer and each Guarantor will do or cause to be done all things necessary to preserve and keep in full force and effect its respective existence, rights (charter and statutory), license and franchises; *provided*, that the Issuer shall not be required to preserve any such rights, license or franchise, or the corporate, partnership or other existence of any Guarantor, if the Issuer determines that the preservation thereof is no longer desirable in the conduct of the business of the Issuer and the Guarantors, taken as a whole, and that the loss thereof is not adverse in any material respect to the Holders of the Securities.

SECTION 4.22. Special Proceeds.

(a) No later than 30 days following the date of receipt by the Issuer or any of its Restricted Subsidiaries, or the Collateral Agent as loss payee, of any Special Proceeds, the Issuer shall make an offer to all Holders of Securities (a "Special Proceeds Offer") to repurchase

the maximum principal amount of Securities that is at least $2,000 and an integral multiple of $1,000 that may be repurchased out of the Special Proceeds at a repurchase price in cash equal to the redemption price set forth in Paragraph 5 of the Form of Security set forth in Exhibit A that would be applicable to such Securities on the date fixed for such repurchase (the "Special Proceeds Repurchase Date"), plus accrued and unpaid interest, if any, to the Special Proceeds Repurchase Date (subject to the right of the Holders of record on the relevant Record Date to receive interest due on the related Payment Date), plus a fee equal to 1.00% of the principal amount repurchased on the Special Proceeds Repurchase Date, in accordance with the terms contemplated in this Section 4.22; *provided*, *however*, that notwithstanding the receipt of Special Proceeds, the Issuer shall not be obligated to repurchase any Securities pursuant to this Section 4.22 in the event that it has exercised (i) its unconditional right to redeem such Securities in accordance with Article 3 or (ii) its legal defeasance option or covenant defeasance option in accordance with Article 8. The Issuer shall commence the Special Proceeds Offer by providing the written notice required pursuant to Section 4.22(e), with a copy provided contemporaneously therewith to the Trustee. To the extent that the aggregate principal amount of Securities tendered pursuant to a Special Proceeds Offer is less than the Special Proceeds, the Issuer (or the applicable Restricted Subsidiary of the Issuer) may use any remaining Special Proceeds for any purpose that is not prohibited by this Indenture. If the aggregate principal amount of Securities tendered pursuant to a Special Proceeds Offer exceeds the Special Proceeds, the selection of the Securities to be repurchased shall be made in the manner described in Section 4.22(d). Upon completion of any such Special Proceeds Offer, the amount of Special Proceeds shall be reset at zero.

(b) The Issuer shall comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations to the extent such laws or regulations are applicable in connection with the repurchase of the Securities pursuant to a Special Proceeds Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of this Indenture, the Issuer shall comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations described in this Indenture by virtue thereof.

(c) Not later than the date upon which written notice of a Special Proceeds Offer is delivered to the Trustee as provided above, the Issuer shall deliver to the Trustee an Officers' Certificate as to the amount of the Special Proceeds. On the Special Proceeds Repurchase Date, the Issuer shall irrevocably deposit or cause to be deposited with the Trustee or with a Paying Agent (or, if the Issuer or a domestically organized Wholly Owned Restricted Subsidiary is acting as the Paying Agent, segregate and hold in trust) an amount equal to the Special Proceeds to be invested in Cash Equivalents, as directed in writing by the Issuer, and to be held for payment in accordance with the provisions of this Section 4.22. Upon the expiration of the period for which the Special Proceeds Offer remains open (the "Special Proceeds Offer Period"), the Issuer shall deliver to the Trustee for cancellation the Securities or portions thereof that have been properly tendered to and are to be accepted by the Issuer, along with a written payment and cancellation order. The Trustee (or the Paying Agent, if not the Trustee) shall, on the Special Proceeds Repurchase Date, mail or otherwise deliver payment to each tendering Holder in the amount of the repurchase price as determined by the Issuer and stated in the written payment and cancellation order. In the event that the Special Proceeds delivered by or caused to be delivered by the Issuer to the Trustee are greater than the repurchase price of the Securities

tendered, the Trustee shall remit the excess to the Issuer immediately after the expiration of the Special Proceeds Offer Period for application in accordance with this Section 4.22.

(d) Holders electing to have a Security repurchased pursuant to a Special Proceeds Offer shall be required to surrender the Security, with an appropriate form duly completed, to the Issuer at the address specified in the notice provided pursuant to this Section 4.22 at least three Business Days prior to the Special Proceeds Repurchase Date. Holders shall be entitled to withdraw their election if the Issuer receives not later than one Business Day prior to the Special Proceeds Repurchase Date a telegram, telex, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Security that was delivered by the Holder for repurchase and a statement that such Holder is withdrawing such Holder's election to have such Security repurchased. If at the end of the Special Proceeds Offer Period more Securities are tendered pursuant to a Special Proceeds Offer than the Issuer is required to repurchase, and if the Securities are Global Securities held by the Depository, the particular Securities or portions thereof to be repurchased shall be allocated on a pro rata pass-through distribution of principal basis in accordance with Depository procedures; *provided*, that, so long as the Securities are held in book-entry form, the selection for repurchase of such Securities shall be made in accordance with the operational arrangements of the Depository then in effect, and if the Depository operational arrangements do not allow for repurchase on a pro rata pass-through distribution of principal basis, the Securities will be selected for repurchase, in accordance with Depository procedures, by lot. If the Securities are not Global Securities held by the Depository, selection of such Securities for repurchase shall be made by the Trustee on a pro rata basis to the extent practicable or such other method as the Trustee shall deem fair and appropriate (and in such manner as complies with applicable legal requirements); *provided* that no Securities of $2,000 or less shall be repurchased in part.

(e) Written notice of a Special Proceeds Offer shall be provided at least 30 but not more than 60 days before the Special Proceeds Repurchase Date to each Holder of Securities at such Holder's registered address (or electronically pursuant to the Depository's applicable procedures), with a copy to the Trustee. If any Security is to be repurchased in part only, any notice of repurchase that relates to such Security shall state the portion of the principal amount thereof that has been or is to be repurchased. Holders whose Securities are repurchased only in part shall be issued new Securities equal in principal amount to the portion of the Securities surrendered but not repurchased. If the Securities are Global Securities held by the Depository, then the applicable operational procedures of the Depository for tendering and withdrawing securities will apply.

## ARTICLE 5

## SUCCESSOR COMPANY

SECTION 5.01. When Issuer May Merge or Transfer Assets.

(a) The Issuer shall not, directly or indirectly, consolidate, amalgamate or merge with or into or wind up or convert into (whether or not the Issuer is the surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets in one or more related transactions to, any Person unless:

(i) (x) the Issuer is the surviving Person or the Person formed by or surviving any such merger, amalgamation, consolidation, winding up or conversion (if other than the Issuer) or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made is a corporation, partnership or limited liability company organized or existing under the laws of the United States, any state thereof or the District of Columbia (the Issuer or such Person, as the case may be, being herein called the "Successor Company"); and (y) the Successor Company (if other than the Issuer) expressly assumes all the obligations of the Issuer under this Indenture, the Securities and the Security Documents pursuant to supplemental indentures or other documents or instruments in form reasonably satisfactory to the Trustee;

(ii) immediately after giving effect to such transaction (and treating any Indebtedness that becomes an obligation of the Successor Company or any of its Restricted Subsidiaries as a result of such transaction as having been Incurred by the Successor Company or such Restricted Subsidiary at the time of such transaction) no Default shall have occurred and be continuing;

(iii) immediately after giving *pro forma* effect to such transaction, as if such transaction had occurred at the beginning of the applicable four-quarter period (and treating any Indebtedness that becomes an obligation of the Successor Company or any of its Restricted Subsidiaries as a result of such transaction as having been Incurred by the Successor Company or such Restricted Subsidiary at the time of such transaction), (A) the Successor Company and its Restricted Subsidiaries would be permitted to incur at least $1.00 of additional Indebtedness pursuant to Section 4.03(b)(xvi) or (B) the Fixed Charge Coverage Ratio for the Successor Company and its Restricted Subsidiaries would be greater than such ratio for the Issuer and its Restricted Subsidiaries immediately prior to such transaction; and

(iv) the Successor Company shall have delivered to the Trustee (A) an Officers' Certificate and an Opinion or Opinions of Counsel, each stating (to the extent applicable with respect to such Opinion or Opinions of Counsel) that such transaction and such supplemental indentures (if any) comply with this Indenture and the obligations of the Issuer under this Indenture, the Securities and the Security Documents remain obligations of the Successor Company and confirming the necessary actions to continue the perfection and priority of the Collateral Agent's Lien in the Collateral and of the preservation of its rights therein, *provided*, that in giving such Opinion of Counsel, such counsel may rely on an Officers' Certificate as to compliance with Section 5.01(a)(iii) and as to other matters of fact, and (B) an Officers' Certificate stating that such necessary actions have been taken (together with evidence thereof) promptly and in any event no later than 30 days following such transaction.

(b) The Successor Company (if other than the Issuer) shall succeed to, and be substituted for, the Issuer under this Indenture, the Securities and the Security Documents, and in such event the Issuer will automatically be released and discharged from its obligations under

this Indenture, the Securities and the Security Documents. This Article 5 will not apply to a sale, assignment, transfer, lease, conveyance or other disposition of property or assets between or among any of the Issuer and the Guarantors.

SECTION 5.02. When Guarantors May Merge or Transfer Assets.

(a) Subject to the provisions of Section 10.03 (which govern the release of a Guarantee upon the sale, disposition, exchange or other transfer of the Capital Stock of a Guarantor), none of the Guarantors shall, and the Issuer shall not permit any Guarantor to, directly or indirectly, consolidate, amalgamate or merge with or into or wind up or convert into (whether or not such Guarantor is the surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets in one or more related transactions to, any Person unless:

(i) either (A) such Guarantor is the surviving Person or the Person formed by or surviving any such merger, amalgamation, consolidation, winding up or conversion (if other than such Guarantor) or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made is a corporation, partnership or limited liability company organized or existing under the laws of the jurisdiction of its formation (such Guarantor or such Person, as the case may be, being herein called the "Successor Guarantor") and the Successor Guarantor (if other than such Guarantor) expressly assumes all the obligations of such Guarantor under this Indenture and, if applicable, such Guarantors' Guarantee and the Security Documents pursuant to a supplemental indenture or other documents or instruments in form reasonably satisfactory to the Trustee or (B) (x) such sale or disposition or merger, amalgamation or consolidation is made to a Person that is not the Issuer or a Restricted Subsidiary and is not in violation of Section 4.06 and (y) after giving effect to such sale, disposition or other transfer, such Guarantor is no longer a Restricted Subsidiary; and

(ii) the Successor Guarantor (if other than such Guarantor) or the Issuer shall have delivered or caused to be delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such merger, amalgamation, consolidation, winding up, conversion, sale, assignment, transfer, lease, conveyance or disposition and such supplemental indenture (if any) comply with this Indenture.

(b) Except as otherwise provided in this Indenture, the Successor Guarantor (if other than such Guarantor) will succeed to, and be substituted for, such Guarantor under this Indenture, such Guarantor's Guarantee and the Security Documents, and in such event such Guarantor will automatically be released and discharged from its obligations under this Indenture, such Guarantor's Guarantee and the Security Documents.

(c) Notwithstanding the foregoing, any Guarantor may consolidate, amalgamate, merge with or into or wind up or convert into, or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets to, the Issuer or any other Guarantor.

## ARTICLE 6

## DEFAULTS AND REMEDIES

SECTION 6.01. Events of Default. An "Event of Default" occurs if:

(a) there is a default in any payment of interest on any Security when the same becomes due and payable, and such default continues for a period of five Business Days;

(b) there is a default in the payment of principal of or premium, if any, on any Security or any fee related to the payment of principal when due at its Stated Maturity, upon scheduled payment thereof, upon optional redemption, upon required repurchase, upon declaration of acceleration or otherwise (including pursuant to Section 4.01(b));

(c) the Issuer or any Guarantor fails to comply with any of its agreements in the Securities or this Indenture (other than those referred to in clause (a) or (b) above) and such failure continues for 60 days after the notice specified below;

(d) the Issuer or any Restricted Subsidiary fails to pay any Indebtedness within any applicable grace period after such payment is due and payable (including at final maturity) or the acceleration of any such Indebtedness by the holders thereof occurs because of a default, in each case, if the total amount of such Indebtedness unpaid or accelerated exceeds $1,000,000 or its non-U.S. currency equivalent;

(e) the Issuer or any Restricted Subsidiary pursuant to or within the meaning of any Bankruptcy Law:

(i) commences a voluntary case;

(ii) consents to the entry of an order for relief against it in an involuntary case;

(iii) consents to the appointment of a Custodian of it or for any substantial part of its property; or

(iv) makes a general assignment for the benefit of its creditors or takes any comparable action under any non-U.S. laws relating to insolvency;

(f) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(i) is for relief against the Issuer or any Restricted Subsidiary of the Issuer in an involuntary case;

(ii) appoints a Custodian of the Issuer or any Restricted Subsidiary of the Issuer or for any substantial part of its property; or

(iii) orders the winding up or liquidation of the Issuer or any Restricted Subsidiary of the Issuer;

or any similar relief is granted under any non-U.S. laws and the order or decree remains unstayed and in effect for 60 days;

(g) the Issuer or any Restricted Subsidiary fails to pay final judgments aggregating in excess of $1,000,000 or its non-U.S. currency equivalent (net of any amounts that are covered by enforceable insurance policies issued by solvent carriers), which judgments are not discharged, waived or stayed for a period of 60 days following the entry thereof;

(h) any representation or warranty made in writing by or on behalf of the Issuer or any Guarantor in connection with the issuance and sale of the Securities or made in writing by or on behalf of the Issuer or any Guarantor or by any officer of the Issuer or any Guarantor furnished in connection with the transactions contemplated by this Indenture and the Security Documents proves to have been false or incorrect in any material respect on the date as of which made (or, if such representation or warranty is given as of a specific time, as of such time);

(i) the Collateral Agent fails to have a perfected security interest in any portion of the Collateral with a value greater than $1,000,000, except (i) as contemplated by this Indenture and the Security Documents or (ii) due to the failure on the part of the Collateral Agent to maintain custody of Collateral within its documented possession;

(j) any Guarantee ceases to be in full force and effect (except as contemplated by the terms thereof in accordance with this Indenture) or any Guarantor denies or disaffirms its obligations under this Indenture or any Guarantee and such Default continues for 10 days;

(k) unless all of the Collateral has been released from the Liens in accordance with the provisions of the Security Documents with respect to the Securities, the Issuer shall assert or any Guarantor shall assert, in any pleading in any court of competent jurisdiction, that any such security interest is invalid or unenforceable and, in the case of any such Person that is a Subsidiary of the Issuer, the Issuer fails to cause such Subsidiary to rescind such assertions within 30 days after the Issuer has actual knowledge of such assertions; or

(l) the Issuer or any Guarantor fails to comply for 60 days after receipt of written notice with its obligations contained in the Security Documents, except for a failure with respect to assets or property that do not constitute a material portion of the Collateral or adversely affect any rights or remedies of the Collateral Agent with respect to a material portion of the Collateral.

The foregoing shall constitute Events of Default whatever the reason for any such Event of Default and whether it is voluntary or involuntary or is effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body.

The term “Bankruptcy Law” means Title 11, United States Code, or any similar U.S. federal or state law for the relief of debtors (or their non-U.S. equivalents). The term

"Custodian" means any receiver, trustee, assignee, liquidator, custodian or similar official under any Bankruptcy Law.

A Default under clause (c) or (l) above shall not constitute an Event of Default until the Trustee or the Holders of at least 25% in principal amount of the outstanding Securities notify the Issuer (and also the Trustee if given by the Holders) of the Default or after the date on which such Default should reasonably have been known or been aware of by the defaulting party and the Issuer does not cure such Default within the time specified in such clause (c) or (l) after receipt of such notice or after such date, as applicable. Such notice must specify the Default, demand that it be remedied and state that such notice is a "Notice of Default". The Issuer shall deliver to the Trustee, within 30 days after the occurrence thereof, written notice in the form of an Officers' Certificate of any event that is, or with the giving of notice or the lapse of time or both would become, an Event of Default, its status and what action the Issuer is taking or proposes to take in respect thereof.

SECTION 6.02. Acceleration. If an Event of Default (other than an Event of Default specified in Section 6.01(e) or 6.01(f) with respect to the Issuer) occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of outstanding Securities by written notice to the Issuer may, and if such notice is given by the Holders such notice shall be given to the Issuer and the Trustee, declare that the principal of, and the premium, if any, and accrued but unpaid interest on, all the Securities and any related fees contemplated by this Indenture is due and payable. Upon such a declaration, such principal and interest and related fees shall be due and payable immediately. If an Event of Default specified in Section 6.01(e) or 6.01(f) with respect to the Issuer occurs, the principal of, and the premium, if any, and accrued but unpaid interest on, all the Securities and any related fees contemplated by this Indenture shall *ipso facto* become and be immediately due and payable, without any declaration or other act on the part of the Trustee or any Holders. The Holders of a majority in principal amount of the Securities by notice to the Trustee may rescind an acceleration and its consequences if the rescission would not conflict with any judgment or decree and if all existing Events of Default (except nonpayment of principal, interest or premium and any related fees that has become due solely because of the acceleration) have been cured or waived.

If the principal of, or premium, if any, or accrued and unpaid interest, if any, on, the Securities and any related fees becomes due and payable as provided above (an "Acceleration"), the principal of, and the premium, if any, and accrued but unpaid interest on, the Securities (and any related fees) that becomes due and payable shall equal the optional redemption price in effect on the date of such declaration (or the date set forth in the third sentence of this Section 6.02), as if such Acceleration were an optional redemption of the Securities effected thereby on such date of declaration (or the date set forth in the third sentence of this Section 6.02). The amounts described in the preceding sentence are intended to be liquidated damages and not unmatured interest or a penalty.

In the event of any Event of Default specified in Section 6.01(d), such Event of Default and all consequences thereof (excluding, however, any resulting payment default) shall be annulled, waived and rescinded, automatically and without any action by the Trustee or the Holders of the Securities, if within 20 days after such Event of Default arose the Issuer delivers an Officers' Certificate to the Trustee stating that (x) the Indebtedness or guarantee that is the

basis for such Event of Default has been discharged, (y) the Holders thereof have rescinded or waived the acceleration, notice or action (as the case may be) giving rise to such Event of Default or (z) the default that is the basis for such Event of Default has been cured, it being understood that in no event shall an acceleration of the principal amount of the Securities as described above be annulled, waived or rescinded upon the happening of any such events.

SECTION 6.03. Other Remedies. If an Event of Default occurs and is continuing, the Trustee may, but only at the written direction of Holders of a majority in principal amount of the then outstanding Securities, pursue any available remedy at law or in equity to collect the payment of principal of or interest on the Securities and any related fees contemplated by this Indenture or to enforce the performance of any provision of the Securities or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Securities or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Holder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. No remedy is exclusive of any other remedy. To the extent required by law, all available remedies are cumulative.

SECTION 6.04. Waiver of Past Defaults. Provided the Securities are not then due and payable by reason of a declaration of acceleration, the Holders of a majority in principal amount of the then outstanding Securities by written notice to the Trustee may waive an existing Default and its consequences except (a) a Default in the payment of the principal of or interest on a Security or any related fees contemplated by this Indenture, (b) a Default arising from the failure to redeem or purchase any Security when required pursuant to the terms of this Indenture or (c) a Default in respect of a provision that under Section 9.02 cannot be amended without the consent of each Holder affected. When a Default is waived, it is deemed cured and the Issuer, the Trustee and the Holders will be restored to their former positions and rights under this Indenture, but no such waiver shall extend to any subsequent or other Default or impair any consequent right. Any past Default or compliance with any provisions may be waived with the consent of the Holders of a majority in principal amount of the Securities then outstanding.

SECTION 6.05. Control by Majority. The Holders of a majority in principal amount of the then outstanding Securities may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture or, subject to Section 7.01, that the Trustee determines is unduly prejudicial to the rights of any other Holder or that would involve the Trustee in personal liability. Prior to taking any action under this Indenture, the Trustee shall be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

SECTION 6.06. Limitation on Suits.

(a) Except to enforce the right to receive payment of principal, premium (if any) or interest and any related fees contemplated by this Indenture when due, no Holder may pursue any remedy with respect to this Indenture or the Securities unless:

(i) the Holder gives the Trustee written notice stating that an Event of Default is continuing;

(ii) the Holders of at least 25% in principal amount of the then outstanding Securities make a written request to the Trustee to pursue the remedy;

(iii) such Holder or Holders offer to the Trustee security or indemnity satisfactory to it against any loss, liability or expense;

(iv) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of security or indemnity; and

(v) the Holders of a majority in principal amount of the then outstanding Securities do not give the Trustee a direction inconsistent with the request during such 60-day period.

(b) A Holder may not use this Indenture to prejudice the rights of another Holder or to obtain a preference or priority over another Holder.

SECTION 6.07. Rights of the Holders to Receive Payment. Notwithstanding any other provision of this Indenture, the right of any Holder to receive payment of principal of and interest on the Securities held by such Holder and any related fees contemplated by this Indenture, on or after the respective due dates expressed or provided for in this Indenture or in the Securities, or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

SECTION 6.08. Collection Suit by Trustee. If an Event of Default specified in Section 6.01(a) or Section 6.01(b) occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Issuer or any other obligor on the Securities for the whole amount then due and owing (together with interest on overdue principal and any related fees contemplated by this Indenture and (to the extent lawful) on any unpaid interest at the rate provided for in the Securities) and the amounts provided for in Section 7.06.

SECTION 6.09. Trustee May File Proofs of Claim. The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for reasonable compensation, expenses disbursements and advances of the Trustee (including counsel, accountants, experts or such other professionals as the Trustee deems necessary, advisable or appropriate)) and the Holders allowed in any judicial proceedings relative to the Issuer or any Guarantor, their creditors or their property, shall be entitled to participate as a member, voting or otherwise, of any official committee of creditors appointed in such matters and, unless prohibited by law or applicable regulations, may vote on behalf of the Holders in any election of a trustee in bankruptcy or other

Person performing similar functions and be a member of a creditors' or other similar committee, and any Custodian in any such judicial proceeding is hereby authorized by each Holder to make payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and its counsel, and any other amounts due the Trustee under Section 7.06.

SECTION 6.10. Priorities. If the Trustee collects any money or property pursuant to this Article 6 or any Security Document, the Trustee (after giving effect to Section 5.3 of the Collateral Agreement) shall pay out the money or property in the following order:

FIRST: to the Trustee for amounts due under Section 7.06;

SECOND: to the Holders for amounts due and unpaid on the Securities for principal, premium, if any, and interest, and any related fees contemplated by this Indenture, ratably, without preference or priority of any kind, according to the amounts due and payable on the Securities for principal, premium, if any, and interest, and any related fees contemplated by this Indenture, respectively; and

THIRD: to the Issuer or, to the extent the Trustee collects any amount related to any Guarantor, to such Guarantor.

The Trustee may fix a record date and payment date for any payment to the Holders pursuant to this Section 6.10. At least 15 days before such record date, the Trustee shall provide to each Holder and the Issuer a written notice that states the record date, the payment date and amount to be paid.

SECTION 6.11. Undertaking for Costs. In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 6.11 does not apply to a suit by the Trustee, a suit by a Holder pursuant to Section 6.07 or a suit by Holders of more than 10% in principal amount of the Securities.

SECTION 6.12. Waiver of Stay or Extension Laws. Neither the Issuer nor any Guarantor (to the extent it may lawfully do so) shall at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, that may affect the covenants or the performance of this Indenture; and the Issuer and each Guarantor (to the extent that it may lawfully do so) hereby expressly waive all benefit or advantage of any such law, and shall not hinder, delay or impede the execution of any power herein granted to the Trustee, but shall suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 6.13. Holder Request. At the written request of the Issuer or any Holder (or any holder of beneficial interests in the Securities that certifies to the Trustee that it is

a holder of such beneficial interests or is actually known by the Trustee to be such a holder of beneficial interests), the Trustee shall, as soon as practicable after receipt of such request and at the Issuer's sole cost and expense, (a) contact each Holder or each other Holder (and each other holder of beneficial interests in the Securities) to request each such other Holder or other Holder (and each such other holder of beneficial interests in the Securities) to provide its written permission to being identified to the Issuer or the requesting Holder (or holder of beneficial interests in the Securities) by the Trustee, to the extent the Trustee has actual knowledge of the identity of such Holder or other Holder (or other holder of beneficial interests in the Securities), and (b) disclose to the Issuer or the requesting Holder (or other holder of beneficial interests in the Securities) the identity of any such Holder or other Holder (and any such other holder of beneficial interests in the Securities) who provides such written permission to the Trustee. The Trustee shall have no liability if it contacts any Person that it believes to be a beneficial holder of the Securities that is not a beneficial holder of the Securities.

## ARTICLE 7

## TRUSTEE

SECTION 7.01. Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this Indenture and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs, except with respect to the obligation to exercise rights and remedies following an Event of Default, which right and remedies shall be performed by the Trustee acting solely upon the direction of Holders of a majority in principal amount of the Securities in accordance with Section 6.03 and Section 6.05.

(b) Except during the continuance of an Event of Default:

(i) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture and no implied covenants or obligations shall be read into this Indenture against the Trustee (it being agreed that the permissive right of the Trustee to do things enumerated in this Indenture shall not be construed as a duty); and

(ii) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. The Trustee shall be under no duty to make any investigation as to any statement contained in any such instance, but may accept the same as conclusive evidence of the truth and accuracy of such statement or the correctness of such opinions. However, in the case of certificates or opinions required by any provision hereof to be provided to it, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(i) this paragraph does not limit the effect of Section 7.01(b);

(ii) the Trustee shall not be liable for any error of judgment made in good faith by a Trust Officer unless it is proved that the Trustee was negligent in ascertaining the pertinent facts;

(iii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.05; and

(iv) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties hereunder or in the exercise of any of its rights or powers.

(d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b) and (c) of this Section 7.01.

(e) The Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Issuer.

(f) Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

(g) The Trustee shall not be liable to any Person for special, punitive, indirect, consequential or incidental loss or damage of any kind whatsoever (including lost profits), even if the Trustee has been advised of the likelihood of such loss or damage.

(h) Every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 7.01 and, to the extent made expressly applicable by the terms of this Indenture, to the provisions of the TIA.

SECTION 7.02. Rights of Trustee.

(a) The Trustee may conclusively rely on any document believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.

(b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel or both. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on the Officers' Certificate or Opinion of Counsel.

(c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.

