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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

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

FOR THE FISCAL YEAR ENDED	COMMISSION FILE NUMBER
DECEMBER 31, 1998	0-23490

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)

605 EAST FAIRCHILD DRIVE, MOUNTAIN VIEW, CALIFORNIA 94043
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES AND ZIP CODE)

(650) 934-5200
(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE
SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:
COMMON STOCK, $.001 PAR VALUE
PREFERRED SHARE PURCHASE RIGHTS

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 [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

As of February 26, 1999, the aggregate market value of the voting stock held by non-affiliates of the Registrant was $78,631,411 (based upon the closing sales price of such stock as reported by The Nasdaq Stock Market on such date). Shares of Common Stock held by each officer, director, and holder of 5 percent or more of the outstanding Common Stock on that date have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 26, 1999, the number of outstanding shares of the Registrant's Common Stock was 31,721,292.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by Items 10, 11, 12 and 13 of Form 10-K is incorporated by reference from the Registrant's proxy statement for the 1999 Annual Stockholders' Meeting (the "Proxy Statement"), which will be filed with the Securities and Exchange Commission within 120 days after the close of the Registrant's fiscal year ended December 31, 1998.

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VIVUS, INC.

FISCAL 1998 FORM 10-K

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This Form 10-K contains "forward-looking" statements about future financial results, future products and other events that have not yet occurred. For example, statements like we "expect," we "anticipate" or we "believe" are forward-looking statements. Investors should be aware that actual results may differ materially from our expressed expectations because of risks and uncertainties about the future. We will not necessarily update the information in this Form 10-K if any forward-looking statement later turns out to be inaccurate. Details about risks affecting various aspects of our business are discussed throughout this Form 10-K. Investors should read all of these risks carefully, and should pay particular attention to risks affecting the following areas: future capital needs and uncertainty of additional financing (page 9); history of losses and limited operating history (pages 9 and 10); limited sales and marketing experience and dependent on third parties (pages 10 and 11); intense competition (page 11); dependence on key personnel (page 11); and other risk factors as stated (pages 12 through 17).

PART I

ITEM 1. BUSINESS

COMPANY OVERVIEW

VIVUS, Inc. ("VIVUS" or the "Company"), is the developer and manufacturer of MUSE(R) (alprostadil) and ACTIS(TM), two advancements in the treatment of men with erectile dysfunction ("ED"), also known as impotence. The Company's objective is to become a global leader in the development and commercialization of innovative therapies for the treatment of sexual dysfunction and urologic disorders. The Company intends to market and sell its products through distribution, co-promotion or license agreements with corporate partners. Currently VIVUS markets MUSE and ACTIS in the United States and has retained its rights to market the products in Japan. Elsewhere around the globe, MUSE is partnered with ASTRA AB ("ASTRA") and Janssen Pharmaceutica ("Janssen") through licensing and distribution agreements. VIVUS has active research, development and clinical programs, and it is currently conducting Phase III clinical trials for ALIBRA, its second-generation male ED treatment.

VIVUS STRATEGY

The Company's objective is to become a global leader in the development and commercialization of innovative therapies for the treatment of sexual dysfunction and urologic disorders. The Company is pursuing this objective through the following strategies:

Targeted Research and Development (R&D) Efforts

The Company will exploit its expertise and patent portfolio by focusing its R&D activities on sexual dysfunction, incontinence, premature ejaculation and other urologic disorders.

Focus on Development and Regulatory Review

The Company will continue to focus its R&D efforts on developing new patentable uses of known pharmacologic agents for which significant safety data already exists. The Company believes that such agents present a lower development risk profile and may progress more rapidly through the clinical development and regulatory process than agents without preexisting data.

Maintain Proprietary Technology

The Company will continue to invest in building its patent portfolio. Currently, VIVUS has been awarded 13 patents and has 19 patent applications pending in the United States. The Company also has 44 patents granted and 22 patents pending internationally.

Partnering Strategy

VIVUS is seeking a marketing partner for MUSE, ACTIS and ALIBRA in the United States. The Company has already entered into international marketing agreements for its products with ASTRA and Janssen, which cover all significant countries, except Japan. The Company is also currently seeking a partner to market, distribute and sell its products in Japan.

1998 HIGHLIGHTS

First Quarter 1998

During the first quarter, in anticipation of Pfizer's launch of Viagra (sildenafil), VIVUS increased the size of its sales force and expanded its physician call universe of urologists and ED Specialists to include primary care physicians who prescribed treatments for ED. In March, Pfizer announced the approval of sildenafil in the U.S. by the Food and Drug Administration ("FDA") and proceeded to launch sildenafil through a multi-million dollar direct-to-consumer advertising campaign, aided by intense media interest. Pfizer's campaign for sildenafil became the most successful launch to date in the history of the U.S. pharmaceutical market.

Outside the U.S., MUSE gained international regulatory approvals. VIVUS' marketing partner ASTRA launched MUSE into the United Kingdom in February. In March, the European Medicine Controls Agency ("MCA") approved VIVUS' manufacturing facility for MUSE. Also during the first quarter, MUSE was approved in South Korea.

Second quarter 1998

The ED marketplace in the United States changed dramatically during the second quarter of 1998. Primarily based on the media attention engendered by the launch of sildenafil, patients were requesting prescriptions for sildenafil from their primary care physician. Urologists, VIVUS' most cultivated audience, ceased to serve as the leading prescribers of erectile dysfunction therapy. This shift in the marketplace away from the urologist dramatically reduced the impact of VIVUS' sales organization.

VIVUS' MUSE had positive data presented in several forums during this period. The June edition of The British Journal of Urology reported on a landmark European study in 13 hospitals in the UK, France, Germany, Ireland and The Netherlands which demonstrated that 64% of men who used MUSE achieved an erection sufficient for sexual intercourse. VIVUS also released long-term safety data (in excess of 24 months) with regard to MUSE-related serious adverse effects. Serious adverse events in this long-term study were found to be similar to treatment with placebo; MUSE did not increase the incidence of heart attack, stroke, hospitalization, disability or death.

Third Quarter 1998

In July, VIVUS announced a strategic shift in its business model; VIVUS decided to seek a major pharmaceutical partner to promote MUSE in the U.S. marketplace. This change was necessary due to the erosion of market share MUSE suffered, and the very large expense associated with maintaining a competitively sized sales force for a primary care physician marketplace. The Company transferred its sales organization to ALZA Corporation ("ALZA"), and as part of the transfer, the ALZA urology sales representatives continued to detail MUSE to urologists through December 31, 1998. Additionally, the Company terminated its contract sales force agreement with Innovex.

In August, the Company announced that it had retained Credit Suisse First Boston Corporation to assist the Company in evaluating various strategic alternatives including marketing collaborations or partnerships, acquisition of the Company or other transactions.

In September, Pfizer received approval in the European Union for sildenafil. Based on the VIVUS' U.S. sales experience post-launch of sildenafil, VIVUS' distribution partners for MUSE notified the Company that they would significantly reduce their orders for MUSE.

The Company took significant steps to restructure its operations in an attempt to bring the cost structure in line with current and projected revenues. These steps included significant reductions in personnel, the closing of the contract manufacturing site located in PACO Pharmaceutical Services, Inc., and the termination of the lease for the Company's corporate office. The Company recorded a significant write-down of property, equipment and inventory. The Company significantly scaled back its manufacturing operations as a result of lower domestic and international demand for MUSE. As a result, the Company experienced an operating loss of $54.7 million, or $1.72 per share, in the third quarter of 1998.

Fourth Quarter 1998

As a result of the restructuring effort VIVUS initiated in the third quarter, the Company reported net income of $1 million, or $0.03 per share. All Company expenses for the fourth quarter of 1998 were less than the preceding quarters of 1998 as well as the same period in 1997. The Company anticipates that these steps have brought its cost structure in line with current revenue projections, however, there can be no assurance that product demand will not weaken further or that these steps will result in sustained profitability in the future.

