

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

VIVUS, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3136179
(I.R.S. Employer
Identification Number)

**900 E. HAMILTON AVENUE, SUITE 550
CAMPBELL, CA 95008**
(Address of principal executive offices, including zip code)

VIVUS, Inc. 2018 Equity Incentive Plan
(Full title of the plan)

Mark K. Oki
Chief Financial Officer and Chief Accounting Officer
VIVUS, Inc.

**900 E. Hamilton Avenue, Suite 550
Campbell, CA 95008
(650) 934-5200**
(Name, address, and telephone number, including area code, of agent for service)

Copy to:

John L. Slebir
Senior Vice President, Business Development and General Counsel
VIVUS, Inc.
900 E. Hamilton Avenue, Suite 550
Campbell, CA 95008
(650) 934-5200

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 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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.001 per share, to be issued pursuant to the 2018 Equity Incentive Plan	2,649,304	\$ 4.245(2)	\$ 11,246,295.48(2)	\$ 1,364

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the common stock of VIVUS, Inc. (the "Registrant") that become issuable under the Registrant's 2018 Equity Incentive Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.

(2) Estimated in accordance with Rule 457(c) and Rule 457(h) solely for the purpose of calculating the registration fee on the basis of \$4.245 per share, which represents the average of the high and low prices of the Registrant's common stock reported on The Nasdaq Global Market on October 19, 2018.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

The documents containing the information specified in this Item 1 will be sent or given to employees, officers, directors or others as specified by Rule 428(b)(1). In accordance with the rules and regulations of the Securities and Exchange Commission (the “**Commission**”) and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424.

Item 2. Registration Information and Employee Plan Annual Information.

The documents containing the information specified in this Item 2 will be sent or given to employees, officers, directors or others as specified by Rule 428(b)(1). In accordance with the rules and regulations of the Commission and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424. Such documents, together with the documents incorporated by reference herein pursuant to Item 3 of Part II of this Registration Statement on Form S-8, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act of 1933, as amended (the “**Securities Act**”), and are available without charge upon written or oral request to: VIVUS, Inc., Attn: Stock Plan Administrator, 900 E. Hamilton Avenue, Suite 550, Campbell, CA 95008, Tel: (650) 934-5200.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents and information previously filed with the Commission by the Registrant are hereby incorporated by reference in this Registration Statement:

- (a) The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed with the Commission on March 14, 2018 pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”).
- (b) The Registrant’s Annual Report on Form 10-K/A for the fiscal year ended December 31, 2017 filed with the Commission on April 26, 2018 pursuant to Section 13(a) or 15(d) of the Exchange Act.
- (c) The Registrant’s Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2018 filed with the Commission on May 8, 2018 pursuant to Section 13(a) or 15(d) of the Exchange Act.
- (d) The Registrant’s Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018 filed with the Commission on August 7, 2018 pursuant to Section 13(a) or 15(d) of the Exchange Act.
- (e) The Registrant’s Current Reports on Form 8-K filed with the Commission on January 8, 2018, January 30, 2018, February 2, 2018, February 6, 2018, March 1, 2018, March 2, 2018, March 13, 2018, April 5, 2018, May 1, 2018, May 4, 2018, May 18, 2018, June 11, 2018, June 19, 2018, July 10, 2018, August 6, 2018, August 9, 2018, August 27, 2018, September 7, 2018, September 10, 2018, September 21, 2018, September 26, 2018 and October 17, 2018 (except that any reports or portions thereof which are furnished and not filed shall not be deemed incorporated by reference in this Registration Statement).
- (f) The Registrant’s Current Report on Form 8-K/A filed with the Commission on January 8, 2018.

- (g) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A filed with the Commission on February 24, 1994 registering such shares pursuant to Section 12 of the Exchange Act, including any amendment or report updating such descriptions.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the filing of this Registration Statement, and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law ("DGCL") authorizes a court to award or a corporation's board of directors to grant indemnification to directors and officers in terms that are sufficiently broad to permit indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. The Registrant's amended and restated bylaws, as further amended, provide for the mandatory indemnification of its directors and officers to the maximum extent permitted by the DGCL. The Registrant's amended and restated bylaws, as further amended, also provide (i) that the Registrant may modify the scope of indemnification by individual contracts with its directors and officers, and (ii) that the Registrant shall not be required to indemnify any director or officer unless the indemnification is required by law, the proceeding in which indemnification is sought was authorized in advance by its board of directors, the indemnification is provided by the Registrant, in its sole discretion pursuant to powers vested in it under the DGCL or the indemnification is required by individual contract. In addition, the Registrant's amended and restated bylaws, as further amended, give it the power to indemnify its employees and agents to the maximum extent permitted by the DGCL.