(d) The Trustee shall not be liable for any action it takes or omits to take in good faith that it believes to be authorized or within its rights or powers; *provided*, *however*, that the Trustee's conduct does not constitute willful misconduct or negligence.

(e) The Trustee may consult with counsel of its own selection and the advice or opinion of counsel with respect to legal matters relating to this Indenture and the Securities or any Opinion of Counsel shall be full and complete authorization and protection from liability in respect of any action taken, omitted or suffered by it hereunder in good faith and in accordance with the advice or opinion of such counsel or Opinion of Counsel.

(f) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, debenture, note or other paper or document unless requested in writing to do so by the Holders of a majority in principal amount of the Securities at the time outstanding, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Issuer, personally or by agent or attorney, at the expense of the Issuer and shall incur no liability of any kind by reason of such inquiry or investigation.

(g) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity satisfactory to the Trustee in its sole discretion against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction.

(h) The rights, privileges, protections, immunities and benefits given to the Trustee, including its right to be compensated, reimbursed and indemnified as provided in Section 7.06, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder (including as Collateral Agent), and each agent, custodian and other Person employed to act hereunder.

(i) The Trustee shall not be liable for any action taken or omitted by it in good faith at the direction of the Holders of a majority in principal amount of the Securities as to the time, method and place of conducting any proceedings for any remedy available to the Trustee or the exercising of any power conferred by this Indenture.

(j) Any action taken, or omitted to be taken, by the Trustee in good faith pursuant to this Indenture upon the request or authority or consent of any person who, at the time of making such request or giving such authority or consent, is the Holder of any Security shall be conclusive and binding upon future Holders of Securities and upon Securities executed and delivered in exchange therefor or in place thereof.

(k) In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and

interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts that are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

SECTION 7.03. Individual Rights of Trustee. The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Issuer or its Affiliates with the same rights it would have if it were not Trustee. The Trustee and its Affiliates have engaged, currently are engaged and may in the future engage in financial or other transactions with the Issuer and its Affiliates in the ordinary course of their respective businesses, subject to the TIA (to the extent this Indenture has been qualified thereunder). Any Paying Agent or Registrar may do the same with like rights. However, the Trustee must comply with Sections 7.09 and 7.10.

SECTION 7.04. Trustee's Disclaimer. The Trustee shall not be responsible for and makes no representation as to the validity or adequacy of this Indenture, any Guarantee, the Securities or any Security Documents, it shall not be accountable for the Issuer's use of the proceeds from the Securities, and it shall not be responsible for any statement of the Issuer or any Guarantor in this Indenture or in any document issued in connection with the sale of the Securities or in the Securities other than the Trustee's certificate of authentication. The Trustee shall not be charged with knowledge of any Default or Event of Default under Section 6.01(c), 6.01(d), 6.01(e), 6.01(f), 6.01(g), 6.01(h), 6.01(i), 6.01(j), 6.01(k) or 6.01(l) unless either (a) a Trust Officer shall have actual knowledge thereof or (b) the Trustee shall have received written notice thereof in accordance with Section 12.01 from the Issuer, any Guarantor or any Holder.

SECTION 7.05. Notice of Defaults. If a Default occurs and is continuing and if it is actually known to the Trustee, the Trustee shall provide to each Holder written notice of the Default within 30 days after it is actually known to a Trust Officer or written notice referring to this Indenture, describing such Default or Event of Default and stating that such notice is a "notice of default", is received by the Trustee in accordance with Section 12.01. Except in the case of a Default in the payment of principal of or premium (if any) or interest on any Security or of any related fees contemplated by this Indenture, the Trustee may withhold the notice if and so long as a committee of its Trust Officers in good faith determines that withholding the notice is in the interests of the Holders.

SECTION 7.06. Compensation and Indemnity. The Issuer shall pay to the Trustee from time to time reasonable compensation for its services, as agreed between the Issuer and the Trustee. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Issuer shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred or made by it, including costs of collection, in addition to the compensation for its services. Such expenses shall include the reasonable compensation and expenses, disbursements and advances of the Trustee's agents, counsel, accountants and experts. The Issuer and each Guarantor, jointly and severally, shall indemnify the Trustee against any and all loss, liability, claim, damage or expense (including reasonable attorneys' fees and expenses) incurred by or in connection with the acceptance or administration of this trust and the performance of its duties hereunder, including the costs and expenses of enforcing this Indenture or a Guarantee against the Issuer or a Guarantor (including this Section

7.06) and defending itself against or investigating any claim (whether asserted by the Issuer, any Guarantor, any Holder or any other Person). The obligation to pay such amounts shall survive the discharge of this Indenture, the payment in full or defeasance of the Securities or the removal or resignation of the Trustee. The Trustee shall notify the Issuer of any claim for which it may seek indemnity promptly upon obtaining actual knowledge thereof; *provided, however*, that any failure so to notify the Issuer shall not relieve the Issuer or any Guarantor of its indemnity obligations hereunder. The Issuer shall defend the claim and the indemnified party shall provide reasonable cooperation at the Issuer's expense in the defense. Such indemnified parties may have separate counsel and the Issuer and the Guarantors, as applicable, shall pay the fees and expenses of such counsel; *provided, however*, that the Issuer shall not be required to pay such fees and expenses if it assumes such indemnified parties' defense and, in such indemnified parties' reasonable judgment, there is no conflict of interest between the Issuer and the Guarantors, as applicable, and such parties in connection with such defense. The Issuer need not reimburse any expense or indemnify against any loss, liability or expense Incurred by an indemnified party through such party's own willful misconduct or gross negligence (as determined by a final, non-appealable order of a court of competent jurisdiction).

To secure the Issuer's and the Guarantors' payment obligations in this Section 7.06, the Trustee shall have a Lien prior to the Securities on all money or property held or collected by the Trustee other than money or property held in trust to pay principal of, and premium, if any, and interest on, particular Securities and any related fees contemplated by this Indenture.

The Issuer's and the Guarantors' payment obligations pursuant to this Section 7.06 shall survive the satisfaction or discharge of this Indenture, any rejection or termination of this Indenture under any bankruptcy law or the resignation or removal of the Trustee. Without prejudice to any other rights available to the Trustee under applicable law, when the Trustee incurs expenses after the occurrence of a Default specified in Section 6.01(e) or Section 6.01(f) with respect to the Issuer, the expenses are intended to constitute expenses of administration under the Bankruptcy Law.

No provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if repayment of such funds or adequate indemnity against such risk or liability is not assured to its satisfaction.

SECTION 7.07. Replacement of Trustee.

(a) The Trustee may resign in writing at any time upon 30 days prior notice to the Issuer by so notifying the Issuer. The Holders of a majority in principal amount of the Securities may remove the Trustee by so notifying the Trustee and may appoint a successor Trustee. The Issuer shall remove the Trustee if:

(i) the Trustee fails to comply with Section 7.09;

(ii) the Trustee is adjudged bankrupt or insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;

(iii) a receiver or other public officer takes charge of the Trustee or its property; or

(iv) the Trustee otherwise becomes incapable of acting.

(b) If the Trustee resigns or is removed by the Issuer or by the Holders of a majority in principal amount of the Securities and such Holders do not reasonably promptly appoint a successor Trustee, or if a vacancy exists in the office of Trustee for any reason (the Trustee in such event being referred to herein as the retiring Trustee), the Issuer shall promptly appoint a successor Trustee.

(c) A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Issuer. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall provide a written notice of its succession to the Holders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, subject to the Lien provided for in Section 7.06.

(d) If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee or the Holders of 10% in principal amount of the Securities may petition at the expense of the Issuer any court of competent jurisdiction for the appointment of a successor Trustee.

(e) If the Trustee fails to comply with Section 7.09, unless the Trustee's duty to resign is stayed as provided in Section 310(b) of the TIA, any Holder who has been a *bona fide* holder of a Security for at least six months may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

(f) Notwithstanding the replacement of the Trustee pursuant to this Section 7.07, the obligations of the Issuer and the Guarantors under Section 7.06 shall continue for the benefit of the retiring Trustee.

SECTION 7.08. Successor Trustee by Merger. If the Trustee consolidates with, amalgamates with, merges with or converts into, or transfers all or substantially all its corporate trust business or assets to, another corporation or banking association, the resulting, surviving or transferee corporation or banking association without any further act shall be the successor Trustee.

In case at the time such successor or successors by merger, amalgamation, conversion or consolidation to the Trustee shall succeed to the trusts created by this Indenture any of the Securities shall have been authenticated but not delivered, any such successor to the Trustee may adopt the certificate of authentication of any predecessor trustee, and deliver such Securities so authenticated; and in case at that time any of the Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor to the Trustee; and in all such cases such certificates shall have the full force that it is anywhere in the Securities or in this Indenture provided that the certificate of the Trustee shall have.

SECTION 7.09. Eligibility; Disqualification. The Trustee shall at all times satisfy the requirements of Section 310(a) of the TIA. The Trustee shall have a combined capital and surplus of at least $100,000,000 as set forth in its most recent published annual report of condition. The Trustee shall comply with Section 310(b) of the TIA, subject to its right to apply for a stay of its duty to resign under the penultimate paragraph of Section 310(b) of the TIA; *provided*, *however*, that there shall be excluded from the operation of Section 310(b)(1) of the TIA any series of securities issued under this Indenture and any indenture or indentures under which other securities or certificates of interest or participation in other securities of the Issuer is outstanding if the requirements for such exclusion set forth in Section 310(b)(1) of the TIA are met.

SECTION 7.10. Preferential Collection of Claims Against the Issuer. The Trustee shall comply with Section 311(a) of the TIA, excluding any creditor relationship listed in Section 311(b) of the TIA. A Trustee who has resigned or been removed shall be subject to Section 311(a) of the TIA to the extent indicated.

## ARTICLE 8

## DISCHARGE OF INDENTURE; DEFEASANCE

SECTION 8.01. Discharge of Liability on Securities; Defeasance.

(a) This Indenture shall be discharged and shall cease to be of further effect (except as to surviving rights of registration of transfer or exchange of Securities, as expressly provided for in this Indenture) as to all outstanding Securities when:

(i) either (1) all the Securities theretofore authenticated and delivered (other than Securities pursuant to Section 2.08 that have been replaced or paid and Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Issuer and thereafter repaid by the Issuer or discharged from such trust) have been delivered to the Trustee for cancellation or (2) all of the Securities (x) have become due and payable, (y) will become due and payable at their Stated Maturity within one year or (z) if redeemable at the option of the Issuer, are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Issuer, and the Issuer has irrevocably deposited or caused to be deposited with the Trustee funds in an amount sufficient to pay and discharge the entire Indebtedness on the Securities not theretofore delivered to the Trustee for cancellation, for principal of, and premium, if any, and interest on, the Securities to the date of deposit, plus a fee equal to 1.00% of the then-outstanding principal amount of the Securities, together with irrevocable instructions from the Issuer directing the Trustee to apply such funds to the payment thereof at maturity or redemption, as the case may be;

(ii) the Issuer or the Guarantors have paid all other sums payable under this Indenture; and

(iii) the Issuer has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel stating that all conditions precedent under this Indenture relating to the satisfaction and discharge of this Indenture have been complied with.

(b) Notwithstanding clauses (a)(i) and (a)(ii) above, the Issuer's obligations in Sections 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 6.07, 7.06 and 7.07 and in this Article 8 shall survive until the Securities have been paid in full. Thereafter, the Issuer's obligations in Sections 7.06, 8.05 and 8.06 shall survive such satisfaction and discharge.

(c) Subject to Section 8.01(b) and Section 8.02, the Issuer at any time may terminate (i) all its obligations under the Securities and this Indenture (with respect to such Securities) ("legal defeasance option") or (ii) its obligations under Sections 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.09, 4.10, 4.12, 4.13, 4.14, 4.16, 4.17, 4.18, 4.19, 4.20 and 4.21 and the operation of Section 4.08, Section 4.22, Article 5 and Sections 6.01(c), 6.01(d), 6.01(e) (with respect to Restricted Subsidiaries of the Issuer only), 6.01(f) (with respect to Restricted Subsidiaries of the Issuer only), 6.01(g), 6.01(h), 6.01(i), 6.01(j), 6.01(k) and 6.01(l) ("covenant defeasance option"). The Issuer may exercise its legal defeasance option notwithstanding its prior exercise of its covenant defeasance option. In the event that the Issuer terminates all of its obligations under the Securities and this Indenture (with respect to such Securities) by exercising its legal defeasance option or its covenant defeasance option, the obligations of each Guarantor under its Guarantee of such Securities and the Security Documents shall be terminated simultaneously with the termination of such obligations.

If the Issuer exercises its legal defeasance option, payment of the Securities so defeased may not be accelerated because of an Event of Default. If the Issuer exercises its covenant defeasance option, payment of the Securities so defeased may not be accelerated because of an Event of Default specified in Section 6.01(c), 6.01(d), 6.01(e) (to the extent such Section 6.01(e) applies to Restricted Subsidiaries), 6.01(f) (to the extent such Section 6.01(f) applies to Restricted Subsidiaries), 6.01(g), 6.01(h), 6.01(i), 6.01(j), 6.01(k) or 6.01(l) or because of the failure of the Issuer to comply with Article 5.

Upon satisfaction of the conditions set forth herein and upon request of the Issuer, the Trustee shall acknowledge in writing the discharge of those obligations that the Issuer terminates.

SECTION 8.02. Conditions to Defeasance.

(a) The Issuer may exercise its legal defeasance option or its covenant defeasance option only if:

(i) the Issuer irrevocably deposits in trust with the Trustee cash in U.S. Dollars, U.S. Government Obligations or a combination thereof in an amount sufficient, or U.S. Government Obligations, the principal of and the interest on which will be sufficient, or a combination thereof sufficient, to pay the principal of and premium (if any) and interest on the Securities and any related fees

contemplated by this Indenture when due at maturity or redemption, as the case may be, including interest thereon to maturity or such redemption date;

(ii) the Issuer delivers to the Trustee a certificate from a firm of independent accountants expressing its opinion that the payments of principal and interest when due and without reinvestment on the deposited U.S. Government Obligations plus any deposited money without investment will provide cash at such times and in such amounts as will be sufficient to pay principal, premium, if any, and interest when due on all the Securities and any related fees contemplated by this Indenture to maturity or redemption, as the case may be;

(iii) 123 days pass after the deposit is made and during the 123-day period no Default specified in Section 6.01(e) or Section 6.01(f) with respect to the Issuer occurs that is continuing at the end of the period;

(iv) the deposit does not constitute a default under any other agreement binding on the Issuer;

(v) in the case of the legal defeasance option, the Issuer shall have delivered to the Trustee an opinion of tax counsel of recognized standing in the United States stating that (1) the Issuer has received from, or there has been published by, the IRS a ruling, or (2) since the date of this Indenture there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such opinion of tax counsel of recognized standing in the United States shall confirm that, the Holders will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred;

(vi) in the case of the covenant defeasance option, the Issuer shall have delivered to the Trustee an opinion of tax counsel of recognized standing in the United States to the effect that the Holders will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred;

(vii) the right of any Holder to receive payment of principal of, and premium, if any, and interest on, such Holder’s Securities and any related fees contemplated by this Indenture on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder’s Securities shall not be impaired; and

(viii) the Issuer delivers to the Trustee an Officers’ Certificate and an Opinion of Counsel, each stating that all conditions precedent to the defeasance

and discharge of the Securities to be so defeased and discharged as contemplated by this Article 8 have been complied with.

(b) Before or after a deposit, the Issuer may make arrangements satisfactory to the Trustee for the redemption of such Securities at a future date in accordance with Article 3.

SECTION 8.03. Application of Trust Money. The Trustee shall hold in trust money or U.S. Government Obligations (including proceeds thereof) deposited with it pursuant to this Article 8. It shall apply the deposited money and the money from U.S. Government Obligations through each Paying Agent and in accordance with this Indenture to the payment of principal of and interest on the Securities so discharged or defeased and any related fees contemplated by this Indenture.

SECTION 8.04. Repayment to Issuer. Each of the Trustee and each Paying Agent shall promptly turn over to the Issuer upon request any money or U.S. Government Obligations held by it as provided in this Article 8 that, in the written opinion of a firm of independent public accountants recognized in the United States delivered to the Trustee (which delivery shall only be required if U.S. Government Obligations have been so deposited), are in excess of the amount thereof that would then be required to be deposited to effect an equivalent discharge or defeasance in accordance with this Article 8.

Subject to any applicable abandoned property law, the Trustee and each Paying Agent shall pay to the Issuer upon written request any money held by them for the payment of principal or interest or any related fees contemplated by this Indenture that remains unclaimed for two years, and, thereafter, Holders entitled to the money must look to the Issuer for payment as general creditors, and the Trustee and each Paying Agent shall have no further liability with respect to such monies.

SECTION 8.05. Indemnity for Government Obligations. The Issuer shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against deposited U.S. Government Obligations or the principal and interest received on such U.S. Government Obligations.

SECTION 8.06. Reinstatement. If the Trustee or any Paying Agent is unable to apply any money or U.S. Government Obligations in accordance with this Article 8 by reason of any legal proceeding or by reason of any order or judgment of any Governmental Authority enjoining, restraining or otherwise prohibiting such application, the Issuer's obligations under this Indenture and the Securities so discharged or defeased shall be revived and reinstated as though no deposit had occurred pursuant to this Article 8 until such time as the Trustee or any Paying Agent is permitted to apply all such money or U.S. Government Obligations in accordance with this Article 8; *provided, however*, that, if the Issuer has made any payment of principal of or interest on any such Securities because of the reinstatement of its obligations, the Issuer shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or any Paying Agent.

## ARTICLE 9

## AMENDMENTS AND WAIVERS

SECTION 9.01. Without Consent of the Holders. Notwithstanding Section 9.02, the Issuer, the Collateral Agent, the Guarantors and the Trustee may amend or supplement this Indenture, the Securities or the Security Documents, and may waive any provision thereof, without notice to or consent of any Holder:

(i) to cure any ambiguity, omission, mistake, defect or inconsistency;

(ii) to provide for the assumption by a Successor Company of the obligations of the Issuer under this Indenture and the Securities in accordance with the terms of this Indenture;

(iii) to provide for the assumption by a Successor Guarantor of the obligations of a Guarantor under this Indenture and its Guarantee;

(iv) to provide for uncertificated Securities in addition to or in place of certificated Securities; *provided, however*, that the uncertificated Securities are issued in registered form for purposes of Sections 871(h)(2)(B) and 881(c)(2)(B) of the Code and United States Treasury Regulation Section 5f.103-1(c);

(v) to add additional Guarantees or co-obligors with respect to the Securities (including any local law guarantee limitations applicable to any Guarantee) and to release any Guarantees in accordance with the terms of this Indenture;

(vi) to add to the covenants of the Issuer for the benefit of the Holders or to surrender any right or power conferred herein upon the Issuer in accordance with the terms of this Indenture;

(vii) to comply with any requirement of the SEC in connection with qualifying or maintaining the qualification of this Indenture under the TIA (it being agreed that this Indenture need not qualify under the TIA);

(viii) to make any change that does not adversely affect the rights of any Holder;

(ix) to add additional assets as Collateral to secure the Securities;

(x) to provide for the issuance of Additional Conditional Securities in accordance with this Indenture;

(xi) to amend the provisions of this Indenture relating to the transfer and legending of Securities as permitted by this Indenture, including to facilitate the issuance of the Securities and the administration of this Indenture; *provided, however*, that (A) compliance with this Indenture as so amended would not result

in Securities being transferred in violation of the Securities Act or any other applicable securities law and (B) such amendment does not materially and adversely affect the rights of Holders to transfer Securities (as certified by the Issuer in an Officers' Certificate to the Trustee); or

(xii) to release Collateral from the Lien pursuant to this Indenture and the Security Documents when permitted or required by this Indenture or the Security Documents.

Upon the request of the Issuer, and upon receipt by the Trustee of the documents described in Section 9.05, the Trustee shall join with the Issuer in the execution of any amended or supplemental Indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into such modified or amended indenture that affects its own rights, duties or immunities under this Indenture or otherwise. After an amendment under this Section 9.01 becomes effective, the Issuer shall provide to the Holders a written notice briefly describing such amendment. The failure to give such notice to all Holders, or any defect therein, shall not impair or affect the validity of an amendment under this Section 9.01.

SECTION 9.02. With Consent of the Holders.

(a) The Issuer, the Collateral Agent, the Guarantors and the Trustee may amend or supplement this Indenture, the Securities and the Security Documents, and may waive any provision thereof (including the provisions of Section 4.08 and Section 4.22), with the written consent of the Holders of a majority in principal amount of the Securities then outstanding voting as a single class (including consents obtained in connection with a tender offer or exchange offer for the Securities). However, without the consent of each Holder of an outstanding Security affected, an amendment, supplement or waiver may not:

(i) reduce the amount of Securities whose Holders must consent to an amendment;

(ii) reduce the rate of or extend the time for payment of interest on any Security;

(iii) reduce the principal of or change the Stated Maturity of any Security (or reduce the amount of any payment of any installment of principal or change the due date in respect of the payment of any installment of principal) or reduce any fee payable under this Indenture calculated with reference to the principal of the Securities or change the due date therefor;

(iv) reduce the premium payable upon the redemption or repurchase of any Security or change the time at which any Security may be redeemed or repurchased in accordance with Article 3, Section 4.08 or Section 4.22;

(v) make any Security payable in currency other than that stated in such Security;

(vi) expressly subordinate the Securities or any Guarantees in right of payment to any other Indebtedness of the Issuer or any Guarantor or adversely affect the priority of any Liens securing the Securities and the Guarantees;

(vii) impair the right of any Holder to receive payment of principal of or premium, if any, and interest on such Holder's Securities on or after the due dates (or the due date in respect of the payment of any installment of principal) therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Securities or to receive any fee payable under this Indenture calculated with reference to the principal of the Securities on or after the due dates therefor or to institute suit for the enforcement of any payment thereon or with respect thereto;

(viii) make any change in Section 6.04 or the second sentence of this Section 9.02;

(ix) modify any Guarantees in any manner adverse to the Holders; or

(x) make any change in the provisions in this Indenture dealing with the application of proceeds of Collateral that would adversely affect the Holders of the Securities.

Without the consent of the Holders of at least two-thirds in aggregate principal amount of the Securities then outstanding, no amendment, supplement or waiver may release all or substantially all of the Collateral from the Liens of this Indenture and the Security Documents with respect to the Securities.

It shall not be necessary for the consent of the Holders under this Section 9.02 to approve the particular form of any proposed amendment if such consent approves the substance thereof.

(b) After an amendment under this Section 9.02 becomes effective, the Issuer shall provide to the Holders a written notice briefly describing such amendment. The failure to give such notice to all Holders, or any defect therein, shall not impair or affect the validity of an amendment under this Section 9.02.

SECTION 9.03. Revocation and Effect of Consents and Waivers.

(a) A consent to an amendment, supplement or a waiver by a Holder of a Security shall bind the Holder and every subsequent Holder of that Security or portion of the Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent, supplement or waiver is not made on the Security. However, any such Holder or subsequent Holder may revoke the consent, supplement or waiver as to such Holder's Security or portion of the Security if the Trustee receives the notice of revocation before the date on which the Trustee receives an Officers' Certificate from the Issuer certifying that the requisite principal amount of Securities have consented. After an amendment, supplement or waiver becomes effective, it shall bind every Holder. An amendment, supplement or waiver becomes effective upon the (i) receipt by the Issuer or the Trustee of consents by the Holders of the requisite

principal amount of Securities, (ii) satisfaction of conditions to effectiveness as set forth in this Indenture and any indenture supplemental hereto containing such amendment, supplement or waiver, (iii) execution of such amendment or waiver (or supplemental indenture) by the Issuer and the Trustee and (iv) delivery to the Trustee of the Officers' Certificate and Opinion of Counsel required under Article 12.

(b) The Issuer may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding Section 9.03(a), those Persons who were Holders at such record date (or their duly designated proxies), and only those Persons, shall be entitled to give such consent or to revoke any consent previously given or to take any such action, whether or not such Persons continue to be Holders after such record date. No such consent shall be valid or effective for more than 120 days after such record date.

SECTION 9.04. Notation on or Exchange of Securities. If an amendment, supplement or waiver changes the terms of a Security, the Issuer may require the Holder of the Security to deliver it to the Trustee. The Trustee may place an appropriate notation on the Security regarding the changed terms and return it to the Holder. Alternatively, if the Issuer or the Trustee so determines, the Issuer in exchange for the Security shall issue and the Trustee shall authenticate a new Security that reflects the changed terms. Failure to make the appropriate notation or to issue a new Security shall not affect the validity of such amendment, supplement or waiver.

SECTION 9.05. Trustee to Sign Amendments. The Trustee shall sign any amendment, supplement or waiver authorized pursuant to this Article 9 if the amendment does not adversely affect the rights, duties, liabilities or immunities of the Trustee. If it does, the Trustee may but need not sign it. In signing such amendment, the Trustee shall be entitled to receive indemnity satisfactory to it and shall be provided with, and (subject to Section 7.01) shall be fully protected in relying upon, an Officers' Certificate and an Opinion of Counsel stating that such amendment, supplement or waiver is authorized or permitted by this Indenture and that such amendment, supplement or waiver is the legal, valid and binding obligation of the Issuer and the Guarantors, enforceable against them in accordance with its terms, subject to customary exceptions, and complies with the provisions hereof (including Section 9.03). Notwithstanding the foregoing, no Opinion of Counsel will be required for the Trustee to execute any amendment or supplement adding a new Guarantor under this Indenture.

SECTION 9.06. Payment for Consent. Neither the Issuer nor any Affiliate of the Issuer shall, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any Holder for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of this Indenture or the Securities unless such consideration is offered to be paid to all Holders that so consent, waive or agree to amend in the time frame set forth in solicitation documents relating to such consent, waiver or agreement.

SECTION 9.07. Additional Voting Terms; Calculation of Principal Amount. All Securities issued under this Indenture shall vote and consent together on all matters (as to which any of such Securities may vote) as one class. Determinations as to whether Holders of the

requisite aggregate principal amount of Securities have concurred in any direction, waiver or consent shall be made in accordance with this Article 9 and Section 2.14.

## ARTICLE 10

## GUARANTEES

SECTION 10.01. Guarantees.

(a) Each Guarantor hereby jointly and severally irrevocably and unconditionally guarantees as a primary obligor and not merely as a surety on a senior basis to each Holder, the Trustee, the Collateral Agent and their respective successors and assigns (i) the full and punctual payment when due, whether at Stated Maturity, by acceleration, by redemption or otherwise, of all Obligations of the Issuer under this Indenture (including obligations to the Trustee) and the Securities, whether for payment of principal of, or premium, if any, or interest, if any, on, the Securities and all other monetary obligations of the Issuer under this Indenture and the Securities, and (ii) the full and punctual performance within applicable grace periods of all other obligations of the Issuer, whether for fees, expenses, indemnification or otherwise under this Indenture and the Securities, on the terms set forth in this Indenture by becoming a party to this Indenture (all the foregoing being hereinafter collectively called the "Guaranteed Obligations").