VIVUS made significant progress during the fourth quarter in the area of international approvals. MUSE was approved and launched in Canada and it also received approval for licensing within the European Union.

The Company announced high efficacy rates for MUSE in the severely dysfunctional radical prostatectomy patient group. VIVUS also reiterated its findings regarding the safety of MUSE in combination with renewed sexual activity in older Americans.

In November, VIVUS was issued U.S. patent number 5,820,587 for "Method and Kit for Preventing Erectile Dysfunction." The patent describes and protects the use of MUSE, or other transurethral therapies, as a periodically administered treatment to prevent erectile dysfunction. The patent is based on the concept that regular administration of an appropriate therapy transurethrally increases blood flow to the penis, thereby maintaining functional erectile tissue within the penis.

VIVUS' TRANSURETHRAL SYSTEM FOR ERECTION

Administration. The transurethral system for erection is an easy and painless procedure. The end of the applicator is less than half the diameter of a man's urine stream and is inserted approximately three centimeters into the urethra. To use the transurethral system for erection, a patient urinates, shakes the penis to remove excess urine, inserts the transurethral system for erection into the urethra, releases the medication and then massages the penis between the hands for 10 seconds to distribute the medication.

The application process takes less than a minute. Once administered, the pharmacologic agent dissolves in the small amount of urine that remains in the urethra. The pharmacologic agent is absorbed by the urethral mucosa and moves across the adjacent tissue and into the erectile bodies. When successful, an erection is produced within 15 minutes of administration and lasts approximately 30-60 minutes. Many patients experience transient penile pain and/or local aching after administration and during intercourse.

Alprostadil is the first pharmacologic agent used in the transurethral system for erection. Alprostadil is the generic name for the synthetic version of prostaglandin E1, a naturally occurring vasodilator present throughout the body and at high levels in seminal fluid.

MUSE ADVANTAGES

VIVUS' transurethral system for erection represents a unique approach to treating ED and is based on the discovery that the urethra, although an excretory duct, can absorb certain pharmacologic agents into the surrounding erectile tissues. This results in enhanced blood flow to the penis. The Company's transurethral

system for erection is designed to overcome the limitations of other available therapies through its unique product attributes that include:

Safety. MUSE is a safe local treatment for patients. It offers an alternative to oral treatments that may have adverse systemic effects.

Ease of Administration. The Company's transurethral system for erection is easy-to-use with minimal instruction, unlike needle injection therapy that requires precise injection into the penis.

Minimally-invasive. The Company's transurethral system for erection utilizes urethral delivery, permitting topical application to the urethral lining.

Discreet. The Company's transurethral system for erection utilizes a small, single-use disposable applicator that can be discreetly applied and is easily integrated into the normal sexual life of the patient. Administration takes less than a minute.

Quality of Erection. The Company's transurethral system for erection therapy mimics the normal vasoactive process, producing an erection that is more natural than those resulting from needle injection therapy, vacuum constriction devices or penile implants.

CURRENT THERAPIES

In addition to MUSE, the primary physiological therapies currently utilized for the treatment of ED are:

Oral Medications. In 1998, Pfizer Inc. received clearance from the FDA to market its oral treatment for ED, sildenafil. Commercial introduction of this new competitive product has adversely effected the Company's business, financial condition and results of operations. SEE "RISK FACTORS -- INTENSE COMPETITION" ON PAGE 12. Yohimbine is another oral medication currently prescribed in the United States for the treatment of ED.

Needle Injection Therapy. This form of treatment involves the needle injection of pharmacologic agents directly into the penis. These agents are generally vasoactive compounds such as alprostadil alone or in combination with phentolamine and papaverine. This form of treatment requires a prescription from a physician and instruction on self-injection. Side effects may include pain associated with injection, local pain and aching, priapism (persistent prolonged erections), fibrosis (build-up of scar tissue) and bleeding.

Vacuum Constriction Devices. This form of treatment involves the use of a mechanical system that creates a vacuum around the penis, causing the erectile bodies to fill with blood. A constriction band is then placed around the base of the penis to impede blood drainage and maintain the erection. Vacuum constriction devices are large, mechanical devices that can be unwieldy and somewhat difficult to use. In addition, the erection may not seem natural since only the part of the penis beyond the constriction band is rigid, and the penis can become cold and discolored due to the constriction of blood flow. Complications encountered by some users of vacuum constriction devices include pain and difficulty ejaculating.

Penile Implants. This therapy involves the surgical implantation of a semi-rigid, rigid or inflatable device into the penile structure to mechanically simulate an erection. In addition to the risks associated with surgical procedures, there is a significant rate of complication with implants such as infection and mechanical failure of the device. This may necessitate a second surgical procedure to remove or reposition the device. In addition, due to the scarring associated with the implant procedure, the patient may no longer be a viable candidate for less radical therapies.

SALES AND MARKETING

The Company intends to market and sell its products worldwide through distribution, co-promotion or license agreements with corporate partners. To date, the Company has entered into marketing agreements with ASTRA and Janssen for certain international markets. The Company is currently seeking a major pharmaceutical partner to market, distribute and sell its products in the U.S. and Japan. There can be no assurance that the Company will be able to successfully enter into additional agreements with corporate

partners upon reasonable terms, if at all. To the extent that the Company enters into distribution, co-promotion or license agreements for the sale of its products, the Company will be dependent upon the efforts of third parties. These third parties may have other commitments, and there can be no assurance that they will commit the necessary resources to effectively market, distribute and sell the Company's product. SEE "RISK FACTORS -- LIMITED SALES AND MARKETING EXPERIENCE; DEPENDENCE ON THIRD PARTIES" ON PAGE 11.

Domestic

The Company believes that the launch of sildenafil has increased the role of the primary care physician ("PCP") in the treatment of ED. The Company also recognized that the infrastructure of a major pharmaceutical company was needed to effectively address the needs of the PCP. Therefore, on July 8, 1998, the Company announced a strategic decision to seek a major pharmaceutical partner to market, distribute and sell MUSE in the U.S. As the first step in the implementation of the Company's new strategy and to immediately reduce expenses, the Company agreed to facilitate the transition of its direct sales representatives to ALZA. Sales personnel joining ALZA continued to sell MUSE on a limited basis through December 31, 1998. Currently, VIVUS supports MUSE sales in the U.S. through physician and patient information/help lines, sales support for major accounts, and product education newsletters. VIVUS also participates in national urologic and sexual dysfunction forums and conferences such as the American Urologic Association annual meeting and the International Society for Impotence Research. In addition, the Company supports ongoing research and clinical investigation of MUSE and the publication of data in peer-reviewed journals.

The Company's goal is to market and sell its products through distribution, co-promotion or license agreements with corporate partners. The Company is currently holding discussions with several large pharmaceutical companies seeking a partner for its products within the U.S. marketplace. If the Company cannot establish such a relationship, it will have to develop an alternative strategy for marketing, distributing and selling its products in the U.S.

International

The Company has entered into international marketing agreements with ASTRA and Janssen, which cover all significant countries, except Japan. The Company is currently seeking a partner to market, distribute and sell its products in Japan.

The Company entered into an international marketing agreement with ASTRA in May 1996, to purchase the Company's products for resale in Europe, South America, Central America, Australia and New Zealand. To date, ASTRA has launched MUSE in several countries, including The United Kingdom and Sweden and is expected to launch in several European countries during the second quarter of 1999.

The Company signed an international marketing agreement with Janssen in January 1997, a subsidiary of Johnson & Johnson. Janssen will purchase the Company's products for resale in China, multiple Pacific Rim countries (excluding Japan), Canada, Mexico and South Africa. In October 1997, the Company signed an agreement that expanded Janssen's territories to include the Middle East, Russia, the Indian sub-continent, and Africa. To date, Janssen has launched MUSE in several countries, including Canada and Mexico.