The Registrant's amended and restated certificate of incorporation provides for the indemnification of directors to the fullest extent permitted under DGCL.

The Registrant has entered into indemnification agreements with its directors and executive officers, in addition to the indemnification provided for in its amended and restated bylaws, as further amended, and the Registrant intends to enter into indemnification agreements with any new directors and executive officers in the future.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Description
4.1	VIVUS, Inc. 2018 Equity Incentive Plan.
5.1	Opinion of Hogan Lovells US LLP.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Hogan Lovells US LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included as part of the signature page to this registration statement).

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be an initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Campbell, State of California, on this 24th day of October, 2018.

VIVUS, INC.

By: /s/ John L. Slebir

John L. Slebir

Senior Vice President, Business Development and General Counsel

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, John Amos and John L. Slebir, and each one of them individually, as his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any and all amendments to this Registration Statement on Form S-8 and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ John Amos</u> John Amos	Chief Executive Officer (Principal Executive Officer) and Director	October 24, 2018
<u>/s/ Mark K. Oki</u> Mark K. Oki	Chief Financial Officer and Chief Accounting Officer (Principal Financial and Accounting Officer)	October 24, 2018
<u>/s/ Thomas B. King</u> Thomas B. King	Director	October 24, 2018
<u>/s/ David Y. Norton</u> David Y. Norton	Director	October 24, 2018
<u>/s/ Jorge Plutzky, M.D.</u> Jorge Plutzky, M.D.	Director	October 24, 2018
<u>/s/ Eric W. Roberts</u> Eric W. Roberts	Director	October 24, 2018
<u>/s/ Herman Rosenman</u> Herman Rosenman	Director	October 24, 2018
<u>/s/ Allan L. Shaw</u> Allan L. Shaw	Director	October 24, 2018

VIVUS, INC.

**2018 EQUITY INCENTIVE PLAN
(Share numbers adjusted for 1-for-10 reverse stock split effected September 10, 2018)**

1. *Purposes of the Plan.* The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide incentives to individuals who perform services to the Company, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units and Performance Shares.

2. *Definitions.* As used herein, the following definitions will apply:

- (a) "*Administrator*" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.
- (b) "*Affiliate*" means any corporation or any other entity (including, but not limited to, partnerships and joint ventures) controlling, controlled by, or under common control with the Company.
- (c) "*Applicable Laws*" means the legal and regulatory requirements relating to the administration of equity-based awards, including but not limited to the related issuance of shares of Common Stock, including but not limited to, under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where Awards are, or will be, granted under the Plan.
- (d) "*Award*" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.
- (e) "*Award Agreement*" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and provisions of the Plan.
- (f) "*Board*" means the Board of Directors of the Company.
- (g) "*Change in Control*" means the occurrence of any of the following events:
 - (i) *Change in Ownership of the Company.* A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("*Person*"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection (i), the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or
 - (ii) *Change in Effective Control of the Company.* If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company

which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) *Change in Ownership of a Substantial Portion of the Company's Assets.* A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such Person) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(g), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction shall not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A of the Code, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction shall not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that shall be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(h) "*Code*" means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or Treasury Regulation thereunder will include such section or regulation, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(i) "*Committee*" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or a duly authorized committee of the Board, in accordance with Section 4 hereof.

(j) "*Common Stock*" means the common stock of the Company.

(k) "*Company*" means VIVUS, Inc., a Delaware corporation, or any successor thereto.

(l) "*Consultant*" means any consultant, independent contractor, advisor, or other natural person who provides services to the Company or its Affiliates, but who is neither an Employee nor a Director, provided the services (i) are not in connection with the offer or sale of securities in a capital-raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities, in each case, within the meaning of Form S-8 promulgated under the Securities Act of 1933, as amended (the "*Securities Act*"), and provided, further, that a Consultant will include only those persons to whom the issuance of Shares may be registered under Form S-8 promulgated under the Securities Act.

(m) "*Director*" means a member of the Board.

(n) “*Disability*” means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(o) “*Employee*” means any person, including Officers and Directors, employed by the Company or its Affiliates. Neither service as a Director nor payment of a director’s fee by the Company will be sufficient to constitute “employment” by the Company.