(b) Each Guarantor further agrees that the Guaranteed Obligations may be extended or renewed, in whole or in part, without notice or further assent from each such Guarantor, and that each such Guarantor shall remain bound under this Article 10 notwithstanding any extension or renewal of any Guaranteed Obligation. The Guaranteed Obligations of a Guarantor will be secured by security interests (subject to Permitted Liens) in the Collateral owned by such Guarantor to the extent provided for in the Security Documents and as required pursuant to Sections 4.13 and 4.16.

(c) Each Guarantor waives presentation to, demand of payment from and protest to the Issuer of any of the Guaranteed Obligations and also waives notice of protest for nonpayment. Each Guarantor waives notice of any default under the Securities or the Guaranteed Obligations. The obligations of each Guarantor hereunder shall not be affected by (i) the failure of any Holder, the Trustee or the Collateral Agent to assert any claim or demand or to enforce any right or remedy against the Issuer or any other Person under this Indenture, the Securities, any Security Document, or any other agreement or otherwise; (ii) any extension or renewal of this Indenture, the Securities, any Security Document or any other agreement; (iii) any rescission, waiver, amendment or modification of any of the terms or provisions of this Indenture, the Securities, any Security Document or any other agreement; (iv) the release of any security held by any Holder, the Trustee or the Collateral Agent for the Guaranteed Obligations or any Guarantor; (v) the failure of any Holder, the Trustee or the Collateral Agent to exercise any right or remedy against any other guarantor of the Guaranteed Obligations; or (vi) any change in the ownership of such Guarantor, except as provided in Section 10.03.

(d) Each Guarantor hereby waives any right to which it may be entitled (except as may be required by applicable requirements of law or regulation and to the extent the

relevant requirement cannot be waived) to (i) have its obligations hereunder divided among the Guarantors, such that such Guarantor's obligations would be less than the full amount claimed, (ii) have the assets of the Issuer or any other Guarantor first be used and depleted as payment of the Issuer's or such Guarantor's obligations hereunder prior to any amounts being claimed from or paid by such Guarantor hereunder and (iii) require that the Issuer be sued prior to an action being initiated against such Guarantor.

(e) Each Guarantor further agrees that its Guarantee herein constitutes a guarantee of payment, performance and compliance when due (and not a guarantee of collection) and waives any right to require that any resort be had by any Holder, the Trustee or the Collateral Agent to any security held for payment of the Guaranteed Obligations.

(f) Except as expressly set forth in Sections 8.01, 10.02, 10.03 and 10.06, the obligations of each Guarantor hereunder shall not be subject to any reduction, limitation, impairment or termination for any reason, including any claim (other than payment in full) of waiver, release, surrender, alteration or compromise, and shall not be subject to any defense of setoff, counterclaim, recoupment or termination whatsoever or by reason of the invalidity, illegality or unenforceability of the Guaranteed Obligations or otherwise. Without limiting the generality of the foregoing, the obligations of each Guarantor herein shall not be discharged or impaired or otherwise affected by (i) the failure of any Holder, the Trustee or the Collateral Agent to assert any claim or demand or to enforce any remedy under this Indenture, the Securities, any Security Document or any other agreement, (ii) any waiver or modification of any thereof, (iii) any default, failure or delay, willful or otherwise, in the performance of the obligations, or (iv) any other act or thing or omission or delay to do any other act or thing that may or might in any manner or to any extent vary the risk of any Guarantor or would otherwise operate as a discharge of any Guarantor as a matter of law or equity.

(g) Except as expressly set forth in Sections 8.01 and 10.03, each Guarantor agrees that its Guarantee shall remain in full force and effect until payment in full of its Guaranteed Obligations. Except as expressly set forth in Sections 8.01 and 10.03, each Guarantor further agrees that its Guarantee herein shall continue to be effective or be reinstated, as the case may be, if at any time payment, or any part thereof, of principal of or interest on any Guaranteed Obligation is rescinded or must otherwise be restored by any Holder or the Trustee upon the bankruptcy or reorganization of the Issuer or otherwise.

(h) In furtherance of the foregoing and not in limitation of any other right that any Holder, the Trustee or the Collateral Agent has at law or in equity against any Guarantor by virtue hereof, at any time when an Event of Default pursuant to Section 6.01(a) or 6.01(b) has occurred and is continuing or upon the failure of the Issuer to perform or comply with any other Guaranteed Obligation, each Guarantor hereby promises to and shall, upon receipt of written demand by the Trustee in accordance with this Indenture, forthwith pay, or cause to be paid, in cash, to the Holders, the Trustee or the Collateral Agent an amount equal to the sum of (i) the unpaid principal amount of such Guaranteed Obligations, (ii) accrued and unpaid interest on such Guaranteed Obligations (but only to the extent not prohibited by applicable law) and (iii) all other monetary obligations of the Issuer then due to the Holders, the Trustee and the Collateral Agent in respect of the Guaranteed Obligations.

(i) Each Guarantor agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Guaranteed Obligations guaranteed hereby until payment in full of all Guaranteed Obligations. Each Guarantor further agrees that, as between it, on the one hand, and the Holders, the Trustee and the Collateral Agent, on the other hand, (i) the maturity of the Guaranteed Obligations guaranteed hereby may be accelerated as provided in Article 6 for the purposes of any Guarantee herein, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Guaranteed Obligations guaranteed hereby, and (ii) in the event of any declaration of acceleration of such Guaranteed Obligations as provided in Article 6, such Guaranteed Obligations (whether or not due and payable) shall forthwith become due and payable by such Guarantor for the purposes of this Section 10.01.

(j) Each Guarantor also agrees to pay any and all costs and expenses (including reasonable attorneys' fees and expenses) incurred by the Trustee, the Collateral Agent or any Holder in enforcing any rights under this Section 10.01.

(k) Each Guarantor shall execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purpose of this Indenture.

SECTION 10.02. Limitation on Liability. Each Guarantor and, by its acceptance of Securities, each Holder hereby confirms that it is the intention of all such parties that the Guarantee of such Guarantor does not constitute a fraudulent transfer or conveyance for purposes of Bankruptcy Law, the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act or any similar U.S. federal or state law to the extent applicable to any Guarantee. To effectuate the foregoing intention, the Trustee, the Holders and the Guarantors hereby irrevocably agree that any term or provision of this Indenture to the contrary notwithstanding, the maximum aggregate amount of the Guaranteed Obligations guaranteed hereunder by any Guarantor shall not exceed the maximum amount that, after giving effect to all other contingent and fixed liabilities of such Guarantor and after giving effect to any collections from or payments made by or on behalf of any other Guarantor in respect of the obligations of such other Guarantor under its Guarantee or pursuant to its contribution obligations under this Indenture, can be guaranteed hereby without rendering the Guarantee, as it relates to such Guarantor, void or voidable under applicable laws relating to fraudulent conveyance or fraudulent transfer or similar laws affecting the rights of creditors generally. Each Guarantor that makes a payment under its Guarantee shall be entitled upon payment in full of all Guaranteed Obligations under this Indenture to a contribution from each other Guarantor in an amount equal to such other Guarantor's pro rata portion of such payment based on the respective maximum liability of all the Guarantors at the time of such payment.

SECTION 10.03. Releases. A Guarantee as to any Guarantor shall terminate and be of no further force or effect and such Guarantor shall be deemed to be automatically and unconditionally released from all obligations under this Article 10 upon:

(a) the sale, disposition, exchange or other transfer (including through merger, amalgamation, consolidation or otherwise) of the Capital Stock of the applicable Guarantor if (x) such sale, disposition, exchange or other transfer is made to a Person that is not the Issuer or a

Restricted Subsidiary in a manner not in violation of this Indenture and (y) after giving effect to such sale, disposition, exchange or other transfer, such Guarantor is no longer a Restricted Subsidiary;

(b) the Issuer designating such Guarantor to be an Unrestricted Subsidiary in accordance with the provisions set forth in Section 4.04 and the definition of "Unrestricted Subsidiary";

(c) the consolidation or merger of any Guarantor with and into the Issuer or another Guarantor that is the surviving Person in such consolidation or merger or upon the liquidation of such Guarantor following the transfer of all of its assets to the Issuer or another Guarantor; or

(d) the Issuer's exercise of the Issuer's legal defeasance option or covenant defeasance option in accordance with Section 8.01 or if the obligations of the Issuer and such Guarantor under this Indenture are discharged in accordance with the terms of this Indenture.

SECTION 10.04. Successors and Assigns. This Article 10 shall be binding upon each Guarantor and its successors and assigns and shall inure to the benefit of the Trustee, the Collateral Agent and the Holders and their successors and assigns and, in the event of any transfer or assignment of rights by any Holder, the Collateral Agent or the Trustee, the rights and privileges conferred upon that party in this Indenture and in the Securities shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions of this Indenture.

SECTION 10.05. No Waiver. Neither a failure nor a delay on the part of the Trustee, the Collateral Agent or the Holders in exercising any right, power or privilege under this Article 10 shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise of any right, power or privilege. The rights, remedies and benefits of the Trustee, the Collateral Agent and the Holders herein expressly specified are cumulative and not exclusive of any other rights, remedies or benefits that any of them may have under this Article 10 at law, in equity, by statute or otherwise.

SECTION 10.06. Modification. No modification, amendment or waiver of any provision of this Article 10, nor the consent to any departure by any Guarantor therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on any Guarantor in any case shall entitle such Guarantor to any other or further notice or demand in the same, similar or other circumstances.

SECTION 10.07. Execution of Supplemental Indenture for Future Guarantors. Each Person that is required to become a Guarantor after the Issue Date pursuant to Section 4.12 shall promptly execute and deliver to the Trustee a supplemental indenture in the form of Exhibit C pursuant to which such Person shall become a Guarantor under this Article 10 and shall guarantee the Guaranteed Obligations. In the case where a supplemental indenture is entered into under this Section 10.07 solely for purposes of adding a Guarantor, no Opinion of Counsel shall

be required; *provided*, that if the Trustee so requests, an Officers' Certificate that all conditions precedent to execution have been satisfied shall be delivered.

SECTION 10.08. No Impairment. The failure to endorse a Guarantee on any Security shall not affect or impair the validity thereof. If an Officer whose signature is on this Indenture or the notation of Guarantee no longer holds that office at the time the Trustee authenticates the Securities, the Guarantee shall be valid nevertheless.

SECTION 10.09. Benefits Acknowledged. Each Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by this Indenture and that the guarantee and waivers made by it pursuant to its Guarantee are knowingly made in contemplation of such benefits.

## ARTICLE 11

## SECURITY DOCUMENTS

SECTION 11.01. Collateral and Security Documents. The due and punctual payment of the principal of and interest on the Securities and any related fees contemplated by this Indenture when and as the same shall be due and payable, whether on an Payment Date, at Stated Maturity, or by acceleration, repurchase, redemption or otherwise, and interest on the overdue principal of and interest on the Securities and any related fees contemplated by this Indenture and performance of all other Guaranteed Obligations of the Issuer and the Guarantors to the Holders, the Trustee or the Collateral Agent under this Indenture, the Securities and the Security Documents, according to the terms hereunder or thereunder, shall be secured as provided in the Security Documents, which define the terms of the Liens that secure the Guaranteed Obligations. The Trustee and the Issuer hereby acknowledge and agree that the Collateral Agent holds the Collateral in trust for the benefit of the Trustee and the Holders, in each case pursuant to the terms of the Security Documents. Each Holder, by accepting a Security, appoints U.S. Bank National Association as Collateral Agent and consents and agrees to the terms of the Security Documents (including the provisions providing for the possession, use, release and foreclosure of Collateral) as the same may be in effect or may be amended from time to time in accordance with their respective terms and this Indenture, and authorizes and directs the Trustee to enter into the Security Documents and to bind the Holders to the terms thereof and to perform its obligations and exercise its rights thereunder in accordance therewith. The Issuer shall deliver to the Trustee (if it is not then also appointed and serving as Collateral Agent) copies of all documents delivered to the Collateral Agent pursuant to the Security Documents, and will do or cause to be done all such acts and things as may be reasonably required by the next sentence of this Section 11.01, to assure and confirm to the Trustee and the Collateral Agent the Liens on the Collateral contemplated hereby, by the Security Documents or by any part thereof, as from time to time constituted, so as to render the same available for the security and benefit of this Indenture and of the Securities secured hereby, according to the intent and purposes herein expressed. The Issuer shall take, and shall cause the Guarantors to take, any and all actions reasonably required to cause the Security Documents to create and maintain at all times, as security for the Obligations of the Issuer and the Guarantors hereunder, a valid and enforceable perfected Lien on all of the Collateral (subject to the terms of the Security Documents), in favor of the Collateral Agent for the benefit of the Trustee and the Holders under

the Security Documents. Notwithstanding anything to the contrary in this Indenture or any Security Document, in no event shall the Collateral Agent be responsible for, or have any duty or obligation with respect to, the recording, filing, registering, perfection, protection or maintenance of the security interests or other Liens intended to be created by this Indenture or the Security Documents (including the filing or continuation of any Uniform Commercial Code financing or continuation statements or similar documents or instruments), nor shall the Collateral Agent be responsible for, and the Collateral Agent makes no representation regarding, the validity, effectiveness or priority of any of the Security Documents or the security interests or other Liens intended to be created thereby.

SECTION 11.02. Recordings and Opinions. The Issuer and the Guarantors shall furnish to the Collateral Agent and the Trustee on or before the time when the Issuer is required to provide annual financials pursuant to Section 4.02 with respect to the preceding fiscal year an Opinion of Counsel:

(i) stating substantially to the effect that, in the opinion of such counsel, such action has been taken with respect to the recording, filing, re-recording and re-filing of Liens under the Security Documents on Article 9 Collateral as necessary to maintain the perfection of such Liens; or

(ii) to the effect that, in the opinion of such counsel, no such action is necessary to maintain to maintain the perfection of such Liens.

SECTION 11.03. Release of Collateral.

(a) Subject to Sections 11.03(b) and 11.04, the Collateral may be released from the Liens and security interest created by the Security Documents at any time or from time to time in accordance with the provisions of the Security Documents or as provided hereby. The Issuer and the Guarantors will be entitled to a release of assets included in the Collateral from the Liens securing the Securities, and the Trustee shall promptly release, or instruct the Collateral Agent to promptly release, as applicable, the Issuer and/or such Guarantors from such Liens at the Issuer's sole cost and expense, under one or more of the following circumstances:

(1) to enable the Issuer or any Restricted Subsidiary to sell, exchange or otherwise dispose of any of the Collateral to any Person other than the Issuer or any Guarantor (but excluding any transaction subject to Article 5 where the recipient is required to become the obligor on the Securities or a Guarantee) to the extent not prohibited by this Indenture, including Section 4.06;

(2) in the case of a Guarantor that is released from its Guarantee with respect to the Securities in accordance with this Indenture, the release of the Collateral owned by such Guarantor;

(3) in respect of the Collateral owned by a Guarantor, upon the designation of such Guarantor to be an Unrestricted Subsidiary in accordance with Section 4.04 and the definition of "Unrestricted Subsidiary"; or

(4) pursuant to an amendment, supplement or waiver in accordance with Article 9.

Upon receipt of an Officers' Certificate certifying that all conditions precedent under this Indenture and the Security Documents, if any, to such release have been met and any necessary or proper (as determined by the Issuer) instruments of termination, satisfaction or release have been prepared by the Issuer, the Collateral Agent shall promptly execute, deliver or acknowledge (at the Issuer's expense) such instruments or releases to evidence the release of any Collateral permitted to be released pursuant to this Indenture or the Security Documents.

(b) At any time when a Default or Event of Default has occurred and is continuing and the maturity of the Securities has been accelerated (whether by declaration or otherwise) and the Trustee (if not then also appointed and serving as Collateral Agent) has delivered a notice of acceleration to the Collateral Agent, no release of Collateral pursuant to the provisions of this Indenture or the Security Documents will be effective as against the Holders.

SECTION 11.04. Permitted Releases Not To Impair Lien. The release of any Collateral from the terms hereof and of the Security Documents or the release of, in whole or in part, the Liens created by the Security Documents, will not be deemed to impair the security under this Indenture in contravention of the provisions hereof if and to the extent the Collateral or Liens are released pursuant to the applicable Security Documents and the terms of this Article 11. Each of the Holders acknowledges that a release of Collateral or a Lien in accordance with the terms of the Security Documents and of this Article 11 will not be deemed for any purpose to be in contravention of the terms of this Indenture.

SECTION 11.05. Suits To Protect the Collateral. Subject to the provisions of Article 7, at any time that an Event of Default has occurred and is continuing, the Trustee in its sole discretion and without the consent of the Holders, on behalf of the Holders, may or may direct the Collateral Agent to take all actions it deems necessary or appropriate in order to:

(a) enforce any of the terms of the Security Documents; and

(b) collect and receive any and all amounts payable in respect of the Guaranteed Obligations of the Issuer hereunder.

Subject to the provisions of the Security Documents, at any time that an Event of Default has occurred and is continuing, the Trustee shall have the power (but not the obligation) to institute and to maintain such suits and proceedings as it may deem expedient to prevent any impairment of the Collateral by any acts that may be unlawful or in violation of any of the Security Documents or this Indenture, and such suits and proceedings as the Trustee, in its sole discretion, may deem expedient to preserve or protect its interests and the interests of the Holders in the Collateral (including the power to institute and maintain suits or proceedings to restrain the enforcement of or compliance with any legislative or other governmental enactment, rule or order that may be unconstitutional or otherwise invalid if the enforcement of, or compliance with, such enactment, rule or order would impair the Lien on the Collateral or be prejudicial to the interests of the Holders or the Trustee).

SECTION 11.06. Authorization of Receipt of Funds by the Trustee Under the Security Documents. The Trustee is authorized (a) to receive any funds for the benefit of the Holders distributed under the Security Documents and (b) to make further distributions of such funds to the Holders according to the provisions of this Indenture.

SECTION 11.07. Purchaser Protected. In no event shall any purchaser in good faith of any property purported to be released hereunder be bound to ascertain the authority of the Collateral Agent or the Trustee to execute the release or to inquire as to the satisfaction of any conditions required by the provisions hereof for the exercise of such authority or to see to the application of any consideration given by such purchaser or other transferee; nor shall any purchaser or other transferee of any property or rights permitted by this Article 11 to be sold be under any obligation to ascertain or inquire into the authority of the Issuer or the applicable Guarantor to make any such sale or other transfer.

SECTION 11.08. Powers Exercisable by Receiver or Trustee. In case the Collateral shall be in the possession of a receiver or trustee, lawfully appointed, the powers conferred in this Article 11 upon the Issuer or a Guarantor with respect to the release, sale or other disposition of such property may be exercised by such receiver or trustee, and an instrument signed by such receiver or trustee shall be deemed the equivalent of any similar instrument of the Issuer or a Guarantor or of any officer or officers thereof required by the provisions of this Article 11; and if the Trustee shall be in the possession of the Collateral under any provision of this Indenture, then such powers may be exercised by the Trustee.

SECTION 11.09. Release Upon Termination of the Issuer's Obligations. In the event that the Issuer delivers to the Trustee an Officers' Certificate certifying that (i) payment in full of the principal of, together with premium, if any, and accrued and unpaid interest on, the Securities and all other Obligations with respect to the Securities under this Indenture, the Guarantees and the Security Documents that are due and payable at or prior to the time such principal, together with premium, if any, and accrued and unpaid interest (including additional interest, if any), and any other applicable amounts, are paid, (ii) all the Obligations under this Indenture, the Securities and the Security Documents have been satisfied and discharged by complying with the provisions of Article 8 or (iii) the Issuer shall have exercised its legal defeasance option or its covenant defeasance option, in each case in compliance with the provisions of Article 8, the Trustee shall deliver to the Issuer and the Collateral Agent a notice stating that the Trustee, on behalf of the Holders, disclaims and gives up any and all rights it has in or to the Collateral (other than with respect to funds held by the Trustee pursuant to Article 8), and any rights it has under the Security Documents, and upon receipt by the Collateral Agent of such notice, the Collateral Agent shall be deemed not to hold a Lien in the Collateral on behalf of the Trustee and shall do or cause to be done all acts reasonably requested by the Issuer to release such Lien as soon as is reasonably practicable.

SECTION 11.10. Collateral Agent.

(a) U.S. Bank National Association shall initially act as Collateral Agent and shall be authorized to appoint co-Collateral Agents as necessary in its sole discretion. Except as otherwise explicitly provided herein or in the Security Documents, neither the Collateral Agent nor any of its officers, directors, employees or agents shall be liable for failure to demand, collect

or realize upon any of the Collateral or for any delay in doing so or shall be under any obligation to sell or otherwise dispose of any Collateral upon the request of any other Person or to take any other action whatsoever with regard to the Collateral or any part thereof. Notwithstanding any provision to the contrary contained elsewhere in this Indenture or the Security Documents, the duties of the Collateral Agent shall be ministerial and administrative in nature, and the Collateral Agent shall not have any duties or responsibilities, except those expressly set forth in this Indenture and in the Security Documents to which the Collateral Agent is a party, nor shall the Collateral Agent have or be deemed to have any trust or other fiduciary relationship with the Trustee, any Holder, the Issuer or any Guarantor, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Indenture or the Security Documents or shall otherwise exist against the Collateral Agent. Without limiting the generality of the foregoing sentence, the use of the term "agent" or "Agent" in this Indenture and the Security Documents with reference to the Collateral Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead, such term is used merely as a matter of market custom and is intended to create or reflect only an administrative relationship between independent contracting parties. The Collateral Agent shall be accountable only for amounts that it actually receives as a result of the exercise of such powers, and neither the Collateral Agent nor any of its officers, directors, employees or agents shall be responsible for any act or failure to act hereunder, except for its own willful misconduct or gross negligence (as determined by a final, non-appealable order of a court of competent jurisdiction).

(b) The Collateral Agent is authorized and directed to (i) enter into the Security Documents, (ii) bind the Holders on the terms as set forth in the Security Documents and (iii) perform and observe its obligations under the Security Documents.

(c) The Collateral Agent shall act pursuant to the instructions of the Holders and the Trustee with respect to the Security Documents and the Collateral. For the avoidance of doubt, the Collateral Agent shall have no discretion under this Indenture or the Security Documents and shall not be required to make or give any determination, consent, approval, request or direction without the written direction of the requisite Holders or the Trustee, as applicable. After the occurrence of an Event of Default, the Trustee may direct the Collateral Agent in connection with any action required or permitted by this Indenture or the Security Documents.

(d) The Collateral Agent shall not be deemed to have knowledge or notice of the occurrence of any Default or Event of Default, unless the Collateral Agent shall have received written notice from the Trustee, a Holder or the Issuer referring to this Indenture, describing such Default or Event of Default and stating that such notice is a "notice of default". The Collateral Agent shall take such action with respect to such Default or Event of Default as may be requested by the Trustee or the Holders of a majority in aggregate principal amount of the Securities subject to this Article 11.

(e) No provision of this Indenture or any Security Document shall require the Collateral Agent (or the Trustee) to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or thereunder or to take or omit to take any action hereunder or thereunder or take any action at the request or direction of Holders (or

the Trustee in the case of the Collateral Agent) if it shall have reasonable grounds for believing that repayment of such funds is not assured to it. Notwithstanding anything to the contrary contained in this Indenture or the Security Documents, in the event the Collateral Agent is entitled or required to commence an action to foreclose or otherwise exercise its remedies to acquire control or possession of the Collateral, the Collateral Agent shall not be required to commence any such action, exercise any remedy, inspect or conduct any studies of any property or take any such other action if the Collateral Agent has determined that the Collateral Agent may incur personal liability as a result of the presence at, or release on or from, the Collateral or such property of any hazardous substances unless the Collateral Agent has received security or indemnity from the Holders in an amount and in a form all satisfactory to the Collateral Agent in its sole discretion, protecting the Collateral Agent from all such liability. The Collateral Agent shall at any time be entitled to cease taking any action described in this Section 11.10(e) if it no longer reasonably deems any indemnity, security or undertaking from the Issuer or the Holders to be sufficient.

(f) The Collateral Agent shall not be responsible in any manner to any of the Trustee or any Holder for the validity, effectiveness, genuineness, enforceability or sufficiency of this Indenture or the Security Documents or for any failure of the Issuer, any Guarantor or any other party to this Indenture or the Security Documents to perform its obligations hereunder or thereunder. The Collateral Agent shall not be under any obligation to the Trustee or any Holder to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Indenture or the Security Documents or to inspect the properties, books or records of the Issuer or the Guarantors.

(g) The parties hereto and the Holders hereby agree and acknowledge that the Collateral Agent shall not assume, be responsible for or otherwise be obligated for any liabilities, claims, causes of action, suits, losses, allegations, requests, demands, penalties, fines, settlements, damages (including foreseeable and unforeseeable), judgments, expenses and costs (including any remediation, corrective action, response, removal or remedial action, or investigation, operations and maintenance or monitoring costs, for personal injury or property damages, real or personal) of any kind whatsoever, pursuant to any environmental law as a result of this Indenture or the Security Documents or any actions taken pursuant hereto or thereto. Further, the parties hereto and the Holders hereby agree and acknowledge that, in the exercise of its rights under this Indenture and the Security Documents, the Collateral Agent may hold or obtain indicia of ownership primarily to protect the security interest of the Collateral Agent in the Collateral and that any such actions taken by the Collateral Agent shall not be construed as or otherwise constitute any participation in the management of such Collateral.

(h) Upon the receipt by the Collateral Agent of a written request of the Issuer signed by two Officers pursuant to this Section 11.10(h) (a “Security Document Order”), the Collateral Agent is hereby authorized to execute and enter into, and shall execute and enter into, without the further consent of any Holder or the Trustee, any Security Document to be executed after the Issue Date. Such Security Document Order shall (i) state that it is being delivered to the Collateral Agent pursuant to, and is a Security Document Order referred to in, this Section 11.10(h) and (ii) instruct the Collateral Agent to execute and enter into such Security Document. Any such execution of a Security Document shall be at the direction and expense of the Issuer, upon delivery to the Collateral Agent of an Officers’ Certificate and an Opinion of Counsel

stating that all conditions precedent to the execution and delivery of such Security Document have been satisfied. The Holders, by their acceptance of the Securities, hereby authorize and direct the Collateral Agent to execute such Security Documents.