A significant number of MUSE approvals and launches are anticipated during the course of 1999. As of March, 1999, approved/licensed countries include:

COUNTRY	APPROVED	MARKETING PARTNER
Argentina	November 1997	ASTRA
Australia	December 1998	ASTRA
Austria -- EU	March 1999	ASTRA
Bahrain	September 1998	Janssen
Brazil	January 1998	ASTRA
Canada	August 1998	Janssen
Chile	December 1998	ASTRA
Cyprus	November 1998	ASTRA
Denmark -- EU	December 1998	ASTRA
France -- EU	March 1999	ASTRA
Finland -- EU	December 1998	ASTRA
Germany -- EU	February 1999	ASTRA
Hong Kong	July 1998	Janssen
Ireland -- EU	February 1999	ASTRA
Israel	October 1998	Janssen
Kuwait	January 1999	Janssen
Luxembourg -- EU	December 1998	ASTRA
Macau	September 1998	Janssen
Mexico	May 1998	Janssen
The Netherlands -- EU	February 1999	ASTRA
New Zealand	July 1998	ASTRA
Norway	December 1998	ASTRA
Philippines	June 1998	Janssen
Portugal -- EU	February 1999	ASTRA
Singapore	July 1998	Janssen
South Africa	May 1998	Janssen
South Korea	January 1998	Janssen
Sweden -- EU	April 1998	ASTRA
Switzerland	February 1998	ASTRA
Thailand	May 1998	Janssen
United Arab Emirates	June 1998	Janssen
United Kingdom -- EU	November 1997	ASTRA

RESEARCH & DEVELOPMENT

VIVUS' objective is to become a global leader in the development and commercialization of innovative therapies for the treatment of sexual dysfunction and urologic disorders. To this end, the Company utilizes its expertise and patent portfolio by focusing its R&D activities on male and female sexual dysfunction, incontinence and premature ejaculation. The Company also investigates novel patentable uses of pharmacologic agents for which significant safety data already exists. The Company believes that such agents present a lower development risk profile and may progress more rapidly through the clinical development and regulatory process than agents without preexisting data.

DEVELOPMENT PROJECTS CURRENTLY INCLUDE:

DEVELOPMENT AREA	PRODUCT/TECHNOLOGY UNDER INVESTIGATION	STATUS
SEXUAL DYSFUNCTION		
Male Erectile Dysfunction	ALIBRA (alprostadil plus prazosin)	Phase III
Female Sexual Dysfunction	Topical application of vasodilator	Preclinical
Male Premature Ejaculation		Preclinical
UROLOGIC DISORDERS		
Urologic Cancers	Gene therapy	Preclinical
	Hormone Substitution Therapy	Preclinical
Incontinence	Novel drug delivery	Preclinical

The Company will continue to assess the feasibility and relevance of these and other R&D projects, as determined by the Company's management and Board of Directors.

CLINICAL STUDIES

In 1998 the Company completed a pharmacokinetic study of the combination of alprostadil and prazosin in men with erectile dysfunction. This study helped the Company determine the best formulation for its second-generation transurethral product containing the combination of alprostadil 125 mcg and prazosin 500 mcg (ALIBRA(R)). Based on this information, the Company initiated a 19-site Phase III study of ALIBRA for the treatment of men with erectile dysfunction. This study completed enrollment of approximately 300 patients in March 1999. Results of this trial will be submitted as part of a New Drug Application (NDA). In 1999 the Company anticipates conducting a long-term (1-year) study of ALIBRA in men with erectile dysfunction.

The Company has also completed a meta-analysis of the risks of cardiovascular adverse events in men using MUSE. This analysis from the Company's Phase III studies was prompted by the reported concerns about the potential health risks of resuming sexual relations in men with ED. The VIVUS meta-analysis showed that in men using MUSE there was no associated increase in cardiovascular adverse events. In addition, the Company's post-marketing surveillance experience with MUSE has not suggested any increased risk to the patient with cardiovascular disease.

The Company also published results of an international study of the effect of MUSE on the quality-of-life of men with erectile dysfunction and their spouses. This important study, published in December in The British Journal of Urology, demonstrated in a placebo-controlled manner that the use of MUSE resulted in improvement in a patient's self-esteem and in the relationship of the couple.

During 1998, VIVUS completed two clinical studies that examined the utility of combining the ACTIS (venous flow controller) with MUSE for the treatment of men with erectile dysfunction. Together these protocols enrolled approximately 500 couples. These studies demonstrated that the use of ACTIS could improve the efficacy of MUSE and that the drug-device combination was well tolerated. Results of these studies were presented at the meetings of the American Urological Association in June 1998 and for the International Society for Impotence Research in August 1998. In addition, the Company initiated a study to examine the efficacy of MUSE in patients who were contraindicated from using sildenafil, had a significant side effect from sildenafil, or who had failed to have an adequate response to sildenafil therapy. The results of this study will be presented at the 1999 meeting of the American Urological Association in Dallas, May 1-6, 1999.

MANUFACTURING AND RAW MATERIALS

The Company has limited experience in manufacturing and selling MUSE in commercial quantities. The Company had initially experienced product shortages due to higher than expected demand and difficulties encountered in scaling up production of MUSE. The Company leased 90,000 square feet of space in New

Jersey in which it has constructed manufacturing and testing facilities. The FDA and MCA authorized the Company to begin commercial production and shipment of MUSE from its new facility in June and March 1998, respectively. In September 1998, the Company closed its contract manufacturing site within PACO Pharmaceutical Services, Inc. and significantly scaled back its manufacturing operations in the New Jersey facility, as a result of lower domestic and international demand for MUSE. Production is currently significantly below capacity for the plant resulting in a higher per unit cost. As a result, the Company expects that gross margin from the sale of MUSE will be lower in future periods, which will have a material adverse affect on the Company's business, financial condition and results of operations.

The Company obtains its supply of alprostadil from two sources. The first is Spolana Chemical Works a.s. in Neratovice, Czech Republic ("Spolana") pursuant to a supply agreement that was executed in May 1997. In January 1996, the Company entered into an alprostadil supply agreement with CHINOIN Pharmaceutical and Chemical Works Co., Ltd. ("Chinoin"). Chinoin is the Hungarian subsidiary of the French pharmaceutical company Sanofi Winthrop. Both agreements were amended in December 1998, as a result of excess inventory on hand to reduce future commitments for alprostadil purchases.

The Company relies on a single injection molding company, The Kipp Group ("Kipp"), for its supply of plastic applicator components. In turn, Kipp obtains its supply of resin, a key ingredient of the applicator, from a single source, Huntsman Corporation. The Company also relies on a single source, E-Beam Services, Inc. ("E-Beam"), for sterilization of its product. There can be no assurance that the Company will be able to identify and qualify additional sources of plastic components and an additional sterilization facility. SEE "RISK FACTORS -- DEPENDENCE ON SINGLE SOURCE OF SUPPLY" ON PAGE 12.

GOVERNMENT REGULATION

The Company's research, pre-clinical development, clinical trials, manufacturing and marketing of its products are subject to extensive regulation by numerous governmental authorities in the United States and other countries. Clinical trials, manufacturing and marketing of the Company's products will be subject to the rigorous testing and approval processes of the FDA and equivalent foreign regulatory agencies. The process of obtaining FDA and other required regulatory approvals is lengthy and expensive. The Company completed pivotal clinical trials in 1995 and submitted an NDA for its first product, MUSE, to the FDA in March 1996. In November 1996, the Company received final marketing clearance from the FDA for MUSE. In November 1997, the Company obtained regulatory marketing clearance by the MCA to market MUSE in the United Kingdom. MUSE has also been approved in a significant number of countries around the globe. After regulatory approval is obtained, the Company's products are subject to continual review. SEE "RISK FACTORS -- GOVERNMENT REGULATION AND UNCERTAINTY OF PRODUCT APPROVALS" ON PAGES 13 AND 14.

In 1998, the Company leased 90,000 square feet of manufacturing space in Lakewood, New Jersey in which it has constructed manufacturing and testing facilities for the production of MUSE. The FDA and MCA authorized the Company to begin commercial production and shipment of MUSE from its new facility in June and March 1998, respectively.