(p) “*Exchange Act*” means the Securities Exchange Act of 1934, as amended.

(q) “*Exchange Program*” means a program under which (i) outstanding Options or Stock Appreciation Rights are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Option or Stock Appreciation Right is reduced. For the avoidance of doubt, as set forth in Section 4(b)(viii), the Administrator may not implement an Exchange Program.

(r) “*Fair Market Value*” means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the New York Stock Exchange, the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such stock (or, the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks are reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(s) “*Fiscal Year*” means the fiscal year of the Company.

(t) “*Incentive Stock Option*” means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(u) “*Inside Director*” means a Director who is an Employee.

(v) “*Nonstatutory Stock Option*” means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(w) “*Officer*” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(x) “*Option*” means a stock option granted pursuant to the Plan.

(y) “*Outside Director*” means a Director who is not an Employee.

(z) “*Parent*” means a “parent corporation,” whether now or hereafter existing, as defined in Section 424(e) of the Code.

- (aa) *“Participant”* means the holder of an outstanding Award.
- (bb) *“Performance Goals”* will have the meaning set forth in Section 11 of the Plan.
- (cc) *“Performance Period”* means any Fiscal Year of the Company or such longer or shorter period as determined by the Administrator in its sole discretion.
- (dd) *“Performance Share”* means an Award denominated in Shares which may be earned in whole or in part upon attainment of performance goals (including without limitation any Performance Goals) or other vesting criteria as the Administrator may determine pursuant to Section 10.
- (ee) *“Performance Unit”* means an Award which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10.
- (ff) *“Period of Restriction”* means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.
- (gg) *“Plan”* means this 2018 Equity Incentive Plan.
- (hh) *“Restricted Stock”* means Shares issued pursuant to a Restricted Stock award under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.
- (ii) *“Restricted Stock Unit”* means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.
- (jj) *“Rule 16b-3”* means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
- (kk) *“Section 16(b)”* means Section 16(b) of the Exchange Act.
- (ll) *“Service Provider”* means an Employee, Director or Consultant.
- (mm) *“Share”* means a share of the Common Stock, as adjusted in accordance with Section 15 of the Plan.
- (nn) *“Stock Appreciation Right”* means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.
- (oo) *“Subsidiary”* means a “subsidiary corporation”, whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. *Stock Subject to the Plan.*

(a) Subject to the provisions of Section 15 of the Plan, the maximum aggregate number of Shares that may be issued under the Plan is equal to the sum of (i) 150,000 Shares, (ii) any Shares which have been reserved but not issued pursuant to any awards granted under the Company’s 2010 Equity Incentive Plan (the “2010 Plan”) as of the date of stockholder approval of this Plan, and (iii) any Shares subject to stock options or similar awards granted under the 2010 Plan or the Company’s 2001 Stock Option Plan (the “2001 Plan” and, together with the 2010 Plan, the “Prior Plans”) that expire or otherwise terminate without having been exercised in full and Shares issued pursuant to awards granted under the Prior Plans that are forfeited to or repurchased by the Company (up to a maximum of 2,501,127 Shares pursuant to clauses (ii) and (iii)). The Shares may be authorized, but unissued, or reacquired Common Stock. For the avoidance of doubt, Shares reacquired by the Company on an established stock exchange or national market system on which the Common Stock is listed through the use of cash proceeds received by the Company from the exercise of Options or options that were granted under a Prior Plan or the Company’s

2018 Inducement Equity Incentive Plan shall not be added to the Shares authorized for grant or issuance under this Section 3.

(b) *Full Value Awards.* Any Shares subject to Awards of Restricted Stock, Restricted Stock Units, Performance Units, and Performance Shares will be counted against the numerical limits of this Section 3 as 1.22 Shares for every one Share subject thereto. Further, if Shares acquired pursuant to any such Award are forfeited or repurchased by the Company and would otherwise return to the Plan pursuant to Section 3(c), 1.22 times the number of Shares so forfeited or repurchased will return to the Plan and will again become available for issuance.

(c) *Lapsed Awards.* If an Award expires or becomes unexercisable without having been exercised in full or, with respect to an Award of Restricted Stock Units, Performance Units or Performance Shares, is terminated due to failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights, the unissued Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). Upon the exercise of a Stock Appreciation Right settled in Shares, the gross number of Shares covered by the portion of the Award so exercised will cease to be available under the Plan. Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company due to failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise or purchase price of an Award and/or to satisfy the tax withholding obligations related to an Award will not become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 15, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Section 422 of the Code and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan under this Section 3(c).