(i) The Collateral Agent's resignation or removal shall be governed by provisions equivalent to Section 7.07(a), Section 7.07(b), Section 7.07(c), Section 7.07(d) and Section 7.07(f).

(j) The Collateral Agent shall be entitled to all of the protections, immunities, indemnities, rights and privileges of the Trustee set forth in this Indenture, and all such protections, immunities, indemnities, rights and privileges shall apply to the Collateral Agent in its roles under any Security Document, whether or not expressly stated therein.

## ARTICLE 12

## MISCELLANEOUS

SECTION 12.01. Notices.

(a) Any notice or communication required or permitted hereunder shall be in writing and delivered in person, via facsimile, via electronic mail, via overnight courier or via first-class mail addressed as follows:

if to the Issuer or a Guarantor:

VIVUS, Inc.
900 East Hamilton Avenue, Suite 550
Campbell, California 95008
Attention: Chief Financial Officer and General Counsel
Electronic mail: cfo@vivus.com;
generalcounsel@vivus.com

if to the Trustee or to the Collateral Agent:

U.S. Bank National Association
Corporate Trust Services
One Federal Street, 3rd Floor
Boston, Massachusetts 02110
Attention: Alison Nadeau (VIVUS, Inc. Indenture)
Facsimile: 617-603-6683

The Issuer or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications. Any notice, direction, request or demand hereunder to or upon the Trustee or the Collateral Agent shall be deemed to have been sufficiently given or made, for all purposes, upon actual receipt by the Trustee or the Collateral Agent if given or served by being deposited postage prepaid by registered or certified mail in a post office letter box addressed to the Corporate Trust Office or sent electronically in PDF format.

(b) Any notice or communication mailed to a Holder shall be mailed, first-class mail, to the Holder at the Holder's address as it appears on the registration books of the Registrar and shall be sufficiently given if so mailed within the time prescribed. Any notice or communication to be delivered to a Holder of Global Securities shall be delivered in accordance with the applicable procedures of the Depository and shall be sufficiently given to such Holder if so delivered to the Depository within the time prescribed.

(c) Failure to provide a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. If a notice or communication is mailed in the manner provided above, it is duly given and provided, whether or not the addressee receives it, except that notices to the Trustee are effective only if received.

(d) Notwithstanding any other provision of this Indenture or any Security, where this Indenture or any Security provides for notice of any event (including any notice of repurchase) to a Holder (whether by mail or otherwise), such notice shall be sufficiently given (in the case of a Global Security) if given to the Depository (or its designee) pursuant to the standing instructions from the Depository or its designee, including by electronic mail in accordance with accepted practices or procedures at the Depository.

SECTION 12.02. Certificate and Opinion as to Conditions Precedent. Upon any request or application by the Issuer to the Trustee to take or refrain from taking any action under this Indenture, the Issuer shall furnish to the Trustee at the request of the Trustee:

(a) an Officers' Certificate to the Trustee stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and

(b) an Opinion of Counsel to the Trustee stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

SECTION 12.03. Statements Required in Certificate or Opinion. Each Officers' Certificate or Opinion of Counsel with respect to compliance with a covenant or condition provided for in this Indenture (other than pursuant to Section 4.02(b)) shall include:

(a) a statement that the Person making such certificate or opinion has read such covenant or condition;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(c) a statement that, in the opinion of such Person, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(d) a statement as to whether or not, in the opinion of such Person, such covenant or condition has been complied with; *provided*, *however*, that with respect to matters of fact an Opinion of Counsel may rely on an Officers' Certificate or certificates of public officials.

SECTION 12.04. When Securities Disregarded. In determining whether the Holders of the required principal amount of Securities have concurred in any direction, waiver or consent, Securities owned by the Issuer, any Guarantor or by any Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Issuer or any Guarantor shall be disregarded and deemed not to be outstanding, except that, for the purpose of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent, only Securities that the Trustee knows are so owned shall be so disregarded. Subject to the foregoing, only Securities outstanding at the time shall be considered in any such determination. Notwithstanding the foregoing, if any such Person or Persons owns 100% of the Securities, such Securities shall not be so disregarded as aforesaid.

SECTION 12.05. Rules by Trustee, Paying Agent and Registrar. The Trustee may make reasonable rules for action by or a meeting of the Holders. The Registrar and a Paying Agent may make reasonable rules for their functions.

SECTION 12.06. Legal Holidays. If a Payment Date is not a Business Day, payment shall be made on the next succeeding day that is a Business Day, and no interest shall accrue on any amount that would have been otherwise payable on such Payment Date if it were a Business Day for the intervening period. If a Record Date is not a Business Day, the Record Date shall not be affected.

SECTION 12.07. **Governing Law; Submission to Jurisdiction; Waiver of Immunity.** THIS INDENTURE, THE SECURITIES AND THE SECURITY DOCUMENTS SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW AND ANY SUCCESSOR TO SUCH STATUTE), WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW, EXCEPT TO THE EXTENT THAT LOCAL LAW GOVERNS THE CREATION, PERFECTION, PRIORITY OR ENFORCEMENT OF SECURITY INTERESTS. The Issuer, the Guarantors, the Trustee and, by its acceptance of a Security, each Holder (and holder of beneficial interests in a Security) hereby submit to the non-exclusive jurisdiction of the federal and state courts of competent jurisdiction in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Indenture or the transactions contemplated hereby. To the extent that the Issuer or any Guarantor may in any jurisdiction claim for itself or its assets immunity (to the extent such immunity may now or hereafter exist, whether on the grounds of sovereign immunity or otherwise) from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process (whether through service of notice or otherwise), and to the extent that in any such jurisdiction there may be attributed to itself or its assets such immunity (whether or not claimed), such Issuer or Guarantor, as applicable, irrevocably agrees with respect to any matter arising under this Indenture for the benefit of the Holders not to claim, and irrevocably waives, such immunity to the full extent permitted by the laws of such jurisdiction.

SECTION 12.08. No Recourse Against Others. No director, officer, employee, manager, incorporator or holder of any Equity Interests in the Issuer or in any Guarantor, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Securities, this Indenture or the Guarantees or for any claim based on, in respect of, or by reason

of, such obligations or their creation. Each Holder of Securities by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Securities. Such waiver may not be effective to waive liabilities under the U.S. federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

SECTION 12.09. Successors. All agreements of the Issuer and each Guarantor in this Indenture and the Securities shall bind its successors. All agreements of the Trustee in this Indenture shall bind its successors.

SECTION 12.10. Multiple Originals. The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. One signed copy is enough to prove this Indenture. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

SECTION 12.11. Table of Contents; Headings. The table of contents and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not intended to be considered a part hereof and shall not modify or restrict any of the terms or provisions hereof.

SECTION 12.12. Indenture Controls. If and to the extent that any provision of the Securities limits, qualifies or conflicts with a provision of this Indenture, such provision of this Indenture shall control.

SECTION 12.13. Severability. In case any provision in this Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

SECTION 12.14. Currency of Account; Conversion of Currency; Currency Exchange Restrictions.

(a) U.S. Dollars are the sole currency of account and payment for all sums payable by the Issuer and the Guarantors under or in connection with the Securities, the Guarantees and this Indenture, including damages related thereto. Any amount received or recovered in a currency other than U.S. Dollars by a Holder (whether as a result of, or as a result of the enforcement of, a judgment or order of a court of any jurisdiction, in the winding-up or dissolution of the Issuer or otherwise) in respect of any sum expressed to be due to it from the Issuer or a Guarantor shall only constitute a discharge to the Issuer or any such Guarantor to the extent of the U.S. Dollar amount, which the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If that U.S. Dollar amount is less than the U.S. Dollar amount expressed to be due to the recipient under the applicable Securities, the Issuer and the Guarantors shall indemnify it against any loss sustained by it as a result as set forth in Section 12.14(b). In any event, the Issuer and

the Guarantors shall indemnify the recipient against the cost of making any such purchase. For the purposes of this Section 12.14, it will be sufficient for the Holder of a Security to certify in a satisfactory manner (indicating sources of information used) that it would have suffered a loss had an actual purchase of U.S. Dollars been made with the amount so received in that other currency on the date of receipt or recovery (or, if a purchase of U.S. Dollars on such date had not been practicable, on the first date on which it would have been practicable, it being required that the need for a change of date be certified in the manner mentioned above).

(b) The Issuer and the Guarantors, jointly and severally, covenant and agree that the following provisions shall apply to conversion of currency in the case of the Securities, the Guarantees and this Indenture:

(i) if for the purpose of obtaining judgment in, or enforcing the judgment of, any court in any country, it becomes necessary to convert into a currency (the "Judgment Currency") an amount due in any other currency (the "Base Currency"), then the conversion shall be made at the rate of exchange prevailing on the Business Day before the day on which the judgment is given or the order of enforcement is made, as the case may be (unless a court shall otherwise determine);

(ii) if there is a change in the rate of exchange prevailing between the Business Day before the day on which the judgment is given or an order of enforcement is made, as the case may be (or such other date as a court shall determine), and the date of receipt of the amount due, the Issuer and the Guarantors will pay such additional (or, as the case may be, such lesser) amount, if any, as may be necessary so that the amount paid in the Judgment Currency when converted at the rate of exchange prevailing on the date of receipt will produce the amount in the Base Currency originally due; and

(iii) in the event of the winding-up of the Issuer or any Guarantor at any time while any amount or damages owing under the Securities, the Guarantees and this Indenture, or any judgment or order rendered in respect thereof, shall remain outstanding, the Issuer and the Guarantors shall indemnify and hold the Holders and the Trustee harmless against any deficiency arising or resulting from any variation in rates of exchange between (A) the date as of which the non-U.S. currency equivalent of the amount due or contingently due under the Securities, the Guarantees and this Indenture (other than under this subsection (b)(iii)) is calculated for the purposes of such winding-up and (B) the final date for the filing of proofs of claim in such winding-up (which shall be the date fixed by the liquidator or otherwise in accordance with the relevant provisions of applicable law as being the latest practicable date as at which liabilities of the Issuer or such Guarantor may be ascertained for such winding-up prior to payment by the liquidator or otherwise in respect thereof).

(c) The obligations contained in this Section 12.14 shall constitute separate and independent obligations from the other obligations of the Issuer and the Guarantors under this Indenture, shall give rise to separate and independent causes of action against the Issuer and

the Guarantors, shall apply irrespective of any waiver or extension granted by any Holder or the Trustee or either of them from time to time and shall continue in full force and effect notwithstanding any judgment or order or the filing of any proof of claim in the winding-up of the Issuer or any Guarantor for a liquidated sum in respect of amounts due hereunder (other than under subsection (b)(iii) above) or under any such judgment or order. Any such deficiency as aforesaid shall be deemed to constitute a loss suffered by the Holders or the Trustee, as the case may be, and no proof or evidence of any actual loss shall be required by the Issuer or any Guarantor or the liquidator or otherwise or any of them. In the case of subsection (b)(iii) above, the amount of such deficiency shall not be deemed to be reduced by any variation in rates of exchange occurring between the said final date and the date of any liquidating distribution.

(d) For purposes of this Section 12.14, the term "rate(s) of exchange" shall mean the rate of exchange quoted by Reuters at 10:00 a.m. (New York City time) for spot purchases of the Base Currency with the Judgment Currency other than the Base Currency and includes any premiums and costs of exchange payable.

SECTION 12.15. Tax Matters.

(a) The Issuer has entered into this Indenture, and the Securities will be issued, with the intention that, for all tax purposes, the Securities will qualify as indebtedness. The Issuer, by entering into this Indenture, and each Holder and beneficial owner of Securities, agree to treat the Securities as indebtedness for all tax purposes.

(b) The Issuer shall not be obligated to pay any additional amounts to the Holders or beneficial holder of Securities as a result of any withholding or deduction for, or on account of, any present or future taxes imposed on payments in respect of the Securities. If a Global Security is issued, in accordance with the procedures of the Depository, the Issuer shall (or shall direct the Trustee in writing to) request the Securities to be coded as eligible for the "portfolio interest exemption". If Definitive Securities are issued, each Holder shall deliver to the Issuer a properly completed IRS Form W-9, IRS Form W-8BEN, IRS Form W-8BEN-E, IRS Form W-8ECI or other applicable IRS form or, in the case of a Holder or beneficial holder of Securities claiming the exemption from U.S. federal withholding tax under Section 871(h) of the Code or Section 881(c) of the Code with respect to payments of "portfolio interest", the appropriate properly completed IRS form together with a certificate substantially in the form of Exhibit E. Any such IRS Form W-8BEN or IRS Form W-8BEN-E shall specify whether the Holder or beneficial holder of Securities to whom the form relates is entitled to the benefits of any applicable income tax treaty.

(c) If Definitive Securities are issued, (i) if any withholding tax is imposed on the Issuer's payment under the Securities to any Holder or beneficial holder of Securities, such tax shall reduce the amount otherwise distributable to such Holder or beneficial holder, as the case may be, (ii) the Trustee is hereby authorized and directed to retain from amounts otherwise distributable to any Holder or beneficial holder of Securities sufficient funds for the payment of any withholding tax that is legally owed by the Issuer (but such authorization shall not prevent the Trustee from contesting any such withholding tax in appropriate proceedings and withholding payment of such tax, if permitted by applicable law, pending the outcome of such proceedings) and (iii) the amount of any withholding tax imposed with respect to any Holder or

beneficial holder of Securities shall be treated as cash distributed to such Holder or beneficial holder, as the case may be, at the time it is withheld by the Trustee and remitted to the appropriate taxing authority. If there is a possibility that withholding tax is payable with respect to a payment under the Securities, the Trustee may (but shall have no obligation to) withhold such amounts in accordance with this Section 12.15. Nothing herein shall impose an obligation on the part of the Trustee to determine the amount of any tax or withholding obligation on the part of the Issuer or in respect of the Securities.

SECTION 12.16. USA PATRIOT Act. The parties hereto acknowledge that in accordance with Section 326 of the USA PATRIOT Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify and record information that identifies each Person that establishes a relationship or opens an account with the Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the USA PATRIOT Act.

SECTION 12.17. WAIVER OF TRIAL BY JURY. EACH OF THE ISSUER, EACH GUARANTOR, THE TRUSTEE AND THE COLLATERAL AGENT HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTION CONTEMPLATED HEREBY.

SECTION 12.18. Limited Incorporation of the TIA. This Indenture is not subject to the mandatory provisions of the TIA. The provisions of the TIA are not incorporated by reference in or made part of this Indenture unless specifically provided herein.

SECTION 12.19. No Adverse Interpretation of Other Agreements. This Indenture may not be used to interpret any other indenture, loan or debt agreement of the Issuer or its Subsidiaries or of any other Person. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

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IN WITNESS WHEREOF, the parties have caused this Indenture to be duly executed as of the date first written above.

**VIVUS, INC.**

By:
Name:
Title:

*{Signature Page to the Indenture}*

**U.S. BANK NATIONAL ASSOCIATION,**
**as Trustee**

By: _____
Name:
Title:

**U.S. BANK NATIONAL ASSOCIATION,**
**as Collateral Agent**

By _____
Name:
Title:

PROVISIONS RELATING TO SECURITIES

1. Definitions.

1.1 Definitions.

For the purposes of this Appendix A, the following terms shall have the meanings indicated below (and if not defined in this Appendix A, capitalized terms used herein shall have the meaning set forth in this Indenture):

"Accredited Investor" means an "accredited investor" as defined in subclause (1), (2), (3) or (7) of Rule 501 that is not (i) a QIB or (ii) a Person other than a U.S. Person that acquires Securities in reliance on Regulation S.

"Clearstream" means Clearstream Banking, S.A.

"Definitive Security" means a certificated Security (bearing the Restricted Securities Legend if the transfer of such Security is restricted by applicable law) that does not include the Global Securities Legend.

"Depository" means The Depository Trust Company, its nominees and their respective successors.

"Euroclear" means Euroclear Bank S.A./N.V., as operator of the Euroclear System.

"Global Securities Legend" means the legend set forth in Section 2.2(f)(ii) herein.

"Global Security" means a certificated Security (bearing the Restricted Securities Legend if the transfer of such Security is restricted by applicable law) that includes the Global Securities Legend. The term "Global Securities" includes Rule 144A Global Securities and Regulation S Global Securities.

"Purchase Agreement" means the Purchase Agreement dated April 30, 2018, among the Issuer and the purchaser(s) party thereto.

"QIB" means a "qualified institutional buyer" as defined in Rule 144A.

"Regulation S" means Regulation S under the Securities Act.

"Regulation S Securities" means all Securities offered and sold outside the United States in reliance on Regulation S.

"Restricted Period", with respect to any Regulation S Securities, means the period of 40 consecutive days beginning on and including the later of (a) the day on which such Securities are first offered to persons other than distributors (as defined in Regulation S) in

reliance on Regulation S, notice of which day shall be promptly given by the Issuer to the Trustee, and (b) the date of issuance of such Securities.

"Restricted Securities Legend" means the legend set forth in Section 2.2(f)(i) herein.

"Rule 144A" means Rule 144A under the Securities Act.

"Rule 144A Securities" means all Securities privately placed with QIBs.

"Rule 501" means Rule 501(a) under the Securities Act.

"Rule 506" means Rule 506 under the Securities Act.

"Securities Custodian" means the custodian with respect to a Global Security (as appointed by the Depository) or any successor person thereto, who shall initially be the Trustee.

"Transfer Restricted Definitive Securities" means Definitive Securities that bear or are required to bear or are subject to the Restricted Securities Legend.

"Transfer Restricted Global Securities" means Global Securities that bear or are required to bear or are subject to the Restricted Securities Legend.

"Unrestricted Definitive Securities" means Definitive Securities that are not required to bear, and are not subject to, the Restricted Securities Legend.

"Unrestricted Global Securities" means Global Securities that are not required to bear, and are not subject to, the Restricted Securities Legend.

"U.S. Person" means a "U.S. person" as defined in Regulation S.

1.2 Other Definitions.

| Term: | Defined in Section: |
|---|---|
| Agent Members | 2.1(b) |
| Regulation S Global Securities | 2.1(b) |
| Rule 144A Global Securities | 2.1(b) |

2. The Securities.

2.1 Form and Dating; Global Securities.

(a) Issuance and Transfers. The Securities issued by the Issuer will be (i) privately placed by the Issuer pursuant to the Purchase Agreement and (ii) sold initially only to (1) QIBs, (2) Persons other than U.S. Persons in reliance on Regulation S and (3) Accredited Investors. Such Securities may thereafter be transferred to, among others, QIBs, purchasers in reliance on Regulation S and Accredited Investors.

(b) Global Securities. (i) Except as provided in clause (c) below, Rule 144A Securities initially shall be represented by one or more Securities in definitive, fully registered, global form without interest coupons (collectively, the "Rule 144A Global Securities").

Regulation S Securities initially shall be represented by one or more Securities in fully registered, global form without interest coupons (collectively, the "Regulation S Global Securities"), which shall be registered in the name of the Depository for the accounts of designated agents holding on behalf of Euroclear or Clearstream.

The provisions of the "Operating Procedures of the Euroclear System" and "Terms and Conditions Governing Use of Euroclear" and the "General Terms and Conditions of Clearstream Banking" and "Customer Handbook" of Clearstream shall be applicable to transfers of beneficial interests in the Regulation S Global Securities that are held through Euroclear or Clearstream.

The Global Securities shall bear the Global Securities Legend. The Global Securities initially shall (i) be registered in the name of the Depository, in each case for credit to an account of an Agent Member, (ii) be delivered to the Securities Custodian and (iii) bear the Restricted Securities Legend.

Members of, or direct or indirect participants in, the Depository (collectively, the "Agent Members") shall have no rights under this Indenture with respect to any Global Security held on their behalf by the Depository, or the Trustee as its custodian, or under the Global Securities. The Depository may be treated by the Issuer, the Trustee and any agent of the Issuer or the Trustee as the absolute owner of the Global Securities for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, the Trustee or any agent of the Issuer or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depository, or impair, as between the Depository and its Agent

Members, the operation of customary practices governing the exercise of the rights of a Holder of any Security.

The Registrar shall retain copies of all letters, notices and other written communications received pursuant to this Section 2.1 or Section 2.2 herein. The Issuer, at its sole cost and expense, shall have the right to inspect and make copies of all such letters, notices or other written communications at any reasonable time upon the giving of reasonable written notice to the Registrar.

(ii) Transfers of Global Securities shall be limited to transfer in whole, but not in part, to the Depository. Interests of beneficial owners in the Global Securities may be transferred or exchanged for Definitive Securities only in accordance with the applicable rules and procedures of the Depository and the provisions of Section 2.2 herein. In addition, a Global Security shall be exchangeable for Definitive Securities if (x) the Depository (1) notifies the Issuer that it is unwilling or unable to continue as depository for such Global Security and the Issuer thereupon fails to appoint a successor depository or (2) has ceased to be a clearing agency registered under the Exchange Act or (y) there shall have occurred and be continuing an Event of Default with respect to such Global Security. In all cases, Definitive Securities delivered in exchange for any Global Security or beneficial interests therein shall be registered in the names, and issued in any approved denominations, requested by or on behalf of the Depository in accordance with its customary procedures.

(iii) In connection with the transfer of a Global Security as an entirety to beneficial owners pursuant to Section 2.1(b)(ii) herein, such Global Security shall be deemed to be surrendered to the Trustee for cancellation, and the Issuer shall execute, and the Trustee shall authenticate and make available for delivery, to each beneficial owner identified by the Depository in writing in exchange for its beneficial interest in such Global Security, an equal aggregate principal amount of Definitive Securities of authorized denominations.

(iv) Any Transfer Restricted Definitive Security delivered in exchange for an interest in a Global Security pursuant to Section 2.2 herein shall, except as otherwise provided in Section 2.2 herein, bear the Restricted Securities Legend.

(v) Notwithstanding the foregoing, through the Restricted Period, a beneficial interest in a Regulation S Global Security may be held only through Euroclear or Clearstream unless delivery is made in accordance with the applicable provisions of Section 2.2 herein.

(vi) The Holder of any Global Security may grant proxies and otherwise authorize any Person, including Agent Members and Persons that may hold interests through Agent Members, to take any action that a Holder is entitled to take under this Indenture or the Securities.

(c) Definitive Securities. To the extent that the purchaser of a Security is an Accredited Investor or otherwise cannot or opts not to hold a beneficial interest in a Global Security, then such Security shall be represented by one or more Definitive Securities.

2.2 Transfer and Exchange.

(a) Transfer and Exchange of Global Securities. A Global Security may not be transferred as a whole except as set forth in Section 2.1(b) herein. Global Securities will not be exchanged by the Issuer for Definitive Securities except under the circumstances described in Section 2.1(b)(ii) herein. Global Securities also may be exchanged or replaced, in whole or in part, as provided in Sections 2.08 and 2.10 of this Indenture. Beneficial interests in a Global Security may be transferred and exchanged as provided in Section 2.2(b) herein or Section 2.2(g) herein.

(b) Transfer and Exchange of Beneficial Interests in Global Securities. The transfer and exchange of beneficial interests in the Global Securities shall be effected through the Depository, in accordance with the provisions of this Indenture and the applicable rules and procedures of the Depository. Beneficial interests in Transfer Restricted Global Securities shall be subject to restrictions on transfer comparable to those set forth herein to the extent required by the Securities Act. Transfers and exchanges of beneficial interests in the Global Securities also shall require compliance with either subparagraph (i) or (ii) below, as applicable, as well as one or more of the other following subparagraphs, as applicable:

(i) Transfer of Beneficial Interests in the Same Global Security. Beneficial interests in any Transfer Restricted Global Security may be transferred to Persons who take delivery thereof in the form of a beneficial interest in the same Transfer Restricted Global Security in accordance with the transfer restrictions set forth in the Restricted Securities Legend; *provided*, *however*, that prior to the expiration of the Restricted Period, transfers of beneficial interests in a Regulation S Global Security may not be made to a U.S. Person or for the account or benefit of a U.S. Person (other than to a QIB in reliance on Rule 144A). A beneficial interest in an Unrestricted Global Security may be transferred to Persons who take delivery thereof in the form of a beneficial interest in an Unrestricted Global Security. No written orders or instructions shall be required to be delivered to the Registrar to effect the transfers described in this Section 2.2(b)(i).

(ii) All Other Transfers and Exchanges of Beneficial Interests in Global Securities. In connection with all transfers and exchanges of beneficial interests in any Global Security that is not subject to Section 2.2(b)(i) herein, the transferor of such beneficial interest must deliver to the Registrar (1) a written order from an Agent Member given to the Depository in accordance with the applicable rules and procedures of the Depository directing the Depository to credit or cause to be credited a beneficial interest in another Global Security in an amount equal to the beneficial interest to be transferred or exchanged and (2) instructions given in accordance with the applicable rules and procedures of the Depository containing information regarding the Agent Member account to be credited with such increase. Upon satisfaction of all of the requirements for transfer or exchange of beneficial interests in Global Securities contained in this Indenture and the Securities or otherwise applicable under the Securities Act, the Trustee shall adjust the principal amount of the relevant Global Security pursuant to Section 2.2(g) herein.

(iii) Transfer of Beneficial Interests to Another Transfer Restricted Global Security. A beneficial interest in a Transfer Restricted Global Security may be transferred to a Person who takes delivery thereof in the form of a beneficial interest in another Transfer Restricted Global Security if the transfer complies with the requirements of Section 2.2(b)(ii) herein and the Registrar receives the following:

(A) if the transferee will take delivery in the form of a beneficial interest in a Rule 144A Global Security, then the transferor must deliver a certificate in the form attached to the applicable Security; and

(B) if the transferee will take delivery in the form of a beneficial interest in a Regulation S Global Security, then the transferor must deliver a certificate in the form attached to the applicable Security.

(iv) Transfer and Exchange of Beneficial Interests in a Transfer Restricted Global Security for Beneficial Interests in an Unrestricted Global Security. A beneficial interest in a Transfer Restricted Global Security may be exchanged by any holder thereof for a beneficial interest in an Unrestricted Global Security or transferred to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Security if the exchange or transfer complies with the requirements of Section 2.2(b)(ii) herein and the Registrar receives the following:

(A) if the holder of such beneficial interest in a Transfer Restricted Global Security proposes to exchange such beneficial interest for a beneficial interest in an Unrestricted Global Security, a certificate from such holder in the form attached to the applicable Security; or

(B) if the holder of such beneficial interest in a Transfer Restricted Global Security proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of a beneficial interest in an Unrestricted Global Security, a certificate from such holder in the form attached to the applicable Security,

and, in each such case, if the Issuer or the Registrar so requests or if the applicable rules and procedures of the Depository so require, an Opinion of Counsel in form reasonably acceptable to the Issuer and the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Restricted Securities Legend are no longer required in order to maintain compliance with the Securities Act. If any such transfer or exchange is effected pursuant to this subparagraph (iv) at a time when an Unrestricted Global Security has not yet been issued, the Issuer shall issue and, upon receipt of a written order of the Issuer in the form of an Officers' Certificate, the Trustee shall authenticate one or more Unrestricted Global Securities in an aggregate principal amount equal to the aggregate principal amount of beneficial interests transferred or exchanged pursuant to this subparagraph (iv).