VIVUS also obtained approval of MUSE through the Mutual Recognition process for the European Union on December 1, 1998. This approval triggered the individual country licensing process. Licenses are expected during the first and second quarters of 1999. MUSE launches by ASTRA into these countries are anticipated shortly after licensing.

EMPLOYEES

As of February 26, 1998, the Company employed 101 persons. Of these employees, 73 are located at the manufacturing facility in Lakewood, New Jersey, 23 are located at the Company's corporate headquarters in Mountain View, CA and 5 are in our international office. None of the Company's current employees are represented by a labor union or are the subject of a collective bargaining agreement. The Company believes that it maintains good relations with its employees.

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RISK FACTORS

FUTURE CAPITAL NEEDS AND UNCERTAINTY OF ADDITIONAL FINANCING

Cash and cash equivalents at December 31, 1998 were $23.9 million, a decrease of $67.8 million from December 31, 1997. The Company anticipates that its existing capital resources combined with anticipated future revenues might not be sufficient to support the Company's operations through the commercial introduction of MUSE in all international markets or for the introduction of any additional future products. The Company is currently seeking other sources of financing to support its operations.

On October 5, 1998, the Company's Lessor ("plaintiff") named the Company in a civil action in connection with the Company's leased manufacturing facilities, located in Lakewood, New Jersey. The Company's lease requires that the Company provide a removal security deposit in the form of cash or letter of credit. The Company and the Lessor ("plaintiff") have not been able to agree on the amount of the deposit, and the Lessor filed suit asking for specific performance in the amount of $3.3 million. The Company believes the $3.3 million security deposit is excessive and not mandated by the terms of the lease. However, if the Company is required to post a certificate of deposit of $3.3 million, this will have a material adverse effect on the Company's business and financial condition.

The Company expects that it will be required to issue additional equity or debt securities or use other financing sources including, but not limited to corporate alliances and lease financing to fund operations and the future development and possible commercial launch of its future products. The sale of additional equity securities would result in additional dilution to the Company's stockholders. The Company's working capital and additional funding requirements will depend upon numerous factors, including: (i) results of operations; (ii) demand for MUSE; (iii) the outcome of litigations; (iv) the activities of competitors; (v) the progress of the Company's research and development programs; (vi) the timing and results of pre-clinical testing and clinical trials; (vii) technological advances; and (viii) the level of resources that the Company devotes to sales and marketing capabilities.

HISTORY OF LOSSES AND LIMITED OPERATING HISTORY

The Company has generated a cumulative net loss of $109.8 million for the period from its inception through December 31, 1998. In order to sustain profitable operations, the Company must successfully manufacture and market MUSE and adjust its expenditures in conjunction with lower product revenues. The Company is subject to a number of risks including its ability to successfully market, distribute and sell its product, intense competition, and its reliance on a single therapeutic approach to erectile dysfunction and its ability to secure additional operating capital. There can be no assurance that the Company will be able to achieve profitability on a sustained basis. Accordingly, there can be no assurance of the Company's future success.

Since the launch of sildenafil, a competitive oral product, MUSE prescriptions have declined by approximately 80% in the U.S. As sildenafil is offered in other countries, it is likely that a large number of current and future impotence patients will want to try this new oral therapy and international demand for

MUSE will be negatively impacted. As a result of this and approvals to market MUSE in Europe occurring later than anticipated, the Company's international marketing partners, Janssen and Astra, have significantly reduced orders for MUSE which will have a material effect on the Company's business, financial conditions and results of operations. Furthermore, there can be no assurances that Janssen and Astra will not further reduce their orders.

During 1998, the Company took significant steps to restructure its operations in an attempt to bring the cost structure of the business in line with current demand for MUSE. These steps included significant reductions in personnel, closing the contract-manufacturing site located in PACO Pharmaceutical Services, Inc., the termination of the lease for the Company's leased corporate offices, and recorded significant write-down of property, equipment and inventory. As a result of these and other factors the Company experienced an operating loss of $80.3 million, or $2.52 per share, in the year ended December 31, 1998.

In September 1998, the Company significantly scaled back its manufacturing operations as a result of lower demand domestically and internationally for MUSE. Production is currently significantly below capacity for the plant resulting in a higher unit cost, and the Company expects that gross margin from the sale of MUSE will be lower in future periods, which will have a material adverse affect on the Company's business, financial condition and results of operations.

LIMITED SALES AND MARKETING EXPERIENCE; DEPENDENCE ON THIRD PARTIES

The Company intends to market and sell its products through distribution, co-promotion or license agreements with corporate partners. To date, the Company has entered into marketing agreements with ASTRA and Janssen for certain international markets. The Company is currently seeking a major pharmaceutical partner to market, distribute and sell its products in the United States and Japan. There can be no assurance that the Company will be able to successfully enter into additional agreements with corporate partners upon reasonable terms, if at all. To the extent that the Company enters into distribution, co-promotion or license agreements for the sale of its products, the Company will be dependent upon the efforts of third parties. These third parties may have other commitments, and there can be no assurance that they will commit the necessary resources to effectively market, distribute and sell the Company's product.

In February 1996, the Company entered into a distribution agreement with CORD Logistics, Inc. ("CORD"), a wholly owned subsidiary of Cardinal Health, Inc. Under this agreement, CORD warehouses the Company's finished goods for U.S. distribution, takes customer orders, picks, and packs and ships its product, invoices customers and collects related receivables. The Company also has access to CORD's information systems that support these functions. As a result of this distribution agreement with CORD, the Company is heavily dependent on CORD's efforts to fulfill orders and warehouse its products effectively. There can be no assurance that such efforts will be successful.

In May 1996, the Company entered into an international marketing agreement with Astra to purchase the Company's products for resale in Europe, South America, Central America, Australia and New Zealand. The marketing agreement does not have minimum purchase commitments, and ASTRA may take up to twelve months to introduce a product in a given country following regulatory approval in such country. As a result, the Company is dependent on ASTRA's efforts to market, distribute and sell the Company's products effectively in the above mentioned markets. There can be no assurance that such efforts will be successful.

In July 1996, the Company entered into a distribution agreement with Integrated Commercialization Services ("ICS,") a subsidiary of Bergen Brunswig Corporation. ICS provides "direct-to-physician" distribution, telemarketing and customer service capabilities in support of U.S. marketing and sales efforts. As a result of this distribution agreement with ICS, the Company is dependent on ICS's efforts to distribute, telemarket, and provide customer service effectively. There can be no assurance that such efforts will be successful.

In January 1997, the Company signed an international marketing agreement with Janssen Pharmaceutica, a subsidiary of Johnson & Johnson. Janssen will purchase the Company's products for resale in China, multiple Pacific Rim countries (excluding Japan), Canada, Mexico and South Africa. In October 1997, the Company signed an international marketing agreement that amended the earlier agreement with

Janssen and expanded Janssen's territories to include the Middle East, Russia, the Indian sub-continent, and Africa. The marketing agreements do not have minimum purchase commitments and the Company is dependent on Janssen's efforts to distribute and sell the Company's products effectively in the above mentioned markets. Janssen may take up to twelve months to introduce a product in a given country following regulatory approval in such country. There can be no assurance that such efforts will be successful.

INTENSE COMPETITION

Competition in the pharmaceutical and medical products industries is intense and is characterized by extensive research efforts and rapid technological progress. Certain treatments for ED exist, such as oral medications, needle injection therapy, vacuum constriction devices and penile implants, and the manufacturers of these products will continue to improve these therapies. The most significant competitive therapy is sildenafil, an oral medication marketed by Pfizer, which received regulatory approvals in the U.S. in March 1998 and in the European Union in September 1998. The commercial launch of sildenafil in the U.S. in April 1998 dramatically increased the number of men seeking treatment for impotence and significantly decreased demand for MUSE. Since the launch of sildenafil, MUSE prescriptions have declined approximately 80% in the U.S. The Company anticipates that the commercial launch of sildenafil in Europe and other international countries will decrease the international demand for MUSE and will have a material adverse effect on the Company's business, financial condition, and results of operations.