(d) *Share Reserve.* The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. *Administration of the Plan.*

(a) *Procedure.*

(i) *Multiple Administrative Bodies.* Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) *Rule 16b-3.* To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

(iii) *Other Administration.* Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which committee will be constituted to satisfy Applicable Laws.

(b) *Powers of the Administrator.* Subject to the terms and provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

- (i) to determine the Fair Market Value;
- (ii) to select the Service Providers to whom Awards may be granted hereunder;
- (iii) to determine the number of Shares to be covered by each Award granted hereunder;
- (iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(vii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable non-U.S. laws or for qualifying for favorable tax treatment under applicable non-U.S. laws;

(viii) to modify or amend each Award (subject to Section 20(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(d) regarding Incentive Stock Options). Notwithstanding the previous sentence, the Administrator may not implement an Exchange Program;

(ix) to allow Participants to satisfy tax withholding obligations in such manner as prescribed in Section 16;

(x) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xi) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award pursuant to such procedures as the Administrator may determine; and

(xii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) *Effect of Administrator's Decision.* The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards and will be given the maximum deference permitted by Applicable Laws.

(d) *No Liability.* Under no circumstances shall the Company, its Affiliates, the Administrator, or the Board incur liability for any indirect, incidental, consequential or special damages (including lost profits) of any form incurred by any person, whether or not foreseeable and regardless of the form of the act in which such a claim may be brought, with respect to the Plan or the Company's, its Affiliates', the Administrator's or the Board's roles in connection with the Plan.

5. *Eligibility.* Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, and Performance Shares may be granted to Service Providers. Incentive Stock Options may be granted only to Employees of the Company or any Parent or Subsidiary of the Company.

6. *Stock Options.*

(a) *Grant of Stock Options.* Subject to the terms and provisions of the Plan, an Option may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand U.S. dollars (\$100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.

(b) *Exercise Price and Other Terms.* The Administrator, subject to the terms and provisions of the Plan, will have complete discretion to determine the terms and conditions of Options granted under the Plan, provided,

however, that the per Share exercise price for the Shares to be issued pursuant to exercise of an Option will not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee of the Company or any Parent or Subsidiary of the Company who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(b), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code and the Treasury Regulations thereunder.

(c) *Option Agreement.*

(i) *Terms and Conditions.* Each Option grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Option, the acceptable forms of consideration for exercise (which may include any form of consideration permitted by Section 6(c)(ii), the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(ii) *Form of Consideration.* The Administrator will determine the acceptable form(s) of consideration for exercising an Option, including the method of payment, to the extent permitted by Applicable Laws. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration to the extent permitted by Applicable Laws may include, but is not limited to:

- (1) cash;
- (2) check;
- (3) other Shares which have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option will be exercised and provided that accepting such Shares, in the sole discretion of the Administrator, will not result in any adverse accounting consequences to the Company;
- (4) by net exercise;
- (5) consideration received by the Company under a broker-assisted (or other) cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan;
- (6) a reduction in the amount of any Company liability to the Participant, including any liability attributable to the Participant's participation in any Company-sponsored deferred compensation program or arrangement;
- (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or
- (8) any combination of the foregoing methods of payment.

(d) *Term of Option.* An Option granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(e) *Exercise of Option.*

(i) *Procedure for Exercise; Rights as a Stockholder.* Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator specifies from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholdings). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No dividend or other right for which the record date is prior to the date the Shares subject to an Option are issued will be paid or payable, accrue, or cause any adjustment to an Option, except as provided in Section 15 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) *Termination of Relationship as a Service Provider.* If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three (3) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) *Disability of Participant.* If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) *Death of Participant.* If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the Option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(v) *Other Termination.* A Participant's Award Agreement also may provide that if the exercise of the Option following the termination of Participant's status as a Service Provider (other than upon the Participant's death or Disability) would result in liability under Section 16(b), then the Option will terminate on the earlier of (A) the expiration of the term of the Option set forth in the Award Agreement, or (B) the tenth (10th) day after the last date on which such exercise would result in such liability under Section 16(b). Finally, a Participant's Award Agreement may also provide that if the exercise of the Option following the termination of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of Shares would violate the registration requirements under the Securities Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option, or (B) the expiration of a period of three (3) months after the termination of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

7. *Stock Appreciation Rights.*

(a) *Grant of Stock Appreciation Rights.* Subject to the terms and provisions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) *Number of Shares.* Subject to the terms and provisions of the Plan, the Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Service Provider.