(v) Transfer and Exchange of Beneficial Interests in an Unrestricted Global Security for Beneficial Interests in a Transfer Restricted Global Security. Beneficial

interests in an Unrestricted Global Security cannot be exchanged for, or transferred to Persons who take delivery thereof in the form of, a beneficial interest in a Transfer Restricted Global Security.

(c) Transfer and Exchange of Beneficial Interests in Global Securities for Definitive Securities. A beneficial interest in a Global Security may not be exchanged for a Definitive Security except under the circumstances described in Section 2.1(b)(ii) herein. A beneficial interest in a Global Security may not be transferred to a Person who takes delivery thereof in the form of a Definitive Security except under the circumstances described in Section 2.1(b)(ii) herein or Section 2.1(c) herein.

(d) Transfer and Exchange of Definitive Securities for Beneficial Interests in Global Securities. Transfers and exchanges of Definitive Securities for beneficial interests in Global Securities also shall require compliance with either subparagraph (i), (ii), (iii) or (iv) below, as applicable:

(i) Transfer Restricted Definitive Securities to Beneficial Interests in Transfer Restricted Global Securities. If any Holder of a Transfer Restricted Definitive Security proposes to exchange such Transfer Restricted Definitive Security for a beneficial interest in a Transfer Restricted Global Security or to transfer such Transfer Restricted Definitive Security to a Person who takes delivery thereof in the form of a beneficial interest in a Transfer Restricted Global Security, then, upon receipt by the Registrar of the following documentation:

(A) if the Holder of such Transfer Restricted Definitive Security proposes to exchange such Transfer Restricted Definitive Security for a beneficial interest in a Transfer Restricted Global Security, a certificate from such Holder in the form attached to the applicable Security;

(B) if such Transfer Restricted Definitive Security is being transferred to a QIB in accordance with Rule 144A, a certificate from such Holder in the form attached to the applicable Security;

(C) if such Transfer Restricted Definitive Security is being transferred to a Person that is not a U.S. Person in an offshore transaction in accordance with Rule 903 or Rule 904 under the Securities Act, a certificate from such Holder in the form attached to the applicable Security;

(D) if such Transfer Restricted Definitive Security is being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate from such Holder in the form attached to the applicable Security; and

(E) if such Transfer Restricted Definitive Security is being transferred to the Issuer or a Subsidiary thereof, a certificate from such Holder in the form attached to the applicable Security;

the Trustee shall cancel the Transfer Restricted Definitive Security, and increase or cause to be increased the aggregate principal amount of the appropriate Transfer Restricted Global Security.

(ii) Transfer Restricted Definitive Securities to Beneficial Interests in Unrestricted Global Securities. A Holder of a Transfer Restricted Definitive Security may exchange such Transfer Restricted Definitive Security for a beneficial interest in an Unrestricted Global Security or transfer such Transfer Restricted Definitive Security to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Security only if the Registrar receives the following:

(A) if the Holder of such Transfer Restricted Definitive Security proposes to exchange such Transfer Restricted Definitive Security for a beneficial interest in an Unrestricted Global Security, a certificate from such Holder in the form attached to the applicable Security; or

(B) if the Holder of such Transfer Restricted Definitive Security proposes to transfer such Transfer Restricted Definitive Security to a Person who shall take delivery thereof in the form of a beneficial interest in an Unrestricted Global Security, a certificate from such Holder in the form attached to the applicable Security,

and, in each such case, if the Issuer or the Registrar so requests or if the applicable rules and procedures of the Depository so require, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Restricted Securities Legend are no longer required in order to maintain compliance with the Securities Act. Upon satisfaction of the conditions of this subparagraph (ii), the Trustee shall cancel the Transfer Restricted Definitive Securities and increase or cause to be increased the aggregate principal amount of the Unrestricted Global Security. If any such transfer or exchange is effected pursuant to this subparagraph (ii) at a time when an Unrestricted Global Security has not yet been issued, the Issuer shall issue and, upon receipt of an written order of the Issuer in the form of an Officers' Certificate, the Trustee shall authenticate one or more Unrestricted Global Securities in an aggregate principal amount equal to the aggregate principal amount of Transfer Restricted Definitive Securities transferred or exchanged pursuant to this subparagraph (ii).

(iii) Unrestricted Definitive Securities to Beneficial Interests in Unrestricted Global Securities. A Holder of an Unrestricted Definitive Security may exchange such Unrestricted Definitive Security for a beneficial interest in an Unrestricted Global Security or transfer such Unrestricted Definitive Security to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Security at any time. Upon receipt of a request for such an exchange or transfer, the Trustee shall cancel the applicable Unrestricted Definitive Security and increase or cause to be increased the aggregate principal amount of one of the Unrestricted Global Securities. If any such transfer or exchange is effected pursuant to this subparagraph (iii) at a time when an Unrestricted Global Security has not yet been issued, the Issuer shall issue and, upon

receipt of a written order of the Issuer in the form of an Officers' Certificate, the Trustee shall authenticate one or more Unrestricted Global Securities in an aggregate principal amount equal to the aggregate principal amount of Unrestricted Definitive Securities transferred or exchanged pursuant to this subparagraph (iii).

(iv) Unrestricted Definitive Securities to Beneficial Interests in Transfer Restricted Global Securities. An Unrestricted Definitive Security cannot be exchanged for, or transferred to a Person who takes delivery thereof in the form of, a beneficial interest in a Transfer Restricted Global Security.

(e) Transfer and Exchange of Definitive Securities for Definitive Securities. Upon request by a Holder of Definitive Securities and such Holder's compliance with the provisions of this Section 2.2(e), the Registrar shall register the transfer or exchange of Definitive Securities. Prior to such registration of transfer or exchange, the requesting Holder shall present or surrender to the Registrar the Definitive Securities duly endorsed or accompanied by a written instruction of transfer in form satisfactory to the Registrar duly executed by such Holder or by its attorney, duly authorized in writing. In addition, the requesting Holder shall provide any additional certifications, documents and information, as applicable, required pursuant to the following provisions of this Section 2.2(e):

(i) Transfer Restricted Definitive Securities to Transfer Restricted Definitive Securities. A Transfer Restricted Definitive Security may be transferred to and registered in the name of a Person who takes delivery thereof in the form of a Transfer Restricted Definitive Security if the Registrar receives the following:

(A) if the transfer will be made pursuant to Rule 144A, a certificate in the form attached to the applicable Security;

(B) if the transfer will be made pursuant to Rule 903 or Rule 904 under the Securities Act, a certificate in the form attached to the applicable Security;

(C) if the transfer will be made pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate in the form attached to the applicable Security;

(D) if the transfer will be made to an Accredited Investor in reliance on an exemption from the registration requirements of the Securities Act other than those listed in subparagraphs (A) through (C) above, a certificate in the form attached to the applicable Security and a Transferee Letter of Representation in the form of Exhibit B to this Indenture; and

(E) if such transfer will be made to the Issuer or a Subsidiary thereof, a certificate in the form attached to the applicable Security.

(ii) Transfer Restricted Definitive Securities to Unrestricted Definitive Securities. Any Transfer Restricted Definitive Security may be exchanged by the Holder thereof for an Unrestricted Definitive Security or transferred to a Person who takes

delivery thereof in the form of an Unrestricted Definitive Security if the Registrar receives the following:

(1) if the Holder of such Transfer Restricted Definitive Security proposes to exchange such Transfer Restricted Definitive Security for an Unrestricted Definitive Security, a certificate from such Holder in the form attached to the applicable Security; or

(2) if the Holder of such Transfer Restricted Definitive Security proposes to transfer such Transfer Restricted Definitive Security to a Person who shall take delivery thereof in the form of an Unrestricted Definitive Security, a certificate from such Holder in the form attached to the applicable Security,

and, in each such case, if the Registrar so requests, an Opinion of Counsel in form reasonably acceptable to the Issuer to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Restricted Securities Legend are no longer required in order to maintain compliance with the Securities Act.

(iii) Unrestricted Definitive Securities to Unrestricted Definitive Securities. A Holder of an Unrestricted Definitive Security may transfer such Unrestricted Definitive Security to a Person who takes delivery thereof in the form of an Unrestricted Definitive Security at any time. Upon receipt of a request to register such a transfer, the Registrar shall register the Unrestricted Definitive Securities pursuant to the instructions from the Holder thereof.

(iv) Unrestricted Definitive Securities to Transfer Restricted Definitive Securities. An Unrestricted Definitive Security cannot be exchanged for, or transferred to a Person who takes delivery thereof in the form of, a Transfer Restricted Definitive Security.

At such time as all beneficial interests in a particular Global Security have been exchanged for Definitive Securities or a particular Global Security has been redeemed, repurchased or canceled in whole and not in part, each such Global Security shall be retained and canceled by the Trustee in accordance with Section 2.11 of this Indenture. At any time prior to such cancellation, if any beneficial interest in a Global Security is exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Security or for Definitive Securities, the principal amount of Securities represented by such Global Security shall be reduced accordingly and an endorsement shall be made on such Global Security by the Trustee or by the Depository at the direction of the Trustee to reflect such reduction; and if the beneficial interest is being exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Security, such other Global Security shall be increased accordingly and an endorsement shall be made on such Global Security by the Trustee or by the Depository at the direction of the Trustee to reflect such increase.

(f) Legends.

(i) Each Security certificate evidencing the Global Securities and the Definitive Securities (and all Securities issued in exchange therefor or in substitution thereof) shall bear a legend in substantially the following form (each defined term in the legend being defined as such for purposes of the legend only):

NEITHER THIS NOTE NOR ANY INTEREST HEREIN HAS BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), THE SECURITIES LAWS OF ANY STATE OR THE SECURITIES LAWS OF ANY OTHER JURISDICTION, NOR IS SUCH REGISTRATION CONTEMPLATED. NEITHER THIS NOTE NOR ANY INTEREST HEREIN MAY BE ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED, SOLD OR OFFERED FOR SALE OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EXEMPTION FROM SUCH REGISTRATION THEREUNDER AND ANY OTHER APPLICABLE SECURITIES LAW REGISTRATION REQUIREMENTS. EACH PERSON OR ENTITY THAT ACQUIRES OR ACCEPTS THIS NOTE OR AN INTEREST HEREIN BY SUCH ACQUISITION OR ACCEPTANCE (1) REPRESENTS THAT (A) IT IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) AND, IF SUBSEQUENT TO THE INITIAL ACQUISITION HEREOF, IS PURCHASING THIS NOTE IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A UNDER THE SECURITIES ACT, (B) IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS NOTE IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT OR (C) IT IS AN ACCREDITED INVESTOR AS DEFINED IN SUBPARAGRAPH (a)(1), (a)(2), (a)(3) or (a)(7) OF RULE 501 UNDER THE SECURITIES ACT (AN "ACCREDITED INVESTOR"), HAS SUFFICIENT KNOWLEDGE AND EXPERIENCE IN FINANCIAL AND BUSINESS MATTERS TO BE CAPABLE OF EVALUATING THE MERITS AND RISKS OF THE PURCHASE OF THIS NOTE AND IS ABLE AND PREPARED TO BEAR THE ECONOMIC RISK OF INVESTING IN AND HOLDING THIS NOTE, (2) AGREES THAT IT WILL NOT OFFER, SELL OR OTHERWISE TRANSFER THIS NOTE OR AN INTEREST HEREIN, EXCEPT (A) TO THE ISSUER OR A SUBSIDIARY THEREOF, (B) FOR SO LONG AS THIS NOTE IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT, TO AN ENTITY IT REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER, TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT, (C) TO PERSONS OR ENTITIES OTHER THAN U.S. PERSONS, INCLUDING DEALERS OR OTHER PROFESSIONAL FIDUCIARIES IN THE UNITED STATES ACTING ON A DISCRETIONARY BASIS FOR NON-U.S. BENEFICIAL OWNERS (OTHER THAN AN ESTATE OR TRUST), IN OFFSHORE TRANSACTIONS IN RELIANCE UPON, AND IN ACCORDANCE WITH, REGULATION S UNDER THE SECURITIES ACT OR (D) TO AN ACCREDITED INVESTOR THAT IS PURCHASING THIS NOTE OR AN INTEREST HEREIN, AS THE CASE MAY BE, FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF SUCH AN ACCREDITED INVESTOR FOR INVESTMENT PURPOSES AND NOT WITH A VIEW TO, OR FOR OFFER OR SALE IN CONNECTION WITH, ANY DISTRIBUTION IN VIOLATION OF THE SECURITIES ACT AND (3) AGREES THAT IT

WILL GIVE TO EACH PERSON OR ENTITY TO WHOM THIS NOTE OR AN INTEREST HEREIN IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND; PROVIDED, THAT THE ISSUER AND THE TRUSTEE SHALL HAVE THE RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (2)(D) OF THIS PARAGRAPH TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM. THE TERMS "OFFSHORE TRANSACTION", "UNITED STATES" AND "U.S. PERSON" HAVE THE RESPECTIVE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT. THE INDENTURE REFERRED TO HEREINAFTER CONTAINS A PROVISION REQUIRING THE REGISTRAR APPOINTED THEREUNDER TO REFUSE TO REGISTER ANY TRANSFER OF THIS NOTE IN VIOLATION OF THE FOREGOING RESTRICTIONS.

THIS NOTE IS ISSUED WITH ORIGINAL ISSUE DISCOUNT FOR U.S. FEDERAL INCOME TAX PURPOSES. THE ISSUE PRICE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT, THE ISSUE DATE AND THE YIELD TO MATURITY OF THIS NOTE MAY BE OBTAINED BY SUBMITTING A WRITTEN REQUEST TO VIVUS, INC., 900 EAST HAMILTON AVENUE, SUITE 550, CAMPBELL, CALIFORNIA 95008, ATTENTION: CHIEF FINANCIAL OFFICER AND GENERAL COUNSEL.

THIS NOTE MAY NOT BE RESOLD OR TRANSFERRED EXCEPT AS SET FORTH IN THE INDENTURE REFERRED TO HEREINAFTER, AND, IN ADDITION, EACH PERSON OR ENTITY THAT ACQUIRES OR ACCEPTS THIS NOTE OR AN INTEREST HEREIN BY SUCH ACQUISITION OR ACCEPTANCE AGREES TO COMPLY WITH THE TRANSFER RESTRICTIONS SET FORTH IN SUCH INDENTURE, AND FURTHER ACKNOWLEDGES AND AGREES TO THE PROVISIONS SET FORTH IN SUCH INDENTURE.

(ii) Each Global Security shall bear the following legend:

UNLESS THIS NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION, TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY NOTE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY (AND ANY PAYMENT HEREON IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON OR ENTITY IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS NOTE SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF CEDE & CO. OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE AND TRANSFERS OF PORTIONS OF THIS NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO HEREINAFTER.

(g) Cancellation or Adjustment of Global Security. At such time as all beneficial interests in a particular Global Security have been exchanged for Definitive Securities or a particular Global Security has been redeemed, repurchased or canceled in whole and not in part, each such Global Security shall be returned to or retained and canceled by the Trustee in accordance with Section 2.11 of this Indenture. At any time prior to such cancellation, if any beneficial interest in a Global Security is exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Security or for Definitive Securities, the principal amount of Securities represented by such Global Security shall be reduced accordingly and an endorsement shall be made on such Global Security by the Trustee or by the Depository at the direction of the Trustee to reflect such reduction; and if the beneficial interest is being exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Security, such other Global Security shall be increased accordingly and an endorsement shall be made on such Global Security by the Trustee or by the Depository at the direction of the Trustee to reflect such increase.

(h) Obligations with Respect to Transfers and Exchanges of Securities.

(i) To permit registrations of transfers and exchanges, the Issuer shall execute, and the Trustee shall authenticate, Definitive Securities and Global Securities at the Registrar's request.

(ii) No service charge shall be made for any registration of transfer or exchange, but the Issuer may require payment of a sum sufficient to cover any transfer tax, assessments, or similar governmental charge payable in connection therewith (other than any such transfer taxes, assessments or similar governmental charge payable upon exchanges pursuant to Sections 3.06, 4.08, 4.22 and 9.04 of this Indenture).

(iii) Prior to the due presentation for registration of transfer of any Security, the Issuer, the Trustee, a Paying Agent or the Registrar may deem and treat the Person in whose name a Security is registered as the absolute owner of such Security for the purpose of receiving payment of principal of and interest on such Security and for all other purposes whatsoever, whether or not such Security is overdue, and none of the Issuer, the Trustee, the Paying Agent or the Registrar shall be affected by notice to the contrary.

(iv) All Securities issued upon any transfer or exchange pursuant to the terms of this Indenture shall evidence the same debt and shall be entitled to the same benefits under this Indenture as the Securities surrendered upon such transfer or exchange.

(i) No Obligation of the Trustee.

(i) The Trustee shall have no responsibility or obligation to any beneficial owner of a Global Security, a member of, or a participant in, the Depository or any other Person with respect to the accuracy of the records of the Depository or of any participant or member thereof, with respect to any ownership interest in the Securities or with respect to the delivery to any participant, member, beneficial owner or other Person (other than the Depository) of any notice (including any notice of redemption or repurchase) or the payment of any amount, under

or with respect to such Securities. All notices and communications to be given to the Holders and all payments to be made to the Holders under the Securities shall be given or made to the registered Holders (which shall be the Depository in the case of a Global Security). Except as may be otherwise permitted pursuant to Section 2.14 of the Indenture, the rights of beneficial owners in any Global Security shall be exercised only through the Depository subject to the applicable rules and procedures of the Depository. The Trustee may rely and shall be fully protected in relying upon information furnished by the Depository with respect to its members, its participants and any beneficial owners.

(ii) The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security (including any transfers between or among Depository participants, members or beneficial owners in any Global Security) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by, the terms of this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

{FORM OF SECURITY}

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RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (2)(D) OF THIS PARAGRAPH TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM. THE TERMS “OFFSHORE TRANSACTION”, “UNITED STATES” AND “U.S. PERSON” HAVE THE RESPECTIVE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT. THE INDENTURE REFERRED TO HEREINAFTER CONTAINS A PROVISION REQUIRING THE REGISTRAR APPOINTED THEREUNDER TO REFUSE TO REGISTER ANY TRANSFER OF THIS NOTE IN VIOLATION OF THE FOREGOING RESTRICTIONS.

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{Global Securities Legend}

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TRANSFERS OF THIS NOTE SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF CEDE & CO. OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR’S NOMINEE AND TRANSFERS OF PORTIONS OF THIS NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO HEREINAFTER.

{FORM OF SECURITY}

No.____ $_____

10.375% Senior Secured Note due 2024

CUSIP No._____
ISIN No._____

VIVUS, Inc., a Delaware corporation (the "Issuer"), promises to pay to {Cede & Co.} {_____}, or its registered assigns, the principal sum {of $_____ Dollars}{listed on the Schedule of Increases or Decreases in Global Security attached hereto}[1] on or before June 30, 2024 as set forth in this Security.

Payment Dates: March 31, June 30, September 30 and December 31 (each, a "Payment Date")

Record Dates: March 15, June 15, September 15 and December 15 (each, a "Record Date")

Additional provisions of this Security are set forth on the following pages of this Security.

[1] Use the Schedule of Increases or Decreases language if Security is in Global Form.

IN WITNESS WHEREOF, the undersigned has caused this Instrument to be duly executed.

VIVUS, INC.

By: _____
Name:
Title:

TRUSTEE'S CERTIFICATE OF
AUTHENTICATION

U.S. BANK NATIONAL ASSOCIATION,
as Trustee, certifies that this is
one of the Securities
referred to in the within-mentioned Indenture.

By: _____
Authorized Signatory
Date:_____

1. Interest and Payments of Principal

(a) VIVUS, Inc., a Delaware corporation (the "Issuer"), shall pay interest on the outstanding principal amount of this Security at the rate per annum shown above.

(b) The Issuer shall pay interest quarterly in arrears on each Payment Date, commencing on September 30, 2018, or on the succeeding Business Day if any such date is not a Business Day. Interest on this Security shall accrue on the outstanding principal amount thereof from the most recent date to which interest has been paid or duly provided for or, if no interest has been paid or duly provided for, from [ ], 2018 until the principal hereof is paid or duly provided for. Interest shall be computed on the basis of a 360-day year composed of twelve 30-day months and, for partial months, on the basis of the number of days actually elapsed in a 30-day month. The Issuer shall pay interest on the outstanding principal at the rate borne by the Securities plus 2.625% per annum during the continuance of an Event of Default and it shall pay interest on overdue installments of interest at the same rate to the extent lawful.

(c) The Securities will mature on June 30, 2024.

(d) This Security is one of a series of Securities aggregating up to $120,000,000 in original principal amount. On each Payment Date, commencing on June 30, 2021, or on the succeeding Business Day if any such date is not a Business Day, the Issuer shall pay to the Holders (x) an installment of principal of the Securities in accordance with the table below corresponding to the applicable Payment Date, where the applicable percentage is the percentage of (i) the initial aggregate principal amount of Original Securities issued on the Issue Date plus (ii) the initial aggregate principal amount of any Additional Conditional Securities issued on their date of issuance minus (iii) the aggregate principal amount of Securities redeemed or repurchased pursuant to the Indenture prior to such Payment Date, plus (y) a fee equal to 1.00% of the principal paid on such Payment Date:

| **Payment Date** | **Amount** |
|---|---|
| June 30, 2021 | 7.69% |
| September 30, 2021 | 7.69% |
| December 31, 2021 | 7.69% |
| March 31, 2022 | 7.69% |
| June 30, 2022 | 7.69% |
| September 30, 2022 | 7.69% |
| December 31, 2022 | 7.69% |
| March 31, 2023 | 7.69% |
| June 30, 2023 | 7.69% |
| September 30, 2023 | 7.69% |
| December 31, 2023 | 7.69% |
| March 31, 2024 | 7.69% |
| June 30, 2024 | All remaining outstanding principal of the Securities at such date |

All payments calculated from the principal installment percentages set forth above shall be rounded to two decimal places.

2. Method of Payment

The Issuer shall pay interest on the Securities (except defaulted interest) and payments of installments of principal and any related fees contemplated by the Indenture to the Persons who are registered Holders at the close of business on the Record Date immediately preceding the related Payment Date even if Securities are canceled after such Record Date and on or before such Payment Date (whether or not a Business Day). Holders must surrender Securities to the Paying Agent to collect principal payments (other than payments of installments of principal). The Issuer shall pay principal, premium, if any, and interest and any related fees contemplated by the Indenture in money of the United States of America that at the time of payment is legal tender for payment of public and private debts. {Payments in respect of the Securities (including principal, premium, if any, and interest) shall be made by wire transfer of immediately available funds to the accounts specified by The Depository Trust Company or any successor depositary.}[2]{The Issuer shall make all payments in respect of the Securities (including principal, premium, if any, and interest) at the office of the Paying Agent, except that, at the option of the Issuer, payment of interest may be made by mailing a check to the registered address of each Holder thereof; *provided*, *however*, that payments on the Securities may also be made, in the case of a Holder of at least $1,000,000 aggregate principal amount of Securities, by wire transfer to a U.S. dollar account maintained by the payee with a bank in the United States if such Holder elects payment by wire transfer by giving written notice to the Trustee or Paying Agent to such effect designating such account no later than 30 days immediately preceding the relevant due date for payment (or such other date as the Trustee may accept in its discretion).}[3]

3. Paying Agent and Registrar

Initially, U.S. Bank National Association (the "Trustee") will act as Paying Agent and Registrar. The Issuer or any of its domestically organized Wholly Owned Restricted Subsidiaries may act as Paying Agent or Registrar.

4. Indenture

The Issuer issued the Securities under the Indenture dated as of [ ], 2018 (the "Indenture") among the Issuer, the guarantors that may be party thereto from time to time, the Trustee and the Collateral Agent. The terms of the Securities include those stated in the Indenture. Terms defined in the Indenture and not defined herein have the meanings ascribed thereto in the Indenture. The Securities are subject to all terms and provisions of the Indenture, and the Holders are referred to the Indenture and the TIA for a statement of such terms and provisions. If and to the extent that any provision of the Securities limits, qualifies or conflicts with a provision of the Indenture, such provision of the Indenture shall control.

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[2] Include in a Global Security.

[3] Include in a Definitive Security.

The Securities are senior secured obligations of the Issuer. This Security is one of the Securities referred to in the Indenture. The Securities are treated as a single class of securities under the Indenture. The Indenture imposes certain limitations on the ability of the Issuer and its Restricted Subsidiaries to, among other things, make certain Investments and other Restricted Payments, pay dividends and other distributions, incur Indebtedness, enter into consensual restrictions upon the payment of certain dividends and distributions by such Restricted Subsidiaries, issue or sell shares of capital stock of the Issuer and such Restricted Subsidiaries, enter into or permit certain transactions with Affiliates, create or incur Liens and dispose of assets. The Indenture also imposes limitations on the ability of the Issuer and each Guarantor to consolidate, amalgamate or merge with or into any other Person or convey, transfer or lease all or substantially all of their property.

To guarantee the due and punctual payment of the principal of and interest on the Securities and all other amounts payable by the Issuer under the Indenture and the Securities when and as the same shall be due and payable, whether at maturity, by acceleration or otherwise, according to the terms of the Securities and the Indenture, the Guarantors have, jointly and severally, irrevocably and unconditionally guaranteed the Guaranteed Obligations on a senior secured basis pursuant to the terms of the Indenture.

5. Optional Redemption

The Issuer may redeem the Securities at its option, in whole at any time or in part from time to time, on any Business Day specified by the Issuer prior to [ ], 2020 (the "First Call Date"), on not less than 30 days' nor more than 60 days' prior written notice delivered to each Holder, at a redemption price equal to 100% of the principal amount of the Securities being redeemed plus the Applicable Premium, plus accrued and unpaid interest, if any, to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant Payment Date), plus a fee equal to 1.00% of the principal amount paid on such redemption date.