Additional competitive products in the erectile dysfunction market include needle injection therapy products from Pharmacia Upjohn and Schwartz Pharma, which were approved by the FDA in July 1995 and June 1997, respectively. Other large pharmaceutical companies are also actively engaged in the development of therapies for the treatment of ED. These companies have substantially greater research and development capabilities as well as substantially greater marketing, financial and human resources than the Company. In addition, many of these companies have significantly greater experience than the Company in undertaking pre-clinical testing, human clinical trials and other regulatory approval procedures. There are also small companies, academic institutions, governmental agencies and other research organizations that are conducting research in the area of ED. For instance, Zonagen, Inc. has filed for FDA approval of its oral treatment and has received approval in Mexico; Pentech Pharmaceutical, Inc. has an oral medication in Phase III clinical trials; ICOS Corporation has an oral medication in phase II clinical trials; and Senetek has a needle injection therapy product approved recently in Denmark and has filed for approval in other countries. These entities may market commercial products either on their own or through collaborative efforts. For example, Zonagen, Inc. announced a worldwide marketing agreement with Schering-Plough in November 1997; and ICOS Corporation formed a joint venture with Eli Lilly in October 1998 to jointly develop and market its oral treatment. The Company's competitors may develop technologies and products that are more effective than those currently marketed or being developed by the Company. Such developments would render the Company's products less competitive or possibly obsolete. The Company is also competing with respect to marketing capabilities and manufacturing efficiency, areas in which it has limited experience.

DEPENDENCE ON KEY PERSONNEL

The Company's success is highly dependent upon the skills of a limited number of key management personnel. To reach its business objectives, the Company will need to retain and hire qualified personnel in the areas of manufacturing, research and development, clinical trial management and pre-clinical testing. Due to decreases in the Company's stock price and demand for MUSE, there can be no assurance that the Company will be able to retain or hire such personnel, as the Company must compete with other companies, academic institutions, government entities and other agencies. The loss of any of the Company's key personnel or the failure to attract or retain necessary new employees could have an adverse effect on the Company's research, product development and business operations.

DEPENDENCE ON SINGLE SOURCE OF SUPPLY

The Company relies on a single injection molding company, The Kipp Group, for its supply of plastic applicator components. In turn, Kipp obtains its supply of resin, a key ingredient of the applicator, from a single source, Huntsman Corporation. The Company also relies on a single source, E-Beam Services, Inc., for sterilization of its product. There can be no assurance that the Company will be able to identify and qualify additional sources of plastic components and an additional sterilization facility. The Company is required to receive FDA approval for suppliers. The FDA may require additional clinical trials or other studies prior to accepting a new supplier. Unless the Company secures and qualifies additional sources of plastic components or an additional sterilization facility, it will be entirely dependent upon the existing supplier and E-Beam. If interruptions in these supplies or services were to occur for any reason, including a decision by existing suppliers and/or E-Beam to discontinue manufacturing or services, political unrest, labor disputes or a failure of the existing suppliers and/or E-Beam to follow regulatory guidelines, the development and commercial marketing of MUSE and other potential products could be delayed or prevented. An interruption in sterilization services or the Company's supply plastic components would have a material adverse effect on the Company's business, financial condition and results of operations.

LIMITED MANUFACTURING EXPERIENCE

The Company has limited experience in manufacturing and selling MUSE in commercial quantities. The Company initially experienced product shortages due to higher than expected demand and difficulties encountered in scaling up production of MUSE. The Company leased 90,000 square feet of space in New Jersey in which it has constructed manufacturing and testing facilities. The FDA and MCA authorized the Company to begin commercial production and shipment of MUSE from its new facility in June and March 1998, respectively. In September 1998, the Company closed its contract manufacturing site within PACO Pharmaceutical Services, Inc. and significantly scaled back its manufacturing operations in the New Jersey facility, as a result of lower domestic and international demand for MUSE. Production is currently significantly below capacity for the plant resulting in higher per unit cost. As a result, the Company expects that gross margin from the sale of MUSE will be lower in future periods, which will have a material adverse affect on the Company's business, financial condition and results of operations.

DEPENDENCE ON THE COMPANY'S TRANSURETHRAL SYSTEM FOR ERECTION

The Company currently markets a single therapeutic approach to treat ED, its transurethral system for erection. Certain side effects have been found to occur with the use of MUSE. MUSE is applied into the urinary opening and is not for men with sickle cell trait, disease, or other blood disorders. One third of men reported genital pain, causing some to stop use. A few men reported dizziness and, less commonly, fainting. To date, the incidence of post-launch adverse side effects is consistent with that experienced in clinical trials.

The existence of side effects or dissatisfaction with product results may impact a patient's decision to use or continue to use, or a physician's decision to recommend, MUSE as a therapy for the treatment of erectile dysfunction thereby affecting the commercial viability of MUSE. In addition, technological changes or medical advancements could diminish or eliminate the commercial viability of the Company's product. As a result of the Company's single therapeutic approach and its current focus on MUSE, the failure to successfully commercialize such product would have an adverse effect on the Company and could threaten the Company's ability to continue as a viable entity.

RISKS RELATING TO INTERNATIONAL OPERATIONS

The Company's product is currently marketed internationally. Changes in overseas economic and political conditions, currency exchange rates, foreign tax laws or tariffs or other trade regulations could have a material adverse effect on the Company's business, financial condition and results of operations. The international nature of the Company's business is also expected to subject it and its representatives, agents and distributors to laws and regulations of the foreign jurisdictions in which they operate or the Company's product is sold. The regulation of drug therapies in a number of such jurisdictions, particularly in the European Union, continues to develop, and there can be no assurance that new laws or regulations will not have a material

adverse effect on the Company's business, financial condition and results of operations. In addition, the laws of certain foreign countries do not protect the Company's intellectual property rights to the same extent, as do the laws of the United States.

GOVERNMENT REGULATION AND UNCERTAINTY OF PRODUCT APPROVALS

The Company's research, pre-clinical development, clinical trials, manufacturing and marketing of its products are subject to extensive regulation, rigorous testing and approval processes of the FDA and equivalent foreign regulatory agencies. In November 1996, the Company received final marketing clearance from the FDA for MUSE. In November 1997, the Company obtained regulatory marketing clearance by the MCA to market MUSE in the United Kingdom. In 1998, MUSE was also approved in many other countries.

After regulatory approval is obtained, the Company's products are subject to continual review. Manufacturing, labeling and promotional activities are continually regulated by the FDA and equivalent foreign regulatory agencies, and the Company must also report certain adverse events involving its drugs to these agencies. Previously unidentified adverse events or an increased frequency of adverse events that occur post-approval could result in labeling modifications of approved products, which could adversely effect future marketing of a drug. Finally, approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. The restriction, suspension or revocation of regulatory approvals or any other failure to comply with regulatory requirements would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company has submitted applications for approval of MUSE in several other countries. These applications will be subject to rigorous approval processes. There can be no assurance that approval in these or other countries will be granted or that these approvals if granted, will not contain significant limitations in the form of warnings, precautions or contraindications with respect to condition of use. Any delay in obtaining, or failure to obtain such approval would adversely affect the Company's ability to generate product revenue.

The Company's clinical trials for future products will generate safety data as well as efficacy data and will require substantial time and significant funding. There is no assurance that clinical trials related to future products would be completed successfully within any specified time period, if at all. Furthermore, the FDA may suspend clinical trials at any time if it is believed that the subjects participating in such trials are being exposed to unacceptable health risks.