(c) *Exercise Price and Other Terms.* The Administrator, subject to the terms and provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan, provided, however, that the exercise price will not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing provisions of this Section 7(c), Stock Appreciation Rights may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code and the Treasury Regulations thereunder.

(d) *Stock Appreciation Right Agreement.* Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) *Expiration of Stock Appreciation Rights.* A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. Notwithstanding the foregoing, the rules of Section 6(e) relating to exercise and dividends also will apply to Stock Appreciation Rights.

(f) *Payment of Stock Appreciation Right Amount.* Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

- (i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times
- (ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. *Restricted Stock.*

(a) *Grant of Restricted Stock.* Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) *Restricted Stock Agreement.* Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify any Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

(c) *Transferability.* Except as provided in this Section 8, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) *Other Restrictions.* The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) *Removal of Restrictions.* Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of any Period of Restriction or at such other time as the Administrator may determine. The Administrator, in its sole discretion, may reduce or waive any restrictions for such Award and may accelerate the time at which any restrictions will lapse or be removed.

(f) *Voting Rights.* During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) *Dividends and Other Distributions.* During the Period of Restriction, no dividends and other distributions for which the record date occurs during the Period of Restriction will be paid or payable, accrue, or cause any adjustment with respect to the Shares of Restricted Stock to which the Period of Restriction applies, except as provided in Section 15 of the Plan.

(h) *Return of Restricted Stock to Company.* On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

9. *Restricted Stock Units.*

(a) *Grant.* Subject to the terms and provision of the Plan, Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units under the Plan, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) *Vesting Criteria and Other Terms.* The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit or individual goals (including without limitation continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(c) *Earning Restricted Stock Units.* Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout and may accelerate the time at which any restrictions will lapse or be removed.

(d) *Form and Timing of Payment.* Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) set forth in the Award Agreement or as otherwise provided in the applicable Award Agreement or as required by Applicable Laws. The Administrator, in its sole discretion, may pay earned Restricted Stock Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash will not reduce the number of Shares available for grant under the Plan.

(e) *Dividends and Other Distributions.* No dividends and other distributions for which the record date occurs (i) while the Shares subject to Restricted Stock Units are unvested will be paid or payable, accrue, or cause any adjustment with respect to such unvested Restricted Stock Units, or (ii) before the date that the Shares subject to vested Restricted Stock Units are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), unless the Administrator determines otherwise, will be paid or payable, accrue or cause any adjustment with respect to such Restricted Stock Units, in each case except as provided in Section 15 of the Plan.

(f) *Cancellation.* On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

10. *Performance Units and Performance Shares.*

(a) *Grant of Performance Units/Shares.* Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. Subject to the terms and provisions of the Plan, the Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant.

(b) *Value of Performance Units/Shares.* Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(c) *Performance Objectives and Other Terms.* The Administrator will set any performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Service Providers. The time period during which any performance objectives or other vesting provisions must be met will be called the "Performance Period." Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify any Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, will determine. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, business unit or individual goals (including without limitation continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(d) *Earning of Performance Units/Shares.* After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share and may accelerate the time at which any restrictions will lapse or be removed.

(e) *Form and Timing of Payment of Performance Units/Shares.* Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period, or as otherwise provided in the applicable Award Agreement or as required by Applicable Laws. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.

(f) *Dividends and Other Distributions.* No dividends and other distributions for which the record date occurs (i) while the Shares subject to Performance Units/Shares are unvested will be paid or payable, accrue, or cause any adjustment with respect to such unvested Performance Units/Shares, or (ii) before the date that the Shares subject to vested Performance Units/Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), unless the Administrator determines otherwise, will be paid or payable, accrue or cause any adjustment with respect to such Performance Units/Shares, in each case except as provided in Section 15 of the Plan.