The Issuer may redeem the Securities at its option, in whole at any time or in part from time to time, on any Business Day specified by the Issuer on or after the First Call Date, on not less than 30 days' nor more than 60 days' prior written notice delivered to each Holder, at the following redemption prices (expressed as a percentage of outstanding principal amount of the Securities being redeemed), plus accrued and unpaid interest to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant Payment Date), plus a fee equal to 1.00% of the principal amount paid on such redemption date, for the following periods:

| Period | Redemption Price |
|---|---|
| From and including the First Call Date to and including [ ], 2021 | 104.00% |
| From and including [ ], 2021 to and including [ ], 2022 | 101.00% |
| From and including [ ], 2022 and thereafter | 100.00% |

"Applicable Premium" means, with respect to any Security (or portion thereof) to be redeemed on any redemption date, the amount, if any, by which (a) the sum of (1) 105% of the amount of principal of such Security to be redeemed plus (2) the present value at such

redemption date of all required interest payments due on the amount of principal of such Security to be redeemed through the First Call Date (excluding accrued but unpaid interest, if any, to the redemption date), computed using a discount rate equal to the Treasury Rate in respect of such redemption date plus 50 basis points, exceeds (b) the amount of principal of such Security to be redeemed. The Trustee shall have no duty to calculate or verify the calculation of the Applicable Premium.

"Treasury Rate" means, in respect of any redemption date, the weekly average yield as of such redemption date of actually traded United States Treasury securities adjusted to a constant maturity of three months (as compiled and published in the most recent Federal Reserve Statistical Release H.15 that has become publicly available at least two Business Days prior to such redemption date (or, if such Federal Reserve Statistical Release H.15 is no longer published, any publicly available source of similar market data)).

Notice of any redemption may, at the Issuer's discretion, be revocable and be subject to one or more conditions precedent, including the receipt by the Trustee, on or prior to the redemption date, of money sufficient to pay the principal of, and premium, if any, and interest on, the Securities being redeemed and any related fees contemplated by the Indenture.

6. Notice of Redemption

Written notice of redemption pursuant to paragraph 5 will be provided at least 30 days but not more than 60 days before the redemption date to each Holder of Securities to be redeemed. Securities in denominations larger than $2,000 may be redeemed in part but only in whole multiples of $1,000. If money sufficient to pay the redemption price of and accrued and unpaid interest on all Securities (or portions thereof) to be redeemed on the redemption date is deposited with a Paying Agent on or before the redemption date and certain other conditions are satisfied, on and after such date, interest ceases to accrue on such Securities (or such portions thereof) called for redemption.

7. Sinking Fund

The Securities are not subject to any sinking fund.

8. Repurchase of Securities at the Option of the Holders upon Change of Control and Receipt of Special Proceeds

Upon the occurrence of a Change of Control, each Holder shall have the right, subject to certain conditions specified in the Indenture, to cause the Issuer to repurchase all or any part of such Holder's Securities at a repurchase price in cash equal to the redemption price set forth in paragraph 5 that would be applicable to the Securities at the time of such Change of Control, plus accrued and unpaid interest, if any, to the date of repurchase (subject to the right of the Holders of record on the relevant Record Date to receive interest due on the related Payment Date), plus a fee equal to 1.00% of the principal amount repurchased on such date of repurchase, as provided in, and subject to the terms of, the Indenture.

In accordance with, and subject to the terms of, Section 4.22 of the Indenture, the Issuer will be required to offer to repurchase Securities upon the receipt of Special Proceeds.

9. Security

The Securities will be secured by the Collateral on the terms and subject to the conditions set forth in the Indenture and the Security Documents. The Collateral Agent holds the Collateral in trust for the benefit of the Trustee and the Holders, in each case pursuant to the Security Documents. Each Holder, by accepting this Security, consents and agrees to the terms of the Security Documents (including the provisions providing for the foreclosure and release of Collateral) as the same may be in effect or may be amended from time to time in accordance with their terms and the Indenture and authorizes and directs each of the Trustee and the Collateral Agent to enter into the Security Documents, and to perform its obligations and exercise its rights thereunder in accordance therewith.

10. Denominations; Transfer; Exchange

The Securities are in registered form, without coupons, in denominations of $250,000 and any integral multiple of $1,000 in excess thereof. The registration of transfer of or exchange of Securities shall be done in accordance with the Indenture. Upon any registration of transfer or exchange, the Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes required by law or permitted by the Indenture. The Registrar need not register the transfer of or exchange any Securities selected for redemption (except, in the case of a Security to be redeemed in part, the portion of the Security not to be redeemed) or to transfer or exchange any Securities for a period of 15 days prior to a selection of Securities to be redeemed.

11. Persons Deemed Owners

Subject to Section 2.14 of the Indenture, the registered Holder of this Security shall be treated as the owner of it for all purposes.

12. Unclaimed Money

If money for the payment of principal or interest or any related fees contemplated by the Indenture remains unclaimed for two years, the Trustee and a Paying Agent shall pay the money back to the Issuer at its written request unless an abandoned property law designates another Person. After any such payment, the Holders entitled to the money must look to the Issuer for payment as general creditors and the Trustee and Paying Agent shall have no further liability with respect to such monies.

13. Discharge and Defeasance

Subject to certain conditions set forth in the Indenture, the Issuer at any time may terminate some of or all its obligations under the Securities and the Indenture if the Issuer deposits with the Trustee money or U.S. Government Obligations for the payment of principal and interest on the Securities and any related fees contemplated by the Indenture to redemption or maturity, as the case may be.

14. Amendment; Waiver

Subject to certain exceptions set forth in the Indenture, (x) the Indenture, the Securities or any Security Document may be amended with the written consent of the Holders of a majority in principal amount of the Securities then outstanding (voting as a single class) and (y) any past default or compliance with any provisions may be waived with the written consent of the Holders of a majority in principal amount of the Securities then outstanding. Subject to certain exceptions set forth in the Indenture, without the consent of any Holder, the Issuer, the Collateral Agent, the Guarantors and the Trustee may amend the Indenture, the Securities or any Security Document (i) to cure any ambiguity, omission, mistake, defect or inconsistency; (ii) to provide for the assumption by a Successor Company of the obligations of the Issuer under the Indenture and the Securities in accordance with the terms of the Indenture; (iii) to provide for the assumption by a Successor Guarantor of the obligations of a Guarantor under the Indenture and its Guarantee; (iv) to provide for uncertificated Securities in addition to or in place of certificated Securities; *provided, however*, that the uncertificated Securities are issued in registered form for purposes of Sections 871(h)(2)(B) and 881(c)(2)(B) of the Code and United States Treasury Regulation Section 5f.103-1(c); (v) to add additional Guarantees or co-obligors with respect to the Securities (including any local law guarantee limitations applicable to any Guarantee) and to release any Guarantees in accordance with the terms of the Indenture; (vi) to add to the covenants of the Issuer for the benefit of the Holders or to surrender any right or power conferred in the Indenture upon the Issuer in accordance with the terms of the Indenture; (vii) to comply with any requirement of the SEC in connection with qualifying or maintaining the qualification of the Indenture under the TIA (it being agreed that this Indenture need not qualify under the TIA); (viii) to make any change that does not adversely affect the rights of any Holder; (ix) to add additional assets as Collateral to secure the Securities; (x) to provide for the issuance of Additional Conditional Securities in accordance with the Indenture; (xi) to amend the provisions of the Indenture relating to the transfer and legending of Securities as permitted by the Indenture, including to facilitate the issuance of the Securities and the administration of the Indenture; *provided, however*, that (A) compliance with the Indenture as so amended would not result in Securities being transferred in violation of the Securities Act or any other applicable securities law and (B) such amendment does not materially and adversely affect the rights of Holders to transfer Securities (as certified by the Issuer in an Officers' Certificate to the Trustee); or (xii) to release Collateral from the Lien pursuant to the Indenture and the Security Documents when permitted or required by the Indenture or the Security Documents.

15. Defaults and Remedies

If an Event of Default (other than an Event of Default relating to certain events of bankruptcy, insolvency or reorganization with respect to the Issuer) occurs and is continuing, the Trustee or the Holders of at least 25% in principal amount of outstanding Securities by notice to the Issuer may, and if such notice is given by the Holders such notice shall be given to the Issuer and the Trustee, declare that the principal of, and the premium, if any, and accrued but unpaid interest on, all the Securities and any related fees contemplated by the Indenture is due and payable. Upon such a declaration, such principal and interest and any related fees contemplated by the Indenture shall be due and payable immediately. If an Event of Default relating to certain events of bankruptcy, insolvency or reorganization with respect to the Issuer occurs, the principal of, and the premium, if any, and accrued but unpaid interest on, all the Securities and any related

fees contemplated by the Indenture shall *ipso facto* become and be immediately due and payable, without any declaration or other act on the part of the Trustee or any Holders. Under certain circumstances, the Holders of a majority in principal amount of the Securities may rescind any such acceleration with respect to the Securities and its consequences.

Except to enforce the right to receive payment of principal, premium (if any) or interest and any related fees contemplated by the Indenture when due, no Holder may pursue any remedy with respect to the Indenture or the Securities unless (i) such Holder gives the Trustee written notice stating that an Event of Default is continuing, (ii) the Holders of at least 25% in principal amount of the then outstanding Securities make a written request to the Trustee to pursue the remedy, (iii) such Holder or Holders offer to the Trustee security or indemnity satisfactory to it against any loss, liability or expense, (iv) the Trustee does not comply with such request within 60 days after the receipt of the request and the offer of security or indemnity and (v) the Holders of a majority in principal amount of the then outstanding Securities do not give the Trustee a direction inconsistent with such request during such 60-day period. Subject to certain restrictions set forth in the Indenture, the Holders of a majority in principal amount of the Securities may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. The Trustee, however, may refuse to follow any direction that conflicts with law or the Indenture or, subject to the Indenture, that the Trustee determines is unduly prejudicial to the rights of any other Holder or that would involve the Trustee in personal liability. Prior to taking any action under the Indenture, the Trustee shall be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

16. Trustee Dealings with the Issuer

Subject to certain limitations imposed by the Indenture, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Securities and may otherwise deal with the Issuer or its Affiliates with the same rights it would have if it were not Trustee.

17. No Recourse Against Others

No director, officer, employee, manager, incorporator or holder of any Equity Interests in the Issuer or in any Guarantor, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Securities or the Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Securities by accepting a Security waives and releases all such liability.

18. Authentication

This Security shall not be valid until an authorized signatory of the Trustee (or an authenticating agent) manually signs the certificate of authentication on this Security.

19. Abbreviations

Customary abbreviations may be used in the name of a Holder or an assignee, such as TEN COM (=tenants in common), TEN ENT (=tenants by the entireties), JT TEN (=joint

tenants with rights of survivorship and not as tenants in common), CUST (=custodian), and U/G/M/A (=Uniform Gift to Minors Act).

20. Governing Law

**THIS SECURITY SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW AND ANY SUCCESSOR TO SUCH STATUTE), WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW.**

21. CUSIP Numbers; ISINs

The Issuer has caused CUSIP numbers and ISINs to be printed on the Securities and has directed the Trustee to use CUSIP numbers and ISINs in notices (including notices of redemption) as a convenience to the Holders. No representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice and reliance may be placed only on the other identification numbers placed thereon.

**The Issuer will furnish to any Holder of Securities upon written request and without charge to the Holder a copy of the Indenture, which has in it the text of this Security.**

ASSIGNMENT FORM

To assign this Security, fill in the form below:

I or we assign and transfer this Security to:

_____

(Print or type assignee's name, address and zip code)

_____

(Insert assignee's soc. sec. or tax I.D. No.)

and irrevocably appoint _____ agent to transfer this Security on the books of the Issuer. The agent may substitute another to act for him or her.

Date: _____ Your Signature:_____

Sign exactly as your name appears on this Security.

Signature Guarantee:_____

Date:_____ _____

Signature must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor program reasonably acceptable to the Trustee

Signature of Signature Guarantee

CERTIFICATE TO BE DELIVERED UPON EXCHANGE OR
REGISTRATION OF TRANSFER OF RESTRICTED SECURITIES

This certificate relates to $_____ principal amount of Securities held in (check applicable space) ____ book-entry or _____ definitive form by the undersigned.

The undersigned (check one box below):

☐ has requested the Trustee by written order to deliver in exchange for its beneficial interest in the Global Security held by the Depository a Security or Securities in definitive, registered form of authorized denominations and an aggregate principal amount equal to its beneficial interest in such Global Security (or the portion thereof indicated above);

☐ has requested the Trustee by written order to exchange or register the transfer of a Security or Securities.

In connection with any transfer of any of the Securities evidenced by this certificate occurring prior to the expiration of the period referred to in Rule 144(d)(1) under the Securities Act, the undersigned confirms that such Securities are being transferred in accordance with its terms:

CHECK ONE BOX BELOW

(1) ☐ to the Issuer or a Subsidiary thereof; or

(2) ☐ to the Registrar for registration in the name of the Holder, without transfer; or

(3) ☐ pursuant to an effective registration statement under the Securities Act of 1933; or

(4) ☐ inside the United States to a "qualified institutional buyer" (as defined in Rule 144A under the Securities Act of 1933) that purchases for its own account or for the account of a qualified institutional buyer to whom notice is given that such transfer is being made in reliance on such Rule 144A, in each case pursuant to and in compliance with Rule 144A under the Securities Act of 1933; or

(5) ☐ outside the United States in an offshore transaction within the meaning of Regulation S under the Securities Act in compliance with Rule 904 under the Securities Act of 1933 and such Security shall be held immediately after the transfer through Euroclear or Clearstream until the expiration of the Restricted Period; or

(6) ☐ to an "accredited investor" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act of 1933) that has furnished to the Trustee a signed letter containing certain representations and agreements and, if

applicable, an Opinion of Counsel; or

(7) ☐ pursuant to another available exemption from registration provided by Rule 144 under the Securities Act of 1933.

Unless one of the boxes is checked, the Trustee will refuse to register any of the Securities evidenced by this certificate in the name of any Person other than the registered Holder thereof; *provided, however*, that if box (5), (6) or (7) is checked, the Issuer or the Trustee may require, prior to registering any such transfer of the Securities, such legal opinions, certifications and other information as the Issuer or the Trustee have reasonably requested to confirm that such transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933.

Date: _____ Your Signature:_____

Signature Guarantee:_____

Date:_____ _____

Signature must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor program reasonably acceptable to the Trustee

Signature of Signature Guarantee

TO BE COMPLETED BY PURCHASER IF (4) ABOVE IS CHECKED.

The undersigned represents and warrants that it is purchasing this Security for its own account or an account with respect to which it exercises sole investment discretion and that it and any such account is a "qualified institutional buyer" within the meaning of Rule 144A under the Securities Act of 1933, and is aware that the sale to it is being made in reliance on such Rule 144A and acknowledges that it has received such information regarding the Issuer as the undersigned has requested pursuant to such Rule 144A or has determined not to request such information and that it is aware that the transferor is relying upon the undersigned's foregoing representations in order to claim the exemption from registration provided by such Rule 144A.

Dated:_____

NOTICE: To be executed by an executive officer

{TO BE ATTACHED TO GLOBAL SECURITIES}

SCHEDULE OF INCREASES OR DECREASES IN GLOBAL SECURITY

The initial principal amount of this Global Security is $_____. The following increases or decreases in this Global Security have been made:

| Date | Amount of decrease in Principal Amount of this Global Security | Amount of increase in Principal Amount of this Global Security | Principal amount of this Global Security following such decrease or increase | Signature of authorized signatory of Trustee or Securities Custodian |
|---|---|---|---|---|

**OPTION OF HOLDER TO ELECT PURCHASE**

**If you want to elect to have this Security repurchased by the Issuer pursuant to Section 4.08 (Change of Control) or Section 4.22 (Special Proceeds) of the Indenture, check the box:**

**Change of Control ☐** **Special Proceeds ☐**

**If you want to elect to have only part of this Security repurchased by the Issuer pursuant to Section 4.08 (Change of Control) or Section 4.22 (Special Proceeds) of the Indenture, state the amount ($2,000 or any integral multiple of $1,000 in excess thereof): $**

**Date: _____** **Your Signature:_____**

**(Sign exactly as your name appears on this Security)**

**Signature Guarantee:_____**

**Signature must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor program reasonably acceptable to the Trustee**

{FORM OF}
TRANSFEREE LETTER OF REPRESENTATION

VIVUS, Inc.
900 East Hamilton Avenue, Suite 550
Campbell, California 95008
Attention: Chief Financial Officer and General Counsel
Electronic mail: cfo@vivus.com; generalcounsel@vivus.com

U.S. Bank National Association, as trustee (the "Trustee")
Corporate Trust Services
One Federal Street, 3rd Floor
Boston, Massachusetts 02110
Attention: Alison Nadeau
Facsimile: 617-603-6683

Ladies and Gentlemen:

This certificate is delivered to request a transfer of $_____ principal amount of the 10.375% Senior Secured Notes due 2024 (the "Securities") of VIVUS, Inc. (the "Issuer")

Upon transfer, the Securities would be registered in the name of the new beneficial owner as follows:

Name: _____

Address: _____

Taxpayer ID Number: _____

The undersigned represents and warrants to you that:

1. We are an "accredited investor" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act of 1933, as amended (the "Securities Act")), purchasing for our own account or for the account of such an "accredited investor" for investment purposes at least $250,000 principal amount of the Securities, and we are acquiring the Securities not with a view to, or for offer or sale in connection with, any distribution in violation of the Securities Act. We have sufficient knowledge and experience in financial and business matters to be capable of evaluating the merits and risks of our investment in the Securities, and we invest in or purchase securities similar to the Securities in the normal course of our business. We, and any accounts for which we are acting, are each able and prepared to bear the economic risk of our or its investment.

2. We understand that the Securities have not been registered under the Securities Act and, unless so registered, may not be sold except as permitted in the following sentence. We agree on our own behalf and on behalf of any investor account for which we are

purchasing Securities to offer, sell or otherwise transfer such Securities only (a) to an entity that we reasonably believe is a qualified institutional buyer (as defined in Rule 144A under the Securities Act) in a transaction meeting the requirements of such Rule 144A, (b) outside the United States in an offshore transaction in accordance with Rule 904 of Regulation S under the Securities Act, (c) to the Issuer or any of its subsidiaries or (d) to an "accredited investor" in the case of each of clauses (a) through (d) in accordance with any applicable securities laws of any state of the United States. In addition, we will, and each subsequent holder is required to, notify any purchaser of the Securities of the resale restrictions set forth above. If any resale or other transfer of the Securities is proposed to be made pursuant to clause (d) above prior to the date that is one year after the later of the date of original issue and the last date on which either the Issuer or any affiliate of the Issuer was the owner of the Securities (the "Resale Restriction Termination Date"), the transferor shall deliver a letter from the transferee substantially in the form of this letter to the Issuer and the Trustee, which shall provide, among other things, that the transferee is an "accredited investor" and that it is acquiring such Securities for investment purposes and not for distribution in violation of the Securities Act. Each purchaser acknowledges that the Issuer and the Trustee reserve the right prior to the offer, sale or other transfer prior to the Resale Restriction Termination Date of the Securities pursuant to clause (b) or (d) above to require the delivery of an Opinion of Counsel, certifications or other information satisfactory to the Issuer and the Trustee.

Dated: _____

TRANSFEREE: _____,

By:

{FORM OF}
SUPPLEMENTAL INDENTURE

This SUPPLEMENTAL INDENTURE (this "Supplemental Indenture") dated as of _____, 20__ is among the new guarantor named in the signature pages hereto (the "Guarantor"), a subsidiary of VIVUS, Inc. (the "Issuer"), and U.S. Bank National Association, as trustee (the "Trustee") and as collateral agent (the "Collateral Agent") under the Indenture referred to below.

W I T N E S S E T H :

WHEREAS the Issuer has heretofore executed and delivered to the Trustee and the Collateral Agent an indenture (as amended, supplemented or otherwise modified, the "Indenture") dated as of June 8, 2018, providing for the issuance of the Issuer's 10.375% Senior Secured Notes due 2024 (the "Securities");

WHEREAS Section 4.12 of the Indenture provides that under certain circumstances the Issuer is required to cause the Guarantor to execute and deliver to the Trustee a supplemental indenture pursuant to which the Guarantor shall guarantee the Issuer's Obligations under the Securities and the Indenture pursuant to a Guarantee on the terms and conditions set forth herein and in the Indenture; and

WHEREAS, pursuant to Section 9.01(v) of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture without notice to or consent of any Holder.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guarantor and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders as follows:

1. Defined Terms. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined, except that the term "Holders" in this Supplemental Indenture shall refer to the term "Holders" as defined in the Indenture and the Trustee acting on behalf of and for the benefit of such Holders. The words "herein", "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

2. Agreement to Guarantee. The Guarantor hereby, jointly and severally with any other guarantor existing under the Indenture, irrevocably and unconditionally guarantees as a primary obligor and not merely as a surety on a senior basis to each Holder and to the Trustee and its successors and assigns the Guaranteed Obligations, on the terms and subject to the conditions set forth in Article 10 of the Indenture, and agrees to be bound by all other applicable provisions of the Indenture and the Securities and to perform all of the obligations and agreements of a Guarantor under the Indenture.

3. Releases. The Guarantee of the Guarantor shall terminate and be of no further force or effect, and the Guarantor shall be deemed to be released from all obligations in respect of its Guarantee, as provided in Section 10.03 of the Indenture.

4. Notices. All notices or other communications to the Guarantor shall be given as provided in Section 12.01 of the Indenture.

5. Ratification of Indenture; Supplemental Indentures Part of Indenture. Except as expressly amended and supplemented hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder heretofore and hereafter existing shall be bound hereby.

6. Governing Law. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW AND ANY SUCCESSOR TO SUCH STATUTE), WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW.

7. No Recourse Against Others. No past, present or future director, officer, employee, manager, incorporator, agent or holder of any Equity Interests in the Issuer or of the Guarantors or any direct or indirect parent corporation, as such, shall have any liability for any obligations of the Issuer and the Guarantors under the Securities, the Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation.

8. Trustee Makes No Representation. The Trustee makes no representation as to the validity or sufficiency of this Supplemental Indenture.

9. Counterparts. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of this Supplemental Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Supplemental Indenture as to the parties hereto and may be used in lieu of the original Supplemental Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

10. Effect of Headings. The Section headings herein are for convenience of reference only and shall not affect the construction thereof.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

{GUARANTOR}

By: _____
Name:
Title:

U.S. BANK NATIONAL ASSOCIATION, AS TRUSTEE

By: _____
Name:
Title:

U.S. BANK NATIONAL ASSOCIATION, AS COLLATERAL AGENT

By: _____
Name:
Title:

PAYMENT SUBORDINATION TERMS

SECTION 1.01. Subordination of Liabilities. {_____}[1] (the "Debtor"), for itself, and its successors and assigns, covenants and agrees, and {_____}[2] (the "Creditor") covenants and agrees, that the payment of the principal of, interest on, and all other amounts owing in respect of, the {_____}[3] (the "Subordinated Indebtedness") is hereby expressly subordinated, to the extent and in the manner hereinafter set forth, to the prior payment in full in cash of Senior Indebtedness (as defined in Section 1.07 of this Exhibit).

SECTION 1.02. Debtor Not to Make Payments with Respect to Subordinated Indebtedness in Certain Circumstances.

(a) Upon the maturity of any applicable Senior Indebtedness (including interest thereon, premium, if any, or fees or any other amounts owing in respect thereof), whether at stated maturity, by acceleration or otherwise, all Obligations (as defined in Section 1.07 of this Exhibit) owing in respect thereof shall first be paid in full in cash, before any payment (whether in cash, property, securities or otherwise) is made on account of the Subordinated Indebtedness.

(b) The Debtor may not, directly or indirectly, make any payment of any Subordinated Indebtedness or acquire any Subordinated Indebtedness for cash or property until all applicable Senior Indebtedness has been paid in full in cash if any default or Event of Default under such Senior Indebtedness is then in existence or would result therefrom. Each Creditor hereby agrees that, so long as any such default or Event of Default exists, it will not ask, demand, sue for, or otherwise take, accept or receive, any amounts owing in respect of the Subordinated Indebtedness.

(c) In the event that, notwithstanding the provisions of the preceding subsections (a) and (b) of this Section 1.02, the Debtor shall make a payment on account of (or any Creditor receives any payment on account of) the Subordinated Indebtedness at a time when payment is not permitted by said subsection (a) or (b), such payment shall be held by such Creditor, in trust for the benefit of, and shall be paid forthwith over and delivered, to the applicable {Agent(s)}[4] for application pro rata to the payment of all such applicable Senior Indebtedness (after giving effect to the relative priorities of such Senior Indebtedness) remaining unpaid to the extent necessary to pay all such Senior Indebtedness in full in cash in accordance with the terms of such Senior Indebtedness,

---

[1] Reference issuer, guarantor, borrower, payor, maker or other obligor/debtor, as applicable.

[2] Reference note holder, lender, payee or other obligee/creditor, as applicable.

[3] Reference the subordinated indebtedness

[4] Reference administrative agent, trustee, paying agent or other agent/representative of the Senior Indebtedness, as applicable

after giving effect to any concurrent payment or distribution to or for the holders of such Senior Indebtedness.

SECTION 1.03. Subordination to Prior Payment of Senior Indebtedness, Dissolution, Liquidation or Reorganization of Debtor. Upon any distribution of assets of the Debtor upon dissolution, winding up, liquidation or reorganization of the Debtor in bankruptcy, insolvency or receivership proceedings or upon an assignment for the benefit of creditors:

(a) the holders of all Senior Indebtedness shall first be entitled to receive payment in full in cash of all Senior Indebtedness (including, without limitation, post-petition interest at the rate provided in the documentation with respect to the Senior Indebtedness whether or not such post-petition interest is an allowed claim against the debtor in any bankruptcy or similar proceeding) before any Creditor is entitled to receive any payment of any kind or character on account of the Subordinated Indebtedness; and

(b) in the event that, notwithstanding the foregoing provisions of this Section 1.03, any payment or distribution of assets of the Debtor of any kind or character, whether they be cash, property or securities, shall be received by the Creditor on account of Subordinated Indebtedness before all Senior Indebtedness is paid in full in cash, such payment or distribution shall be received and held in trust for and shall forthwith be paid over to the holders of the applicable Senior Indebtedness (after giving effect to the relative priorities of such Senior Indebtedness) remaining unpaid or unprovided for or their representative(s) or to the applicable {Agent(s)}, for application to the payment of such Senior Indebtedness until all such Senior Indebtedness shall have been paid in full in cash, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.