Failure to comply with the applicable regulatory requirements can, among other things, result in fines, suspensions of regulatory approvals, product recalls, operating restrictions and criminal prosecution. In addition, the marketing and manufacturing of pharmaceutical products are subject to continuing FDA and other regulatory review, and later discovery of previously unknown problems with a product, manufacturer or facility may result in the FDA and other regulatory agencies requiring further clinical research or restrictions on the product or the manufacturer, including withdrawal of the product from the market. The restriction, suspension or revocation of regulatory approvals or any other failure to comply with regulatory requirements would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company obtains the necessary raw materials and components for the manufacture of MUSE as well as certain services, such as testing and sterilization, from third parties. The Company currently contracts with suppliers and service providers, including foreign manufacturers that are required to comply with strict standards established by the Company. Certain suppliers and service providers are required by the Federal Food, Drug, and Cosmetic Act, as amended, and by FDA regulations to follow cGMP requirements and are subject to routine periodic inspections by the FDA and certain state and foreign regulatory agencies for compliance with cGMP and other applicable regulations. Certain of the Company's suppliers were inspected for cGMP compliance as part of the approval process. However, upon routine re-inspection of these facilities, there can be no assurance that the FDA and other regulatory agencies will find the manufacturing process or facilities to be in compliance with cGMP and other regulations. Failure to achieve satisfactory cGMP compliance as confirmed by routine inspections could have a material adverse effect on the Company's ability to continue to manufacture and distribute its products and, in the most serious case, result in the issuance of a

regulatory Warning Letter or seizure or recall of products, injunction and/or civil fines or closure of the Company's manufacturing facility until cGMP compliance is achieved.

PATENTS AND PROPRIETARY RIGHTS

The Company's policy is to aggressively maintain its patent position and to enforce all of its intellectual property rights.

The Company is the exclusive licensee of United States and Canadian patents originally filed in the name of Dr. Gene Voss. These patents claim methods of treating erectile dysfunction with a vasodilator-containing ointment that is administered either topically or transurethrally.

The Company is also the exclusive licensee of patents and patent applications filed in the name of Dr. Nils G. Kock, in numerous countries. Three United States patents have issued directed to methods and compositions for treating erectile dysfunction by transurethrally administering an active agent. Two additional United States patent applications are still pending, and patents have been granted in Australia, Austria, Belgium, Canada, Finland, France, Germany, Great Britain, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Spain, Sweden and South Africa. Patent applications are pending in Denmark and Romania. The foreign patents and applications, like the U.S. patents and applications, are directed to the treatment of erectile dysfunction by transurethral administration of certain active substances including alpha-receptor blockers, vasoactive polypeptides, prostaglandins or nitroglycerin dispersed in a hydrophilic vehicle. An opposition against the granted European patent application was filed with the European Patent Office ("EPO") by the Pharmedic Company. As a result of the opposition, certain claims of the European patent application are still on appeal. Failure to defend the Company's patent position in the appeal could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company is the sole assignee of three United States patents, one divisional patent application and two continuation applications all deriving from patent applications originally filed by Alza, covering inventions of Dr. Virgil Place made while he was an employee of Alza. The patents and patent applications are directed to dosage forms for administering a therapeutic agent to the urethra, methods for treating erectile dysfunction and specific drug formulations that can be delivered transurethrally for the treatment of erectile dysfunction. The divisional and continuation applications were filed in the United States on June 7, 1995. All patents issuing on applications filed before June 8, 1995 will automatically have a term that is the greater of twenty years from the patent's effective filing date or seventeen years from the date of patent grant. Foreign patents have been granted in Australia, Europe (including Austria, Belgium, Denmark, France, Germany, Great Britain, Greece, Italy, Luxembourg, Norway, the Netherlands, Spain, Sweden and Switzerland), New Zealand, South Africa and South Korea, and foreign applications are pending in Canada, Finland, Ireland, Mexico, Portugal, and Japan.

The Company's license and assignment agreements for these patents and patent applications are royalty bearing and do not expire until the licensed patents expire. These license and assignment agreements provide that the Company may assume responsibility for the maintenance and prosecution of the patents and bring infringement actions.

In addition to the Voss, Kock and Place patents and applications identified above, the Company has six issued United States patents, seventeen pending United States patent applications, three Patent Cooperation Treaty ("PCT") applications, two granted foreign patents, and two pending foreign patent applications. Of these, the three PCT applications were filed in 1998, as were five of the United States patent applications. Several of these patents and applications further address the prevention, treatment and diagnosis of erectile dysfunction, while others are directed to prevention and/or treatment of other types of sexual dysfunction, including premature ejaculation in men, and female sexual dysfunction, generally. One of the Company's issued patents covers the Company's ACTIS(R) venous flow control device. Other pending patent applications focus on prevention and/or treatment of conditions other than sexual dysfunction, including vascular disorders such as peripheral vascular disease ("PVD").

The Company's success will depend in large part on the strength of its current and future patent position relating to the transurethral delivery of pharmacologic agents for the treatment of erectile dysfunction. The Company's patent position, like that of other pharmaceutical companies, is highly uncertain and involves complex legal and factual questions. The claims of a U.S. or foreign patent application may be denied or significantly narrowed and patents that ultimately issue may not provide significant commercial protection to the Company. The Company could incur substantial costs in proceedings before the United States Patent and Trademark Office, including interference proceedings. These proceedings could also result in adverse decisions as to the priority of the Company's licensed or assigned inventions. There is no assurance that the Company's patents will not be successfully challenged or designed around by others.

The Company is presently involved in an opposition proceeding that was instigated by the Pharmedic Company against a European patent, inventors Nils G. Kock et al., that is exclusively licensed to VIVUS. As a result of the opposition proceeding, certain pharmaceutical composition claims in the European patent were held unpatentable by the Opposition Division of the EPO. The patentability of all other claims in the patent was confirmed, i.e., those claims directed to the use of active agents in the treatment of erectile dysfunction, and to a pharmaceutical composition claim for prazosin. The Company appealed the EPO's decision with respect to the pharmaceutical composition claims that were held unpatentable. The Pharmedic Company appealed the EPO's decision with respect to the claims that were held patentable, but has since withdrawn the appeal. Despite the withdrawal of the Pharmedic Company from the appeal process, the Company has continued with its own appeal in an attempt to reinstate the composition claims. The EPO Appeals Board must make its own finding whether the claims that were deemed unpatentable by the Opposition Division are indeed patentable before it can reverse the Opposition Division's decision. There can be no assurance that the appeal will be successful or that further challenges to the Company's European patent will not occur should the Company try to enforce the patent in the various European courts.

The Company was also the first to file a Notice of Opposition to Pfizer's European patent application claiming the use of phosphodiesterase inhibitors to treat erectile dysfunction. Numerous other companies have also opposed the patent, and the Company will support these other entities in their oppositions as necessary.

There can be no assurance that the Company's products do not or will not infringe on the patent or proprietary rights of others. The Company may be required to obtain additional licenses to the patents, patent applications or other proprietary rights of others. There can be no assurance that any such licenses would be made available on terms acceptable to the Company, if at all. If the Company does not obtain such licenses, it could encounter delays in product introductions while it attempts to design around such patents, or the development, manufacture or sale of products requiring such licenses could be precluded. The Company believes there will continue to be significant litigation in the pharmaceutical industry regarding patent and other intellectual property rights.

In addition to its patent portfolio, the Company also relies on trade secrets and other unpatented proprietary technology. No assurance can be given that the Company can meaningfully protect its rights in such unpatented proprietary technology or that others will not independently develop substantially equivalent proprietary products and processes or otherwise gain access to the Company's proprietary technology. The Company seeks to protect its trade secrets and proprietary know-how, in part, with confidentiality agreements with employees and consultants. There can be no assurance that the agreements will not be breached or that the Company will have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known or be independently developed by competitors. In addition, protracted and costly litigation may be necessary to enforce and determine the scope and validity of the Company's proprietary rights.