(g) *Cancellation of Performance Units/Shares.* On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

11. *Performance Awards.* The granting and/or vesting of Awards may be made subject to the attainment of performance goals relating to one or more business criteria and may provide for a targeted level or levels of achievement (“*Performance Goals*”) including: (i) attainment of research and development milestones, (ii) bookings, (iii) business divestitures and acquisitions, (iv) cash flow, (v) cash position, (vi) contract awards or backlog, (vii) customer renewals, (viii) customer retention rates from an acquired company, business unit or division, (ix) earnings (which may include earnings before interest and taxes, earnings before taxes and net earnings), (x) earnings per Share, (xi) expenses, (xii) gross margin, (xiii) growth in stockholder value relative to the moving average of the S&P 500 Index or another index, (xiv) internal rate of return, (xv) market share, (xvi) net income, (xvii) net profit, (xviii) net sales, (xix) new product development, (xx) new product invention or innovation, (xxi) number of customers, (xxii) operating cash flow, (xxiii) operating expenses, (xxiv) operating income, (xxv) operating margin, (xxvi) overhead or other expense reduction, (xxvii) product defect measures, (xxviii) product release timelines, (xxix) productivity, (xxx) profit, (xxxi) return on assets, (xxxii) return on capital, (xxxiii) return on equity, (xxxiv) return on investment, (xxxv) return on sales, (xxxvi) revenue, (xxxvii) revenue growth, (xxxviii) sales results, (xxxix) sales growth, (xl) stock price, (xli) time to market, (xlii) total stockholder return, (xliii) working capital. Any criteria used may be (A) measured in absolute terms, (B) measured in terms of growth, (C) compared to another company or companies, (D) measured against the market as a whole and/or according to applicable market indices, (E) measured against the performance of the Company as a whole or a segment of the Company and/or (F) measured on a pre-tax or post-tax basis (if applicable). Further, any Performance Goals may be used to measure the performance of the Company as a whole or a business unit or other segment of the Company, or one or more product lines or specific markets and may be measured relative to a peer group or index. The Performance Goals may differ from Participant to Participant and from Award to Award. The Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any Participant. In all other respects, Performance Goals will be calculated in accordance with the Company’s financial statements, generally accepted accounting principles, or under a methodology established by the Administrator prior to the issuance of an Award and which is consistently applied with respect to a Performance Goal in the relevant Performance Period.

12. *Compliance With Code Section 409A.* Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A. In no event will the Company or any of its Affiliates have any obligation under the terms of this Plan to reimburse, indemnify, or hold harmless a Participant for any taxes, interest or penalties imposed, or other costs incurred, as a result of Code Section 409A.

13. *Leaves of Absence/Transfer Between Locations.* Unless the Administrator provides otherwise and except as required by Applicable Laws, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

14. *Transferability of Awards.* Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award will contain such additional terms and conditions as the Administrator deems appropriate.

15. *Adjustments; Dissolution or Liquidation; Merger or Change in Control.*

(a) *Adjustments.* In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares that may be delivered under the Plan and/or the number, class, and price of shares covered by each outstanding Award, and the numerical Share limits set forth in Section 3 of the Plan.

(b) *Dissolution or Liquidation.* In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) *Change in Control.* In the event of a merger of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection 15(c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights (or portions thereof) that are not assumed or substituted for, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock, Restricted Stock Units, and Performance Shares/Units not assumed or substituted for will lapse, and, with respect to Awards with performance-based vesting (or portions thereof) not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement between the Participant and the Company or any of its Affiliates, as applicable. In addition, if an Option or Stock Appreciation Right (or portion thereof) is not assumed or substituted for in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right (or its applicable portion) will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right (or its applicable portion) will terminate upon the expiration of such period.

For the purposes of this subsection (c) (and subsection (d) below), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a Stock Appreciation Right upon the exercise of which the Administrator determines to pay cash or a Restricted Stock Unit, Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, Performance Unit or Performance Share, for each Share subject to such Award (or in the case of an Award settled in cash, the number of implied shares determined by dividing the value of the Award by the per share consideration received by holders of Common Stock in the merger or Change in Control), to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 15(c) to the contrary, and unless otherwise provided for in an Award Agreement or other written agreement between the Participant and the Company or any of its Affiliates, as applicable, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance objectives (including any Performance Goals) will not be considered assumed if the Company or its successor modifies any of such performance objectives without the Participant's consent; provided, however, a modification to such performance objectives only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 15(c) to the contrary, if a payment under an Award Agreement is subject to Code Section 409A and if the change in control definition contained in the Award Agreement or other agreement related to the Award does not comply with the definition of "change in control" for purposes of a distribution under Code Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Code Section 409A without triggering any penalties applicable under Code Section 409A.