SECTION 1.04. Subrogation. Subject to the prior payment in full in cash of all applicable Senior Indebtedness, each Creditor shall be subrogated to the rights of the holders of such Senior Indebtedness to receive payments or distributions of assets of the Debtor applicable to such Senior Indebtedness until all amounts owing on the Subordinated Indebtedness shall be paid in full, and for the purpose of such subrogation no payments or distributions to the holders of such Senior Indebtedness by or on behalf of the Debtor or by or on behalf of any Creditor by virtue of this Exhibit that otherwise would have been made to a Creditor shall, as between the Debtor, its creditors other than the holders of such Senior Indebtedness, and the Creditor, be deemed to be payment by such Debtor to or on account of such Senior Indebtedness, it being understood that the provisions of this Exhibit are and are intended solely for the purpose of defining the relative rights of the Creditor, on the one hand, and the holders of such Senior Indebtedness, on the other hand.

SECTION 1.05. Obligation of the Debtor Unconditional. Nothing contained in this Exhibit is intended to or shall impair, as between the Debtor and the Creditor, the obligation of the Debtor, which is absolute and unconditional, to pay to the Creditor the principal of and interest on the Subordinated Indebtedness as and when the same shall become due and payable in accordance with its terms, or is intended to or shall affect the relative rights of the Creditor and other creditors of the Debtor other than the holders of the Senior Indebtedness, nor, except as specifically provided herein, shall anything herein or therein prevent the Creditor from

exercising all remedies otherwise permitted by applicable law upon an event of default under the Subordinated Indebtedness, subject to the rights, if any, under this Exhibit of the holders of Senior Indebtedness in respect of cash, property, or securities of the Debtor received upon the exercise of any such remedy. Upon any distribution of assets of the Debtor, each Creditor shall be entitled to rely upon any order or decree made by any court of competent jurisdiction in which such dissolution, winding up, liquidation or reorganization proceedings are pending, or a certificate of the liquidating trustee or agent or other person making any distribution to the Creditor, for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of the Senior Indebtedness and other indebtedness of the Debtor, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Exhibit.

SECTION 1.06. Subordination Rights Not Impaired by Acts or Omissions of the Debtor or Creditor of Senior Indebtedness. No right of any present or future holders of any Senior Indebtedness to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Debtor or by any act or failure to act in good faith by any such holder, or by any noncompliance by the Debtor with the terms and provisions of the Subordinated Indebtedness, regardless of any knowledge thereof that any such holder may have or be otherwise charged with.

SECTION 1.07. Senior Indebtedness. The term “Senior Indebtedness” shall mean (i) the Obligations of the Debtor under the Indenture for the 10.375% Senior Secured Notes due 2024 by and among VIVUS, Inc., a Delaware corporation, as issuer, and U.S. Bank National Association, a national banking association, as indenture trustee (the “Trustee”), among others, and any amendment, renewal, extension, restatement, refinancing or refunding (in whole or in part) thereof and (ii) the Optional Secured Notes, if any. As used herein, the term “Obligation” shall mean all principal, interest, premium, reimbursement obligations, penalties, fees, expenses, indemnities and other liabilities and obligations (including any guaranties of the foregoing liabilities and obligations) payable under the documentation governing any Senior Indebtedness (including interest after the commencement of any bankruptcy, insolvency, receivership or similar proceeding at the rate provided in the documentation with respect thereto, whether or not such interest is an allowed claim against the debtor in any such proceeding).

SECTION 1.08. Miscellaneous. If, at any time, all or part of any payment with respect to Senior Indebtedness theretofore made by the Debtor or any other person is rescinded or must otherwise be returned by the holders of Senior Indebtedness for any reason whatsoever (including, without limitation, the insolvency, bankruptcy or reorganization of the Debtor or such other persons), the subordination provisions set forth herein shall continue to be effective and be reinstated, as the case may be, all as though such payment had not been made.

FORM OF PORTFOLIO INTEREST CERTIFICATE

hereby certifies that:

1. It is (*one must be checked*):

   (1) ____ a natural individual person;

   (2) ____ treated as a corporation for U.S. federal income tax purposes;

   (3) ____ disregarded for U.S. federal income tax purposes (in which case a copy of this certificate is completed and signed by its sole beneficial owner); or

   (4) ____ treated as a partnership for U.S. federal income tax purposes (in which case each partner also has completed as to itself and signed a copy of this certificate and an appropriate IRS Form W-8, a copy of each of which is attached, or, if applicable, has completed as to itself and signed an IRS Form W-9, a copy of which is attached).

2. It is not a bank, as such term is used in Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "Code").

3. It is not a 10-percent shareholder of VIVUS, Inc. (the "Issuer") within the meaning of Section 871(h)(3) of the Code or Section 881(c)(3)(B) of the Code.

4. It is not a controlled foreign corporation that is related to the Issuer within the meaning of Section 881(c)(3)(C) of the Code.

_____
{Fill in name of holder}

By: _____
Name:
Title:
Date:

**SCHEDULE 1**

**PURCHASERS**

| Purchaser | Principal Amount of Original Notes | Principal Amount of Additional Notes | Number of Shares of Common Stock Underlying the Warrants | Notice Information |
|---|---|---|---|---|
| ATHYRIUM OPPORTUNITIES III CO-INVEST 1 LP | $91,667,000 | $8,333,000 | 2,750,000 | Athyrium Opportunities III Co-Invest 1 LP<br>c/o Athyrium Capital Management, LP<br>530 Fifth Avenue, Floor 25<br>New York, NY 10036<br>Telephone: (212) 402-6925<br>Attention: Andrew C. Hyman and Laurent Hermouet<br>Email: aof3@athyrium.com<br>ahyman@athyrium.com<br>lhermouet@athyrium.com |
| ATHYRIUM OPPORTUNITIES II ACQUISITION LP | $18,333,000 | $1,667,000 | 550,000 | Athyrium Opportunities II Acquisition LP<br>c/o Athyrium Capital Management, LP<br>530 Fifth Avenue, Floor 25<br>New York, NY 10036<br>Telephone: (212) 402-6925<br>Attention: Andrew C. Hyman and Laurent Hermouet<br>Email: aof2@athyrium.com<br>ahyman@athyrium.com<br>lhermouet@athyrium.com |

**SCHEDULE 5.1**

**EXISTING WARRANTS**

| Holder | Grant Date | Underlying Shares | Exercise Price | Term |
|---|---|---|---|---|
| Torreya Capital, LLC | 02/23/2018 | 1,500,000 | $0.44 | 5 years |
| 2018 Inducement Equity Incentive Plan | 04/30/2018 | 5,020,000 | Closing price on 04/30/2018 | 7 years |
| Stockholders of Willow Biopharma Inc. | 04/30/2018 | 3,570,000 | Closing price on 04/30/2018 | 7 years |

**SCHEDULE 5.4**

**EXISTING SUBSIDIARY**

Willow Biopharma Inc.
8865 Woodbine Avenue, Unit D, Suite 137
Markham, Ontario L3R 5G1
Canada

**SCHEDULE 5.5**

**CAPITALIZATION**

| Name of Obligor | Jurisdiction of Organization | Address of Principal Office | Ownership of Subsidiaries |
|---|---|---|---|
| VIVUS UK Limited | United Kingdom | No physical address | 100% owned by the Issuer |
| VIVUS BV | Netherlands | Prins Bernhardplein 200<br>1097 JB<br>Amsterdam<br>The Netherlands | 100% owned by the Issuer |
| Vivus Limited | Bermuda | Clarendon House<br>2 Church Street<br>Hamilton<br>HM11<br>Bermuda | 100% owned by the Issuer |
| Vivus International, L.P. | Bermuda | Clarendon House<br>2 Church Street<br>Hamilton<br>HM11<br>Bermuda | 100% limited partner interests owned by the Issuer; 100% general partnership interests owned by Vivus Limited |
| Vivus International Limited | Ireland | 25-28 North Wall Quay<br>Dublin<br>1<br>Ireland | 100% owned by the Issuer |
| Willow Biopharma Inc | Canada | 8865 Woodbine Avenue<br>Unit D, Suite 137<br>Markham<br>Ontario<br>L3R 5G1<br>Canada | 100% owned by the Issuer |

None of the entities above has a U.S. taxpayer identification number.

**SCHEDULE 5.20**

**PRODUCT AUTHORIZATIONS**

PMR 1901-10: The Issuer will not meet its requirement of providing data from a Qsymia® Cardiovascular Outcomes Trial ("CVOT") in June 2018. The Issuer has been in ongoing dialogue with the FDA since May 2015 regarding the status of the CVOT, and the rationale for reducing the size and scope of or eliminating the need for a CVOT. The Issuer has submitted data from a "real world experience" study of a health claims database to analyze cardiovascular events in patients who used Qsymia® or its components (mono or combination therapy) versus a control group. The CVOT is on hold while the FDA and the Issuer continue their discussions. The official status of this study is listed as "delayed" and there continues to be a requirement to conduct the study.

PMR 1901-02: The Issuer will not submit data for PMR 1901-02 by the stated deadline. The Issuer has been in discussions with the FDA to gain alignment for the final protocol for this adolescent safety and efficacy study protocol. In addition, the Issuer needed to wait for the results of the adolescent PK study. The current status of the study is that the protocol is finalized, CROs selection process is near final, and study drug is being manufactured, with an expected first patient enrolled by the end of 2018.

**SCHEDULE 5.40**

**ASSETS OF SUBSIDIARIES**

VIVUS BV holds ex-U.S. rights to trademarks for VIVUS and SPEDRA.

**VIVUS, INC.**

**2018 INDUCEMENT EQUITY INCENTIVE PLAN**

**NOTICE OF GRANT OF STOCK OPTION**

Unless otherwise defined herein, the terms defined in the VIVUS, Inc. 2018 Inducement Equity Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Stock Option (the "Notice of Grant") and Terms and Conditions of Stock Option Grant, attached hereto as Exhibit A (together, the "Agreement").

**Participant:**

**Address:**

Participant has been granted an Option to purchase Shares of Common Stock, subject to the following terms and conditions of the Plan and this Agreement.

| | |
|---|---|
| Grant Number | |
| Date of Grant | |
| Vesting Commencement Date | |
| Number of Shares Granted | |
| Exercise Price per Share | $ |
| Total Exercise Price | $ |
| Type of Option | Nonstatutory Stock Option |
| Term/Expiration Date | |

Vesting Schedule:

Subject to accelerated vesting as set forth below or in the Plan, this Option will be exercisable, in whole or in part, in accordance with the following schedule:

Twenty-five percent (25%) of the Shares subject to the Option shall vest on the one (1) year anniversary of the Vesting Commencement Date, and one forty-eighth (1/48th) of the Shares subject to the Option shall vest each month thereafter on the same day of the month as the Vesting Commencement Date (and if there is no corresponding day, on the last day of the month), subject to Participant continuing to be a Service Provider through each such date.

Termination Period:

This Option will be exercisable for twelve (12) months after Participant ceases to be a Service Provider. If Participant ceases to be a Service Provider due to his or her Disability or if Participant dies while holding this Option, this Option will be exercisable for twelve (12) months after Participant ceases to be a Service Provider. Notwithstanding the foregoing, in no event may this Option be exercised after the Term/Expiration Date as provided above and may be subject to earlier termination as provided in Section 15(c) of the Plan.

Participant and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Agreement. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan and Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated above.

Participant acknowledges and agrees that by clicking the "ACCEPT" button on the E*TRADE on-line grant agreement response page, it will act as Participant's electronic signature to this Agreement and will constitute Participant's acceptance of and agreement with all of the terms and conditions of the Option, as set forth in the Agreement and the Plan.

VIVUS, INC.

/s/ Mark K. Oki

Mark K. Oki
Chief Financial Officer

**EXHIBIT A**

**TERMS AND CONDITIONS OF STOCK OPTION GRANT**

1. Grant. The Company hereby grants to the Participant named in the Notice of Grant ("Participant") an option (the "Option") to purchase the number of Shares, as set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), subject to the terms and conditions in this Agreement and the Plan, which is incorporated herein by reference. Subject to Section 20(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Agreement, the terms and conditions of the Plan will prevail.

2. Vesting Schedule. Except as provided in Section 3, the Option awarded by this Agreement will vest in accordance with the vesting provisions set forth in the Notice of Grant. Shares scheduled to vest on a certain date or upon the occurrence of a certain condition will not vest in Participant in accordance with any of the provisions of this Agreement, unless Participant will have been continuously a Service Provider from the Date of Grant until the date such vesting occurs.

3. Administrator Discretion. The Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Option at any time, subject to the terms of the Plan. If so accelerated, such Option will be considered as having vested as of the date specified by the Administrator.

4. Exercise of Option. This Option may be exercised only within the term set out in the Notice of Grant in accordance with the Plan and the terms of this Agreement. This Option will be exercisable in a manner and pursuant to such procedures as the Administrator may determine, which procedure will require Participant to state that he/she is electing to exercise the Option, the number of Shares in respect of which the Option is being exercised (the "Exercised Shares"), and will require Participant to make such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. This Option will be deemed to be exercised upon completion of the exercise procedure to the Company's satisfaction.

5. Method of Payment. Payment of the aggregate Exercise Price will be by any of the following, or a combination thereof, at the election of Participant:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan (including by way of a net exercise); or

(d) surrender of other Shares which have a Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Exercised Shares.

6. Tax Obligations.

(a) General. Participant acknowledges that, regardless of any action taken by the Company or, if different, Participant's employer (the "Employer") or Parent, Subsidiary or Affiliate of the Company to which Participant is providing services (together, the Company, Employer, Parent, Subsidiary, or Affiliate to which the Participant is providing services, the "Company Group"), the ultimate liability for any tax and/or social insurance liability obligations and requirements in connection with the Option, including, without limitation, (i) all federal, state, and local taxes (including the Participant's Federal Insurance Contributions Act (FICA) obligation) that are required to be withheld by the Company Group or other payment of tax-related items related to Participant's participation in the Plan and legally applicable to Participant, (ii) the Participant's and, to the extent required by the Company Group, the Company Group's fringe benefit tax liability, if any, associated with the grant, vesting, or exercise of the Option or sale of Shares, and (iii) any other Company Group taxes the responsibility for which the Participant has, or has agreed to bear, with respect to the Option (or exercise thereof or issuance of Shares thereunder) (collectively, the "Tax Obligations"), is and remains Participant's responsibility and may exceed the amount actually withheld by the Company Group. Participant further acknowledges that the Company Group (A) make no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Option, including, but not limited to, the grant, vesting or exercise of the Option, the subsequent sale of Shares acquired pursuant to such exercise and the receipt of any dividends or other distributions, and (B) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate Participant's liability for Tax Obligations or achieve any particular tax result. Further, if Participant is subject to Tax Obligations in more than one jurisdiction between the Date of Grant and the date of any relevant taxable or tax withholding event, as applicable, Participant acknowledges that the Company Group (or former employer, as applicable) may be required to withhold or account for Tax Obligations in more than one jurisdiction. If Participant fails to make satisfactory arrangements for the payment of any required Tax Obligations hereunder at the time of the applicable taxable event, Participant acknowledges and agrees that the Company may refuse to issue or deliver the Shares.

(b) Tax Withholding. When the Option is exercised, Participant generally will recognize immediate U.S. taxable income if Participant is a U.S. taxpayer. Pursuant to such procedures as the Administrator may specify from time to time, the Company Group will withhold the amount required to be withheld for the payment of Tax Obligations. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit Participant to satisfy such Tax Obligations, in whole or in part (without limitation), by (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a fair market value equal to the minimum amount that is necessary to meet the withholding requirement for such Tax Obligations (or such greater amount as Participant may elect if permitted by the Administrator, if such greater amount would not result in adverse financial accounting consequences for the Company Group), (iii) withholding the amount of such Tax Obligations from Participant's wages or other cash compensation paid to Participant by the Company Group, (iv) delivering to the Company already vested and owned Shares having a fair market value equal to such Tax Obligations, or (v) selling a sufficient number of such Shares otherwise deliverable to Participant through such means as the Company may determine in its sole discretion (whether through a broker or otherwise) equal to the minimum amount that is necessary to meet the withholding requirement for such Tax Obligations (or such greater amount as

Participant may elect if permitted by the Administrator, if such greater amount would not result in adverse financial accounting consequences for the Company Group). To the extent determined appropriate by the Company in its discretion, it will have the right (but not the obligation) to satisfy any Tax Obligations by reducing the number of Shares otherwise deliverable to Participant. Further, if Participant is subject to tax in more than one jurisdiction between the Date of Grant and a date of any relevant taxable or tax withholding event, as applicable, Participant acknowledges and agrees that the Company Group (and/or former employer, as applicable) may be required to withhold or account for tax in more than one jurisdiction. If Participant fails to make satisfactory arrangements for the payment of any required Tax Obligations hereunder at the time of the Option exercise, Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such amounts are not delivered at the time of exercise.

(c) Code Section 409A. Under Code Section 409A, an option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004), that was granted with a per share exercise price that is determined by the Internal Revenue Service (the "IRS") to be less than the fair market value of a share on the date of grant (a "Discount Option") may be considered "deferred compensation." A Discount Option may result in (i) income recognition by the recipient of the option prior to the exercise of the option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The Discount Option also may result in additional state income, penalty and interest tax to the recipient of the option. Participant acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the per Share exercise price of this Option equals or exceeds the fair market value of a Share on its date of grant in a later examination. Participant agrees that if the IRS determines that the Option was granted with a per Share exercise price that was less than the fair market value of a Share on the Option's date of grant, Participant will be solely responsible for Participant's costs related to such a determination.

7. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until certificates representing such Shares (which may be in book entry form) will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant (including through electronic delivery to a brokerage account). After such issuance, recordation and delivery, Participant will have all the rights of a stockholder of the Company with respect to voting such Shares and receipt of dividends and distributions on such Shares.

8. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT, SUBSIDIARY OR AFFILIATE OF THE COMPANY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR

ANY PERIOD, OR AT ALL, AND WILL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT, SUBSIDIARY OR AFFILIATE OF THE COMPANY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

9. Address for Notices. Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at VIVUS, Inc., 900 E. Hamilton Avenue, Suite 550, Campbell, California 95008, or at such other address as the Company may hereafter designate in writing or electronically.

10. Grant is Not Transferable. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant.

11. Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement will be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Agreement will be binding upon Participant and his or her heirs, executors, administrators, legatees, legal representatives, successors and assigns. The rights and obligations of Participant under this Agreement may be assigned only with the written consent of the Company.

12. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration, qualification or rule compliance of the Shares upon any securities exchange or under any state, federal or non-U.S. law, the tax code and related regulations or under the rulings or regulations of the United States Securities and Exchange Commission or any other governmental regulatory body or the clearance, consent or approval of the United States Securities and Exchange Commission or any other governmental regulatory authority is necessary or desirable as a condition to the purchase by, or issuance, of Shares to Participant (or his or her estate) hereunder, such purchase or issuance will not occur unless and until such listing, registration, qualification, rule compliance, clearance, consent or approval will have been completed, effected or obtained free of any conditions not acceptable to the Company. Subject to the terms of the Agreement and the Plan, the Company will not be required to issue any certificate or certificates for Shares hereunder prior to the lapse of such reasonable period of time following the date of exercise of the Option the Administrator may establish from time to time for reasons of administrative convenience. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent, clearance or approval of any such governmental authority. Assuming such compliance, for income tax purposes the Exercised Shares will be considered transferred to Participant on the date the Option is exercised with respect to such Exercised Shares.

13. Plan Governs. This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions

of the Plan, the provisions of the Plan will govern. Capitalized terms used and not defined in this Agreement will have the meaning set forth in the Plan.

14. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Shares subject to the Option have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

15. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to Options awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

16. Captions. Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

17. Agreement Severable. In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

18. Modifications to the Agreement. This Agreement, together with the Plan, constitutes the entire understanding of the parties on the subjects covered. Participant expressly warrants that he or she is not accepting this Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Agreement can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Agreement, the Company reserves the right to revise this Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Code Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Code Section 409A in connection to this Option.

19. Amendment, Suspension or Termination of the Plan. By accepting this Award, Participant expressly warrants that he or she has received an Option under the Plan, and has received, read and understood a description of the Plan. Participant understands that the Plan is discretionary in nature and may be amended, suspended or terminated by the Company at any time.

20. Governing Law. This Agreement will be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Option or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation will be conducted in the

courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Option is made and/or to be performed.

21. No Waiver. Either party's failure to enforce any provision or provisions of this Agreement shall not in any way be construed as a waiver of any such provision or provisions, nor prevent that party from thereafter enforcing each and every other provision of this Agreement. The rights granted both parties herein are cumulative and shall not constitute a waiver of either party's right to assert all other legal remedies available to it under the circumstances.

22. Tax Consequences. Participant has reviewed with its own tax advisers the U.S. federal, state, local and non-U.S. tax consequences of this investment and the transactions contemplated by this Agreement. With respect to such matters, Participant relies solely on such advisers and not on any statements or representations of the Company or any of its agents, written or oral. Participant understands that Participant (and not the Company Group) shall be responsible for Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

* * *

Approved: 30 April 2018

**THIRD AMENDED AND RESTATED**
**CHANGE OF CONTROL AND SEVERANCE AGREEMENT**

This Third Amended and Restated Change of Control and Severance Agreement (the "**Agreement**") is made and entered into effective as of _____, 2018, by and between _____ (the "**Employee**") and VIVUS, Inc., a Delaware corporation (the "**Company**"). The Agreement amends, restates and replaces the Second Amended and Restated Change in Control and Severance Agreement previously entered into between Employee and the Company, which was dated _____, _____ (the "**Prior Agreement**").

**RECITALS**

A. It is expected that another company or other entity may from time to time consider the possibility of acquiring the Company or that a change in control may otherwise occur, with or without the approval of the Company's Board of Directors (the "**Board**"). The Board recognizes that such consideration can be a distraction to the Employee and may cause the Employee to consider alternative employment opportunities. The Board has determined that it is in the best interests of the Company and its shareholders to assure that the Company will have the continued dedication and objectivity of the Employee, notwithstanding the possibility, threat or occurrence of a Change of Control (as defined below) of the Company. The Board also recognizes that circumstances may arise whereby the Employee's employment is terminated other than in connection with a Change of Control.

B. The Board believes that it is in the best interests of the Company and its shareholders to provide the Employee with an incentive to continue his or her employment with the Company.

C. The Board believes that it is imperative to provide the Employee with certain benefits upon termination of the Employee's employment in connection with a Change of Control, which benefits are intended to provide the Employee with financial security and provide sufficient income and encouragement to the Employee to remain with the Company notwithstanding the possibility of a Change of Control.

D. To accomplish the foregoing objectives, the Board has directed the Company, upon execution of this Agreement by the Employee, to agree to the terms provided in this Agreement.

E. Certain capitalized terms used in the Agreement are defined in Section 3 below.

In consideration of the mutual covenants herein contained, and in consideration of the continuing employment of Employee by the Company, the parties agree as follows:

1. At-Will Employment. The Company and the Employee acknowledge that the Employee's employment is and shall continue to be at-will, as defined under applicable law. If the Employee's employment terminates for any reason, the Employee shall not be entitled to any severance payments or benefits, other than as provided by this Agreement. The terms of this

Agreement shall terminate upon the earlier of (i) the date that all obligations of the parties hereunder have been satisfied, or (ii) eighteen (18) months after a Change of Control (provided, however, that if Employee becomes entitled to benefits under this Agreement during the term of this Agreement, the Agreement will not terminate until all of the obligations of the parties hereto with respect to this Agreement have been satisfied). A termination of the terms of this Agreement pursuant to the preceding sentence shall be effective for all purposes, except that such termination shall not affect the payment or provision of compensation or benefits on account of a termination of employment occurring prior to the termination of the terms of this Agreement.

2. Severance Benefits.

(a) Termination Following A Change of Control. Subject to Sections 4, 7 and 8 below, if the Employee's employment with the Company is terminated at any time within three (3) months prior to or eighteen (18) months after a Change of Control (the "**Protection Period**"), then the Employee shall be entitled to receive severance benefits as follows:

(i) Voluntary Resignation; Termination For Cause. If the Employee voluntarily resigns from the Company (other than for Good Reason (as defined below)) or if the Company terminates the Employee's employment for Cause (as defined below), then the Employee shall not be entitled to receive severance payments. The Employee's benefits will be terminated under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination or as otherwise determined by the Board.

(ii) Involuntary Termination. If the Employee's employment is terminated (x) by the Company other than for Cause and other than due to Employee's death or Disability, or (y) voluntarily by the Employee for Good Reason, then Employee shall be entitled to receive the following benefits:

(A) monthly severance payments during the period from the date of the Employee's termination until the date eighteen (18) months after the effective date of the termination (the " **COC Severance Period**") equal to the monthly salary which the Employee was receiving immediately prior to the Change of Control;

(B) monthly severance payments during the COC Severance Period equal to one-twelfth (1/12 th ) of the Employee's Target Bonus (as defined herein) for the fiscal year in which the termination occurs for each month in which severance payments are made to the Employee pursuant to subsection (A) above;

(C) a lump sum cash payment equal to the prorated amount of the Employee's Target Bonus for the fiscal year in which the termination occurs (and a prior fiscal year to the extent the bonus for such prior fiscal year has not yet been declared and paid by the Company), calculated based on the number of months during such fiscal year in which the Employee was employed by the Company (or a successor corporation) multiplied by the average of the actual bonus percentage payouts in the two (2) most recent fiscal years prior to the year of termination (i.e., if Employee is terminated in fiscal year 2019 at a time when the bonus for fiscal year 2018 has not yet been declared and paid, then Employee shall be entitled to receive a prorated Target Bonus for the

months employed during fiscal years 2018 and 2019 multiplied by the average of the actual bonus percentage payouts in fiscal years 2016 and 2017); and

(D) if Employee, and any spouse and/or dependents of Employee (" **Family Members**") has coverage on the date of Employee's termination of employment under a group health plan sponsored by the Company, then reimbursement to Employee the employer portion of the total applicable premium cost for continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1986, as amended ("**COBRA**") for a period of up to eighteen (18) months following Employee's termination of employment or if earlier, the date upon which Employee and Employee's eligible dependents become covered under similar plans, provided that Employee validly elects and is eligible to continue coverage under COBRA for Employee and the Family Members, and, provided further, that if the Company determines in its sole discretion that it cannot provide the COBRA reimbursement benefits without potentially violating applicable laws (including, without limitation, Section 2716 of the Public Health Service Act and the Employee Retirement Income Security Act of 1974, as amended), the Company will in lieu thereof provide to Employee a taxable lump sum payment in an amount equal to the monthly COBRA premium that Employee would be required to pay to continue the group health coverage in effect on the date of Employee's termination of employment (which amount will be based on the premium for the first month of COBRA coverage) for a period of eighteen (18) months following Employee's termination of employment, which payment will be made regardless of whether Employee elects COBRA continuation coverage.

(iii) Disability; Death. If the Company terminates Employee's employment as a result of Employee's disability, or Employee's employment terminates due to Employee's death, then Employee shall not be entitled to receive severance or other benefits except for those that have been earned but not yet paid under this agreement and those, if any, as may be established under the Company's then existing benefit plans and practices or pursuant to other written agreements with the Company.