UNCERTAINTY OF PHARMACEUTICAL PRICING AND REIMBURSEMENT

In the U.S. and elsewhere, sales of pharmaceutical products 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. With the introduction of sildenafil, third party payors have begun to restrict or eliminate reimbursement for erectile dysfunction treatments. While more than 70 percent of prescriptions in the U.S. for MUSE have been

reimbursed by third party payors since its commercial launch in January 1997, there can be no assurance that the Company's products will be considered cost effective and that reimbursement to the consumer will continue to be available or sufficient to allow the Company to sell its products on a competitive basis.

In addition, certain health care providers are moving towards a managed care system in which such providers contract to provide comprehensive health care services, including prescription drugs, for a fixed cost per person. The Company hopes to further qualify MUSE for reimbursement in the managed care environment. However, the Company is unable to predict the reimbursement policies employed by third-party health care payors. Furthermore, reimbursement for MUSE could be adversely affected by changes in reimbursement policies of governmental or private health care payors.

PRODUCT LIABILITY AND AVAILABILITY OF INSURANCE

The commercial launch of MUSE exposes the Company to a significant risk of product liability claims due to its availability to a large population of patients. In addition, pharmaceutical products are subject to heightened risk for product liability claims due to inherent side effects. The Company details potential side effects in the patient package insert and the physician package insert, both of which are distributed with MUSE, and the Company maintains product liability insurance coverage. However, the Company's product liability coverage is limited and may not be adequate to cover potential product liability exposure. Product liability insurance is expensive, difficult to maintain and current or increased coverage may not be available on acceptable terms, if at all. Product liability claims brought against the Company in excess of its insurance coverage, if any, could have a material adverse effect upon the Company's business, financial condition and results of operations.

UNCERTAINTY AND POSSIBLE NEGATIVE EFFECTS OF HEALTHCARE REFORM

The healthcare industry 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 Medicare and Medicaid spending, the creation of large insurance purchasing groups and fundamental changes to the healthcare delivery system. Due to uncertainties regarding the outcome of healthcare reform initiatives and their enactment and implementation, the Company cannot predict which, if any, of the reform proposals will be adopted or the effect such adoption may have on the Company. 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 the Company. Healthcare reform is also under consideration in some other countries.

POTENTIAL VOLATILITY OF STOCK PRICE

The stock market has experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. In addition, the market price of the Company's Common Stock has been highly volatile and is likely to continue to be so. Factors such as the Company's ability to increase demand for its product in the U.S., the Company's ability to successfully sell its product in the U.S. and internationally, variations in the Company's financial results and its ability to obtain needed financing, announcements of technological innovations or new products by the Company or its competition, comments by security analysts, adverse regulatory actions or decisions, any loss of key management, the results of the Company's clinical trials or those of its competition, changing governmental regulations, patents or other proprietary rights, product or patent litigation or public concern as to the safety of products developed by the Company, may have a significant effect on the market price of the Company's Common Stock.

ANTI-TAKEOVER EFFECT OF PREFERRED SHARES RIGHTS PLAN AND CERTAIN CHARTER AND BYLAW PROVISIONS

In February 1996, the Company's Board of Directors authorized its reincorporation in the State of Delaware (the "Reincorporation") and adopted a Preferred Shares Rights Plan. The Company's reincorporation into the State of Delaware was approved by its stockholders and became effective in May 1996. The Preferred Shares Rights Plan provides for a dividend distribution of one Preferred Shares Purchase Right (a "Right") on each outstanding share of the Company's Common Stock. The Rights will become exercisable following the tenth day after a person or group announces acquisition of 20 percent or more of the Company's Common Stock, or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20 percent or more of the Company's Common Stock. The Company will be entitled to redeem the Rights at $0.01 per Right at any time on or before the tenth day following acquisition by a person or group of 20 percent or more of the Company's Common Stock.

The Preferred Shares Rights Plan and certain provisions of the Company's Certificate of Incorporation and Bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of the Company. The Company's Certificate of Incorporation allows the Company to issue Preferred Stock without any vote or further action by the stockholders, and certain provisions of the Company's Certificate of Incorporation and Bylaws eliminate the right of stockholders to act by written consent without a meeting, 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. Certain provisions of Delaware law could also delay or make more difficult a merger, tender offer or proxy contest involving the Company, including Section 203, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years unless certain conditions are met. The Preferred Shares Rights Plan, the possible issuance of Preferred Stock, the procedures required for director nominations and stockholder proposals and Delaware law could have the effect of delaying, deferring or preventing a change in control of the Company, including without limitation, discouraging a proxy contest or making more difficult the acquisition of a substantial block of the Company's Common Stock. These provisions could also limit the price that investors might be willing to pay in the future for shares of the Company's Common Stock.

ITEM 2. PROPERTIES

The Company leases 90,000 square feet of space in New Jersey in which it has constructed manufacturing and testing facilities. The FDA and MCA authorized the Company to begin commercial production and shipment of MUSE from its new facility in June and March 1998, respectively. In September 1998, the Company closed its contract manufacturing site within PACO Pharmaceutical Services, Inc. and significantly scaled back its manufacturing operations in the New Jersey facility, as a result of lower demand domestically and internationally for MUSE.

In November 1998, the Company and its Lessor agreed to terminate the lease of approximately 53,000 square feet of space in Mountain View, California, which served as the principal site for administration, clinical trial management, regulatory affairs and monitoring of product production and quality control, as well as its research and development lab. The Company was able to secure a sub-lease that expires November 30, 1999 for significantly reduced space within the same building.

ITEM 3. LEGAL PROCEEDINGS

On February 18, 1998, a purported shareholder class action entitled Crain et al. v. Vivus, Inc. et al., was filed in Superior Court of the State of California for the County of San Mateo. Five identical complaints were subsequently filed in the same court. These complaints were filed on behalf of a purported class of persons who purchased stock between May 15, 1997 and December 9, 1997. The complaints allege that the Company and certain current and former officers or directors artificially inflated the Company's stock price by issuing false and misleading statements concerning the Company's prospects and issuing false financial statements. The complaints do not specify the damages resulting from the alleged conduct. The state court cases have been consolidated, and the Company anticipates that the plaintiffs will file a consolidated and amended complaint.

On March 16, 1998, a purported shareholder class action entitled Cramblit et al. v. Vivus, Inc. et al. was filed in the United States District Court for the Northern District of California. Five additional complaints were subsequently filed in the same court. The federal complaints were filed on behalf of a purported class of persons who purchased stock between May 2, 1997 and December 9, 1997. The federal complaints assert the same factual allegations as the state court complaints, but assert legal claims under the Federal Securities Laws. The federal court cases were consolidated, and a lead plaintiff has been appointed and the plaintiff filed a consolidated and amended complaint in 1998. The Company believes the complaints lack merit and the Company will vigorously defend itself in the pending actions.

On October 5, 1998, the Company was named in a civil action filed in the Superior Court of New Jersey. This complaint seeks specific performance and other relief in connection with the Company's leased manufacturing facilities, located in Lakewood, New Jersey. The Company's lease agreement requires that the Company provide a removal security deposit in the form of cash or a letter of credit. The Company and lessor ("plaintiff") have not been able to agree on the amount of such deposit and the plaintiff filed suit asking for specific performance in the amount of $3.3 million. The Company believes that the amount sought by the plaintiff is excessive and not mandated by the terms of the lease. However, if the Company is required to post a certificate of deposit of $3.3 million, this will have a material adverse effect on the company's business and financial condition.

In the normal course of business, the Company receives and makes inquiries regarding patent infringement and other legal matters. The Company believes that it has meritorious claims and defenses and intends to pursue any such matters vigorously. The Company is not aware of any asserted or unasserted claims against it where the resolution would have an adverse material impact on the operations or financial position of the Company.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of the Company's stockholders during the quarter ended December 31, 1998.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The Company's Common Stock trades publicly on the NASDAQ Stock Market under the symbol "VVUS." The following table sets forth for the periods indicated the quarterly high and low closing sales prices of the Common Stock on the NASDAQ Stock Market.