(d) *Outside Director Awards.* With respect to Awards granted to an Outside Director, in the event of a Change in Control, the Participant will fully vest in and have the right to exercise Options and/or Stock Appreciation Rights as to all of the Shares underlying such Award, including those Shares which otherwise would not be vested or exercisable, all restrictions on Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met, unless specifically provided otherwise under the applicable Award Agreement or other written agreement between the Participant and the Company.

16. *Tax Withholding.*

(a) *Withholding Requirements.* Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof) or such earlier time as any tax withholding obligations are due, the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, non-U.S. or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) *Withholding Arrangements.* The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (a) paying cash, check or other cash equivalents, (b) electing to have the Company withhold otherwise deliverable cash or Shares having a fair market value equal to the minimum statutory amount required to be withheld or such greater amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, (c) delivering to the Company already-owned Shares having a fair market value equal to the minimum statutory amount required to be withheld or such greater amount as the Administrator may determine, in each case, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, (d) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld, or (e) any combination of the foregoing methods of payment. The fair market value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

17. *No Effect on Employment or Service.* Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company or any Affiliate, nor will they interfere in any way with the Participant's right or the right of the Company or any Affiliate to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

18. *Date of Grant.* The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

19. *Term of Plan.* Subject to Section 23 of the Plan, the Plan will become effective upon its adoption by the Board. It will continue in effect for a term of ten (10) years from the date adopted by the Board, unless terminated earlier under Section 20 of the Plan.

20. *Amendment and Termination of the Plan.*

(a) *Amendment and Termination.* The Administrator may at any time amend, alter, suspend or terminate the Plan.

(b) *Stockholder Approval.* The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) *Effect of Amendment or Termination.* No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

21. *Conditions Upon Issuance of Shares.*

(a) *Legal Compliance.* Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) *Investment Representations.* As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

22. *Inability to Obtain Authority.* The inability of the Company to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any registration or other qualification of the Shares under any state, federal or non-U.S. law or under the rules and regulations of the Securities and Exchange Commission, the stock exchange on which Shares of the same class are then listed, or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority, registration, qualification or rule compliance will not have been obtained.

23. *Stockholder Approval.* The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

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October 24, 2018

Board of Directors
VIVUS, Inc.
900 E. Hamilton Avenue, Suite 550
Campbell, CA 95008

Ladies and Gentlemen:

We are acting as counsel to VIVUS, Inc., a Delaware corporation (the “**Company**”), in connection with its registration statement on Form S-8 (the “**Registration Statement**”), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the “**Act**”) relating to the proposed offering of up to 2,649,304 newly issued shares of the common stock, par value \$0.001 per share (the “**Common Stock**”) of the Company (the “**Shares**”), all of which shares are issuable pursuant to the VIVUS, Inc. 2018 Equity Incentive Plan (the “**Plan**”). This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have examined copies of such agreements, instruments and documents as we have deemed an appropriate basis on which to render the opinions hereinafter expressed. In our examination of the aforesaid documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the accuracy and completeness of all documents submitted to us, the authenticity of all original documents, and the conformity to authentic original documents of all documents submitted to us as copies (including pdfs). As to all matters of fact, we have relied on the representations and statements of fact made in the documents so reviewed, and we have not independently established the facts so relied on. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

This opinion letter is based as to matters of law solely on the Delaware General Corporation Law, as amended. We express no opinion herein as to any other statutes, rules or regulations.

Based upon, subject to and limited by the foregoing, we are of the opinion that following (i) effectiveness of the Registration Statement, (ii) issuance of the Shares pursuant to the terms of the Plan, and (iii) receipt by the Company of the consideration for the Shares specified in the applicable resolutions of the Board of Directors and in the Plan, the Shares will be validly issued, fully paid, and nonassessable.

This opinion letter has been prepared for use in connection with the Registration Statement. We assume no obligation to advise of any changes in the foregoing subsequent to the effective date of the Registration Statement.

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We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ HOGAN LOVELLS US LLP

HOGAN LOVELLS US LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8, pertaining to the VIVUS, Inc. 2018 Equity Incentive Plan, of our reports dated March 13, 2018 relating to the consolidated financial statements and financial statement schedule of VIVUS, Inc. and the effectiveness of VIVUS, Inc.'s internal control over financial reporting, which appear in VIVUS, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017.

/s/ OUM & CO. LLP

San Francisco, California
October 24, 2018