(b ) Acceleration of Equity Awards. If during the Protection Period Employee's employment is terminated (x) by the Company other than for Cause, or (y) voluntarily by the Employee for Good Reason, each equity award granted to the Employee by the Company, including, without limitation, stock options and restricted stock units (the "**Equity Awards**") shall automatically vest in full and become immediately exercisable or issued.

(c) Termination Apart from a Change of Control. Subject to Sections 4, 7 and 8 below, if the Employee's employment with the Company is terminated at any time other than as provided in paragraph 2(a), then the Employee shall be entitled to receive severance benefits as follows:

(i) Voluntary Resignation; Termination For Cause. If the Employee voluntarily resigns from the Company (other than for Good Reason) or if the Company terminates the Employee's employment for Cause, then the Employee shall not be entitled to receive severance

payments. The Employee's benefits will be terminated under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination or as otherwise determined by the Board.

(ii) Involuntary Termination. If the Employee's employment is terminated (x) by the Company other than for Cause, or (y) voluntarily by the Employee for Good Reason, then the Employee shall be entitled to receive the following benefits:

(A) monthly severance payments during the period from the date of the Employee's termination until the date twelve (12) months after the effective date of the termination (the " **Severance Period**") equal to the monthly salary which the Employee was receiving immediately prior to the termination date;

(B) monthly severance payments during the Severance Period equal to one-twelfth (1/12 th ) of the Employee's Target Bonus for the fiscal year in which the termination occurs for each month in which severance payments are made to the Employee pursuant to subsection (A) above;

(C) a lump sum cash payment equal to the prorated amount of the Employee's Target Bonus for the fiscal year in which the termination occurs, calculated based on the number of months during such fiscal year in which the Employee was employed by the Company (and a prior fiscal year to the extent the bonus for such prior fiscal year has not yet been declared and paid by the Company) multiplied by the average of the actual bonus percentage payouts in the two (2) most recent years prior to the year of termination (i.e., if Employee is terminated in fiscal year 2019 at a time when the bonus for fiscal year 2018 had not yet been declared and paid, then Employee shall be entitled to receive a prorated Target Bonus for the months employed during fiscal years 2018 and 2019 multiplied by the average of the actual bonus percentage payouts in fiscal years 2016 and 2017);

(D) if Employee, and any Family Members has coverage on the date of Employee's termination of employment under a group health plan sponsored by the Company, then reimbursement to Employee the employer portion of the total applicable premium cost for continued group health plan coverage under COBRA for a period of up to twelve (12) months following Employee's termination of employment or if earlier, the date upon which Employee and Employee's eligible dependents become covered under similar plans, provided that Employee validly elects and is eligible to continue coverage under COBRA for Employee and the Family Members, and, provided further, that if the Company determines in its sole discretion that it cannot provide the COBRA reimbursement benefits without potentially violating applicable laws (including, without limitation, Section 2716 of the Public Health Service Act and the Employee Retirement Income Security Act of 1974, as amended), the Company will in lieu thereof provide to Employee a taxable lump sum payment in an amount equal to the monthly COBRA premium that Employee would be required to pay to continue the group health coverage in effect on the date of Employee's termination of employment (which amount will be based on the premium for the first month of COBRA coverage) for a period of twelve (12) months following Employee's termination of employment, which payment will be made regardless of whether Employee elects COBRA continuation coverage; and

(E) fifty percent (50%) of Employee's then-outstanding and unvested Equity Awards shall automatically vest in full and become immediately exercisable or issued.

(iii) Disability; Death. If the Company terminates Employee's employment as a result of Employee's disability, or Employee's employment terminates due to his or her death, then Employee shall not be entitled to receive severance or other benefits except for those that have been earned but not yet paid under this agreement and for those, if any, as may be established under the Company's then existing benefit plans and practices or pursuant to other written agreements with the Company.

3. Definition of Terms. The following terms referred to in this Agreement shall have the following meanings:

(a) Change of Control. "**Change of Control**" shall mean the occurrence of any of the following events:

(i) Ownership. Any "**Person**" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) is or becomes the "**Beneficial Owner**" (as defined in Rule l3d-3 under said Act), directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the total voting power represented by the Company's then outstanding voting securities *without* the approval of the Board; or

(ii) Merger/Sale of Assets. A merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the shareholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

(iii) Change in Board Composition. A change in the composition of the Board, as a result of which fewer than a majority of the directors are Incumbent Directors. "**Incumbent Directors**" shall mean directors who either (A) are directors of the Company as of May 1, 2018, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but shall not include an individual whose election or nomination is in connection with an actual or threatened Proxy contest relating to the election of directors to the Company).

(b) Cause. "**Cause**" shall mean (i) gross negligence or willful misconduct in the performance of the Employee's duties to the Company where such gross negligence or willful misconduct has resulted or is likely to result in substantial and material damage to the Company or its subsidiaries, (ii) repeated unexcused absences from the Company, (iii) commission of any act of fraud

with respect to the Company, or (v) conviction of a felony or a crime involving moral turpitude and causing material harm to the standing and reputation of the Company, in each case as determined in good faith by the Board.

(c) Disability. "**Disability**" shall mean total and permanent disability as defined in Section 22(e)(3) of the Internal Revenue Code unless the Company maintain a long-term disability plan at the time of Employee's termination, in which case the determination of disability under such plan shall also be considered "Disability" for purposes of this Agreement.

(d) Good Reason. "**Good Reason**" shall mean the Employee's voluntary termination, upon thirty (30) days prior written notice to the Company, after any one of the following events: (i) a material reduction or change in job duties, responsibilities and requirements inconsistent with the Employee's position with the Company and the Employee's prior duties, responsibilities and requirements (including, for example, but not by way of limitation, a material reduction due to the Company becoming part of a larger entity, unless Employee receives substantially the same level of job duties, responsibilities and requirements with respect to the total combined entity and not only with respect to the Company as a division, subsidiary or business unit of the total combined entity (e.g., a material reduction as a result of the Chief Financial Officer of the Company not having the job duties, responsibilities and requirements as the Chief Financial Officer of the combined entity)); (ii) a material reduction in the authority, duties, or responsibilities of the supervisor to whom Employee is required to report (including, for example, but not by way of limitation, a material reduction due to the Company becoming a part of a larger entity and Employee no longer reporting to the Chief Executive Officer of the total combined entity) (iii) a material reduction of the Employee's base compensation; or (iv) the Employee's refusal to relocate to a facility or location more than thirty (30) miles from the Company's current location; provided, however, that (A) a voluntary termination of Employee for any events listed under this Section (d)(i) through (d)(iv) shall not constitute "Good Reason" if such event or events are cured by the Company within thirty (30) days after receipt of written notice from the Employee of Employee's intent to terminate employment pursuant to this Section and (B) a voluntary termination of Employee pursuant to Section 2(c)(ii) for any events listed under this Section (d)(i) and (d)(ii) shall not consititute "Good Reason" if a material reduction or change in job duties, responsibilities and requirements is, directly or indirectly, the result of a Company-wide reduction in budgets that affect each Company business unit or division in a substantially similar manner.

(e) Target Bonus. "**Target Bonus**" shall mean that percentage of the Employee's base salary that is prescribed by the Company under its Management Bonus Program as the percentage of such base salary payable to the Company as a bonus if the Company pays bonuses at one-hundred percent (100%) of its operating plan.

4. Limitation on Payments. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code and, (ii) but for this Section 4, would be subject to the excise tax imposed by Section 4999 of the Code, then Employee's severance benefits under Section 2 (the "**280G Amounts**") will be either:

(a) delivered in full; or

(b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Employee on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. Unless the Company and Employee otherwise agree in writing, any determination required under this Section 4 will be made in writing by a nationally recognized firm of independent public accountants selected by the Company (the "**Accountants**"), whose determination will be conclusive and binding upon Employee and the Company for all purposes. For purposes of making the calculations required by this Section 4, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Employee will furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company will bear all costs the Accountants may incur in connection with any calculations contemplated by this Section 4.

In the event that a reduction of 280G Amounts is made in accordance with this Section 4, the reduction will occur, with respect to the 280G Amounts considered parachute payments within the meaning of Section 280G of the Code, in the following order: (1) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the excise tax will be the first cash payment to be reduced); (2) cancellation of equity awards that were granted "contingent on a change in ownership or control" within the meaning of Code Section 280G; (3) reduction of the accelerated vesting of equity awards in the reverse order of date of grant of the awards (i.e., the vesting of the most recently granted equity awards will be cancelled first); and (4) reduction of employee benefits in reverse chronological order (i.e., the benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first benefit to be reduced). In no event will Employee have any discretion with respect to the ordering of payment reductions.

5. Successors. Any successor to the Company (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. The terms of this Agreement and all of the Employee's rights hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

6. Notice. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. Mailed notices to the Employee shall be addressed to the Employee at the home address which the Employee most

recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

7. Conditions to Receipt of Severance. As a condition to receiving the severance and other benefits under this Agreement, Employee will be required to sign and not revoke a separation and release of claims agreement in substantially the form attached hereto as Exhibit A (the "**Release**"). The Release must become effective and irrevocable no later than the sixtieth (60th) day following Employee's termination of employment (the "**Release Deadline Date**"). If the Release does not become effective and irrevocable by the Release Deadline Date, Employee will forfeit any right to the severance and other benefits under this Agreement. In no event will the severance or other benefits under this Agreement be paid or provided until the Release becomes effective and irrevocable. Provided that the Release becomes effective and irrevocable by the Release Deadline Date and subject to Section 9, the severance payments and benefits under this Agreement will be paid, or in the case of installments, will commence, within ten (10) days following the date that the Release becomes effective and irrevocable (such payment date, the "**Severance Start Date**"), and any severance payments or benefits otherwise payable to Employee during the period immediately following Employee's termination of employment with the Company through the Severance Start Date will be paid in a lump sum to Employee on the Severance Start Date, with any remaining payments to be made as provided in this Agreement.

8. Miscellaneous Provisions.

(a) No Duty to Mitigate. The Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking new employment or in any other manner), nor, except as otherwise provided in this Agreement, shall any such payment be reduced by any earnings that the Employee may receive from any other source.

(b) Waiver. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Whole Agreement. No agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement supersedes any agreement of the same title and concerning similar subject matter dated prior to the date of this Agreement, including but not limited to the Prior Agreement, and by execution of this Agreement both parties agree that any such predecessor agreement shall be deemed null and void.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California without reference to conflict of laws provisions.

(e) Severability. If any term or provision of this Agreement or the application thereof to any circumstance shall, in any jurisdiction and to any extent, be invalid or unenforceable, such term or provision shall be ineffective as to such jurisdiction to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable the remaining terms and provisions of this Agreement or the application of such terms and provisions to circumstances other than those as to which it is held invalid or unenforceable, and a suitable and equitable term or provision shall be substituted therefor to carry out, insofar as may be valid and enforceable, the intent and purpose of the invalid or unenforceable term or provision.

(f) Arbitration. Any dispute or controversy arising under or in connection with this Agreement may be settled at the option of either party by binding arbitration in the County of Santa Clara, California, in accordance with the rules of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator's award in any court having jurisdiction.

(g) Legal Fees and Expenses. The parties shall each bear their own expenses, legal fees and other fees incurred in connection with this Agreement. Provided, however, in the event that Employee is required to incur attorneys' fees in order to obtain any payments or benefits under this Agreement, and provided that Employee prevails on at least one material issue related to his or her claim(s) under the Plan, then the Company will reimburse the attorneys' fees incurred by Employee.

(h) No Assignment of Benefits. The rights of any person to payments or benefits under this Agreement shall not be made subject to option or assignment, either by voluntary or involuntary assignment or by operation of law, including (without limitation) bankruptcy, garnishment, attachment or other creditor's process, and any action in violation of this subsection (h) shall be void.

(i) Employment Taxes. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.

(j) Assignment by Company. The Company may assign its rights under this Agreement to an affiliate, and an affiliate may assign its rights under this Agreement to another affiliate of the Company or to the Company; provided, however, that no assignment shall be made if the net worth of the assignee is less than the net worth of the Company at the time of assignment. In the case of any such assignment, the term "Company" when used in a section of this Agreement shall mean the corporation that actually employs the Employee.

(k) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

9. Section 409A.

(a)Notwithstanding anything to the contrary in this Agreement, no severance payments or benefits to be paid or provided to Employee, if any, under this Agreement that, when considered together with any other severance payments or separation benefits, are considered deferred compensation under Section 409A of the Code, and the final regulations and any guidance promulgated thereunder (" **Section 409A**") (together, the "**Deferred Payments**") will be paid or provided until Employee has a "separation from service" within the meaning of Section 409A. Similarly, no severance payable to Employee, if any, under this Agreement that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until Employee has a "separation from service" within the meaning of Section 409A.

(b)It is intended that none of the severance payments or benefits under this Agreement will constitute Deferred Payments but rather will be exempt from Section 409A as a payment that would fall within the "short-term deferral period" as described in 9(d) below or resulting from an involuntary separation from service as described in Section 9(e) below. In no event will Employee have discretion to determine the taxable year of payment of any Deferred Payment. Any severance payments or benefits under this Agreement that would be considered Deferred Payments will be paid on, or in the case of installments commence on, the sixty-first (61 st ) day following Employee's separation from service, or if later, such time as required by Section 9(c). Except as required by Section 9(c), any payments that would have been made to Employee during the sixty (60) day period immediately following Employee's separation from service but for the preceding sentence will be paid to Employee on the sixty-first (61st) day following Employee's separation from service and any remaining payments will be made as provided in this Agreement.

(c)Notwithstanding anything to the contrary in this Agreement, if Employee is a "specified employee" within the meaning of Section 409A at the time of Employee's separation from service (other than due to death), then the Deferred Payments, if any, that are payable within the first six (6) months following Employee's separation from service, will become payable on the date six (6) months and one (1) day following the date of Employee's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, in the event of Employee's death following Employee's separation from service, but before the six (6) month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Employee's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Agreement is intended to constitute a separate payment under Section 1.409A-2(b)(2) of the Treasury Regulations.

(d)Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Payments for purposes of Section 9(a) above.

(e) Any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury Regulations that does not exceed the Section 409A Limit (as defined below) will not constitute Deferred Payments for purposes of Section 9(a) above.

(f) The foregoing provisions are intended to comply with or be exempt from the requirements of Section 409A so that none of the payments and benefits to be provided under the Agreement will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply or be exempt. The Company and Employee agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition before actual payment to Employee under Section 409A. In no event will the Company reimburse Employee for any taxes that may be imposed on Employee as result of Section 409A.

For purposes of this Agreement "**Section 409A Limit**" will mean the lesser of two (2) times: (i) Employee's annualized compensation based upon the annual rate of pay paid to Employee during the Company's taxable year preceding the Company's taxable year of Employee's termination of employment as determined under Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which Employee's employment is terminated.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duty authorized officer, as of the day and year first above written.

| | |
|---|---|
| **VIVUS, Inc.** | Employee |
| Name: | Name: |
| Title: | Title: |
| Date: | Date: |

EXHIBIT A

SEPARATION AGREEMENT AND RELEASE

**SEPARATION AGREEMENT AND RELEASE**

This Separation Agreement and Release ("**Agreement**") is made by and between _____ ("**Employee**") and VIVUS, Inc. (the "**Company**") (collectively referred to as the "**Parties**" or individually referred to as a "**Party**").

Whereas, in connection with Employee's termination of employment effective as of _____, 201__, Employee is eligible to receive the severance benefits provided in the Third Amended and Restated Change of Control and Severance Agreement (the "**Severance Agreement**") dated [DATE], 2018, subject to the terms and conditions set forth therein including (but not limited to) entering into a release of claims agreement in favor of the Company under Section 7 of the Severance Agreement.

Whereas, in consideration for such severance benefits provided under the Severance Agreement and pursuant to Section 7 of the Severance Agreement, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that Employee may have against the Company and any of the Releasees as defined below, including, but not limited to, any and all claims arising out of or in any way related to Employee's employment with or separation from the Company.

Now, therefore, Employee covenants and agrees as follows:

1. Payment of Salary and Receipt of All Benefits. Employee acknowledges and represents that, other than the consideration set forth in this Agreement, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, premiums, leaves, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Employee.

2. Release of Claims. Employee agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Employee by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "**Releasees**"). Employee, on his/her own behalf and on behalf of his/her respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, demand, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Employee may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date (as defined below) of this Agreement, including, without limitation:

a. any and all claims relating to or arising from Employee's employment relationship with the Company and the termination of that relationship;

b. any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

c. any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; the California Family Rights Act; the California Labor Code; the California Workers' Compensation Act; and the California Fair Employment and Housing Act;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the nonwithholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; and

h. any and all claims for attorneys' fees and costs.

Employee agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement. This release does not release claims that cannot be released as a matter of law, including, but not limited to, Employee's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that any such filing or participation does not give Employee the right to recover any monetary damages against the Company; Employee's release of claims herein bars Employee from recovering such monetary relief from the Company). Notwithstanding the foregoing, Employee acknowledges that any and all disputed wage claims that are released herein shall be subject to binding arbitration in accordance with Paragraph 9, which

precludes Employee from filing a claim with the Division of Labor Standards Enforcement. Further, Employee will not be deemed to have waived his/her right to indemnification in accordance with the Company's certificate of incorporation and bylaws[, which indemnifies and holds Employee harmless from and against any and all liability, loss, damages or expenses incurred as a result of, arising out of, or in any way related to, Employee's service as an officer or director of the Company, to the same extent as with respect to other officers and directors of the Company]. Employee represents that he/she has made no assignment or transfer of any right, claim, complaint, charge, duty, obligation, demand, cause of action, or other matter waived or released by this Section.

3. Acknowledgment of Waiver of Claims under ADEA. [The following provision to be included if Employee is at least 40 years of age:] Employee acknowledges that he/she is waiving and releasing any rights he/she may have under the Age Discrimination in Employment Act of 1967 ("**ADEA**"), and that this waiver and release is knowing and voluntary. Employee agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Employee acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further acknowledges that he/she has been advised by this writing that: (a) he/she should consult with an attorney prior to executing this Agreement; (b) he/she has twenty-one (21) days within which to consider this Agreement; (c) he/she has seven (7) days following his/her execution of this Agreement to revoke this Agreement; (d) this Agreement shall not be effective until after the revocation period has expired; and (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Employee signs this Agreement and returns it to the Company in less than the 21-day period identified above, Employee hereby acknowledges that he/she has freely and voluntarily chosen to waive the time period allotted for considering this Agreement. Employee acknowledges and understands that revocation must be accomplished by a written notification to the person executing this Agreement on the Company's behalf that is received prior to the Effective Date.

4. California Civil Code Section 1542. Employee acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Employee, being aware of said code section, agrees to expressly waive any rights he/she may have thereunder, as well as under any other statute or common law principles of similar effect.

5. No Pending or Future Lawsuits. Employee represents that he/she has no lawsuits, claims, or actions pending in his/her name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Employee also represents that he/she does not intend to bring any claims on his/her own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

6. Trade Secrets and Confidential Information/Company Property. Employee reaffirms and agrees to observe and abide by the terms of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement (the "**Confidentiality Agreement**"), specifically including the provisions therein regarding nondisclosure of the Company's trade secrets and confidential and proprietary information, and nonsolicitation of Company employees. Employee's signature below constitutes his/her certification under penalty of perjury that he/she has returned all documents and other items provided to Employee by the Company, developed or obtained by Employee in connection with his/her employment with the Company, or otherwise belonging to the Company.

7. No Admission of Liability. Employee understands and acknowledges that this Agreement constitutes a compromise and settlement of any and all actual or potential disputed claims by Employee. No action taken by the Company hereto, either previously or in connection with this Agreement, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Employee or to any third party.

8. Costs. The Parties shall each bear their own costs, attorneys' fees, and other fees incurred in connection with the preparation of this Agreement.

9. ARBITRATION. THE PARTIES AGREE THAT ANY AND ALL DISPUTES ARISING OUT OF THE TERMS OF THIS AGREEMENT, THEIR INTERPRETATION, AND ANY OF THE MATTERS HEREIN RELEASED, SHALL BE SUBJECT TO ARBITRATION IN SANTA CLARA COUNTY, BEFORE JUDICIAL ARBITRATION & MEDIATION SERVICES ("JAMS"), PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES ("JAMS RULES"). THE ARBITRATOR MAY GRANT INJUNCTIONS AND OTHER RELIEF IN SUCH DISPUTES. THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH CALIFORNIA LAW, INCLUDING THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL CALIFORNIA LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO ANY CONFLICT-OF-LAW PROVISIONS OF ANY JURISDICTION. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH CALIFORNIA LAW, CALIFORNIA LAW SHALL TAKE PRECEDENCE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE, AND BINDING ON THE PARTIES TO THE ARBITRATION. THE PARTIES AGREE THAT THE PREVAILING PARTY IN ANY ARBITRATION SHALL BE ENTITLED TO INJUNCTIVE RELIEF IN ANY COURT OF COMPETENT JURISDICTION TO ENFORCE THE ARBITRATION AWARD. THE PARTIES TO THE ARBITRATION SHALL EACH PAY AN EQUAL SHARE OF THE COSTS AND

EXPENSES OF SUCH ARBITRATION, AND EACH PARTY SHALL SEPARATELY PAY FOR ITS RESPECTIVE COUNSEL FEES AND EXPENSES; PROVIDED, HOWEVER, THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS TO THE PREVAILING PARTY, EXCEPT AS PROHIBITED BY LAW. THE PARTIES HEREBY AGREE TO WAIVE THEIR RIGHT TO HAVE ANY DISPUTE BETWEEN THEM RESOLVED IN A COURT OF LAW BY A JUDGE OR JURY. NOTWITHSTANDING THE FOREGOING, THIS SECTION WILL NOT PREVENT EITHER PARTY FROM SEEKING INJUNCTIVE RELIEF (OR ANY OTHER PROVISIONAL REMEDY) FROM ANY COURT HAVING JURISDICTION OVER THE PARTIES AND THE SUBJECT MATTER OF THEIR DISPUTE RELATING TO THIS AGREEMENT AND THE AGREEMENTS INCORPORATED HEREIN BY REFERENCE. SHOULD ANY PART OF THE ARBITRATION AGREEMENT CONTAINED IN THIS PARAGRAPH CONFLICT WITH ANY OTHER ARBITRATION AGREEMENT BETWEEN THE PARTIES, THE PARTIES AGREE THAT THIS ARBITRATION AGREEMENT SHALL GOVERN.

10. Tax Consequences. The Company makes no representations or warranties with respect to the tax consequences of the payments and any other consideration provided to Employee or made on his/her behalf under the terms of this Agreement. Employee agrees and understands that he/she is responsible for payment, if any, of local, state, and/or federal taxes on the payments and any other consideration provided hereunder by the Company and any penalties or assessments thereon.

11. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Agreement. Employee represents and warrants that he/she has the capacity to act on his/her own behalf and on behalf of all who might claim through him/her to bind them to the terms and conditions of this Agreement. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein.

12. No Representations. Employee represents that he/she has had an opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Agreement. Employee has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

13. Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction or arbitrator to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without said provision or portion of provision.

14. Attorneys' Fees. Except with regard to a legal action challenging or seeking a determination in good faith of the validity of the waiver herein under the ADEA, in the event that either Party brings an action to enforce or effect its rights under this Agreement, the prevailing Party shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

15. Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Employee concerning the subject matter of this Agreement and Employee's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Employee's relationship with the Company, with the exception of the Confidentiality Agreement.

16. No Oral Modification. This Agreement may only be amended in a writing signed by Employee and the Company's Chief Executive Officer or Chief Financial Officer.

17. Governing Law. This Agreement shall be governed by the laws of the State of California, without regard for choice-of-law provisions. Employee consents to personal and exclusive jurisdiction and venue in the State of California.

18. Effective Date. [Employee understands that this Agreement shall be null and void if not executed by him/her within twenty one (21) days. Each Party has seven (7) days after that Party signs this Agreement to revoke it. This Agreement will become effective on the eighth (8th) day after Employee signed this Agreement, so long as it has been signed by the Parties and has not been revoked by either Party before that date (the "Effective Date").]/OR/[If Employee is under age 40, the following provision will apply: Employee understands that this Agreement shall be null and void if not executed by him/her within seven (7) days. This Agreement will become effective on the date it has been signed by both Parties (the "**Effective Date**").]

19. Counterparts. This Agreement may be executed in counterparts and by facsimile, and each counterpart and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

20. Voluntary Execution of Agreement. Employee understands and agrees that he/she executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of his/her claims against the Company and any of the other Releasees. Employee acknowledges that:

(a) he/she has read this Agreement;

(b) he/she has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of his/her own choice or has elected not to retain legal counsel;

(c) he/she understands the terms and consequences of this Agreement and of the releases it contains; and

(d) he/she is fully aware of the legal and binding effect of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

_____, an individual

Dated: _____, 201__

[Employee Name]

VIVUS, INC.

Dated: _____, 201__By

[Name, Title]

**Exhibit 31.1**

CERTIFICATION

I, John Amos, certify that:

1. I have reviewed this quarterly report on Form 10-Q of VIVUS, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2018

By: /s/ John Amos
John Amos
Chief Executive Officer

**Exhibit 31.2**

CERTIFICATION

I, Mark K. Oki, certify that:

1. I have reviewed this quarterly report on Form 10-Q of VIVUS, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2018

By: /s/ Mark K. Oki
Mark K. Oki
Chief Financial Officer and Chief Accounting Officer

**Exhibit 32**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER**
**PURSUANT TO**
**18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, John Amos, Chief Executive Officer of VIVUS, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of VIVUS, Inc. on Form 10-Q for the period ended June 30, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of VIVUS, Inc. This written statement is being furnished to the Securities and Exchange Commission as an exhibit to such Quarterly Report on Form 10-Q. A signed original of this statement has been provided to VIVUS, Inc. and will be retained by VIVUS, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Date: August 7, 2018

By: /s/ John Amos
John Amos
Chief Executive Officer

I, Mark K. Oki, Chief Financial Officer and Chief Accounting Officer of VIVUS, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of VIVUS, Inc. on Form 10-Q for the period ended June 30, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of VIVUS, Inc. This written statement is being furnished to the Securities and Exchange Commission as an exhibit to such Quarterly Report on Form 10-Q. A signed original of this statement has been provided to VIVUS, Inc. and will be retained by VIVUS, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Date: August 7, 2018

By: /s/ Mark K. Oki
Mark K. Oki
Chief Financial Officer and Chief Accounting Officer