	THREE MONTHS ENDED			
	MARCH 31	JUNE 30	SEPTEMBER 30	DECEMBER 31
1998				
High	$15.50	$14.25	$10.25	$ 4.00
Low	9.63	5.81	2.06	2.19
1997				
High	$39.06	$25.88	$38.13	$40.56
Low	18.75	15.31	22.81	9.94

As of February 26, 1999, there were no outstanding shares of Preferred Stock and 762 holders of record of 31,721,292 shares of outstanding Common Stock. The Company has not paid any dividends since its inception and does not intend to pay any dividends on its Common Stock in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

SELECTED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE AND EMPLOYEE DATA)

SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	QUARTER ENDED,			
	MARCH 31	JUNE 30	SEPTEMBER 30	DECEMBER 31
1998				
Net income (loss)	$(2,389)	$(24,179)	$(54,725)	$1,040
Net income (loss) per diluted share	$ (0.07)	$ (0.76)	$ (1.72)	$ 0.03
1997				
Net income	$ 9,554	$ 9,958	$ 11,259	$5,846
Net income per diluted share	$ 0.27	$ 0.28	$ 0.31	$ 0.17

SELECTED ANNUAL FINANCIAL DATA

	YEAR ENDED DECEMBER 31,				
	1998	1997	1996	1995	1994
Income Statement Data:					
Product revenue -- US	$ 39,041	$128,320	$ --	$ --	$ --
Product revenue -- International	32,658	1,017	--	--	--
Milestone revenue	3,000	9,000	20,000	--	--
Total revenue	74,699	138,337	20,000	--	--
Gross margin	19,083	100,049	20,000	--	--
Operating expenses:					
Research and development	16,178	12,123	28,279	21,313	13,916
Selling, general and administrative	40,477	47,931	11,733	4,389	2,587
Write-offs and other charges	44,653	5,050	--	--	--
Total operating expenses	101,308	65,104	40,012	25,702	16,503
Income (loss) from operations	(82,225)	34,945	(20,012)	(25,702)	(16,503)
Interest and other income	1,972	4,856	3,485	2,891	1,639
Income (loss) before taxes	(80,253)	39,801	(16,527)	(22,811)	(14,864)
Net income (loss)	$ (80,253)	$ 36,617	$(16,527)	$(22,811)	$(14,864)
Net income (loss) per diluted share	$ (2.52)	$ 1.03	$ (0.55)	$ (0.85)	$ (0.63)
Shares used in per share computation	31,876	35,559	29,833	26,914	23,488
Financial position at year end:					
Working capital	$ 10,324	$ 54,888	$ 60,388	$ 19,878	$ 21,656
Total assets	$ 54,108	$150,669	$ 96,532	$ 44,049	$ 43,021
Accumulated deficit	$(109,790)	$(29,537)	$(66,154)	$(49,627)	$(26,816)
Stockholders' equity	$ 21,677	$123,930	$ 89,780	$ 41,181	$ 40,307
Additional information:					
Common shares outstanding	31,890	33,168	32,454	26,952	23,448
Number of employees	101	215	95	38	28

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

In the Management Discussion and Analysis section of the 10-K we are providing more detailed information about our operating results and changes in financial position over the past three years. This section should be read in conjunction with the Consolidated Financial Statements and related Notes beginning on page 25.

VIVUS, Inc., is the developer and manufacturer of MUSE and ACTIS, two advancements in the treatment of men with erectile dysfunction ("ED"), also known as impotence. The Company's objective is to become a global leader in the development and commercialization of innovative therapies for the treatment of sexual dysfunction and urologic disorders. The Company intends to market and sell its products through distribution, co-promotion or license agreements with corporate partners. Currently VIVUS markets MUSE and ACTIS in the United States and has maintained its rights to market the products in Japan. Elsewhere around the globe, MUSE is partnered with ASTRA and Janssen through licensing and distribution agreements. VIVUS has active research, development and clinical programs, and it is currently conducting Phase III clinical trials for ALIBRA, its second-generation male ED treatment.

1998 HIGHLIGHTS

First Quarter 1998

During the first quarter, in anticipation of Pfizer's launch of Viagra (sildenafil), VIVUS increased the size of its sales force and expanded its physician call universe of Urologists and ED Specialists to include primary care physicians who prescribed treatments for ED. In March, Pfizer announced the approval of sildenafil in the U.S. by the Food and Drug Administration ("FDA") and proceeded to launch sildenafil through a multi-million dollar direct-to-consumer advertising campaign, aided by intense media interest. Pfizer's campaign for sildenafil became the largest pharmaceutical launch to date in the history of the U.S. pharmaceutical market.

Outside the U.S., MUSE gained international regulatory approvals. VIVUS' marketing partner ASTRA launched MUSE into the United Kingdom in February. In March, the European Medicine Controls Agency ("MCA") approved VIVUS' manufacturing facility for MUSE.

Second quarter 1998

The ED marketplace in the U.S. changed dramatically during the second quarter of 1998. Primarily based on the media attention engendered by the launch of sildenafil, patients were requesting prescriptions for sildenafil from their primary care physician. Urologists, VIVUS' most cultivated audience, ceased to serve as the leading prescribers of erectile dysfunction therapy. This shift in the marketplace away from the urologist dramatically reduced the impact of VIVUS' sales organization.

VIVUS' MUSE had positive data presented in several forums during this period. The June edition of The British Journal of Urology reported on a landmark European study in 13 hospitals in the UK, France, Germany, Ireland and The Netherlands where it was demonstrated that 64% of men who used MUSE achieved an erection sufficient for sexual intercourse. VIVUS also released long-term safety data (in excess of 24 months) with regard to MUSE-related serious adverse effects. Serious adverse events in this long-term study were found to be similar to treatment with placebo; MUSE did not increase the incidence of heart attack, stroke, hospitalization, disability or death. Also during the second quarter, MUSE was approved in South Africa, the first Janssen territory.

Third Quarter 1998

In July, VIVUS announced a strategic shift in its business model; VIVUS decided to seek a major pharmaceutical partner to promote MUSE in the U.S. marketplace. This change was necessary due to the erosion of market share MUSE suffered, and the very large expense associated with maintaining a

competitively sized sales force for a primary care physician marketplace. The Company transferred its sales organization to ALZA Corporation ("ALZA"), and as part of the transfer, the ALZA urology sales representatives continued to detail MUSE to urologists through December 31, 1998. Additionally, the Company terminated its contract sales force agreement with Innovex.

In August, the Company announced that it had retained Credit Suisse First Boston Corporation to assist the Company in evaluating various strategic alternatives including marketing collaborations or partnerships, acquisition of the Company or other transactions.

In September, Pfizer received approval in the European Union for sildenafil. Based on the VIVUS' U.S. sales experience post-launch of sildenafil, VIVUS' distribution partners for MUSE notified the Company that they would significantly reduce their orders for MUSE.

The Company took significant steps to restructure its operations in an attempt to bring the cost structure in line with current and projected revenues. These steps included significant reductions in personnel, the closing of the contract manufacturing site located in PACO Pharmaceutical Services, Inc., and the termination of the lease for the Company's corporate offices. The Company recorded a significant write-down of property, equipment and inventory. The Company significantly scaled back its manufacturing operations as a result of lower domestic and international demand for MUSE. As a result, the Company experienced an operating loss of $54.7 million, or $1.72 per share, in the third quarter of 1998.

Fourth Quarter 1998

As a result of the restructuring effort VIVUS initiated in the third quarter among other things, the Company reported net income of $1 million, or $0.03 per share. All Company expenses for the fourth quarter of 1998 were less than the preceding quarters of 1998 as well as the same period in 1997. The Company anticipates that these steps have brought its cost structure in line with current revenue projections, however, there can be no assurance that product demand will not weaken further or that these steps will result in sustained profitability in the future.

VIVUS made significant progress during the fourth quarter in the area of international approvals. MUSE was approved and launched in Canada and it also received approval for licensing within the European Union.

The Company announced high efficacy rates for MUSE in the severely dysfunctional radical prostatectomy patient group. VIVUS also reiterated its findings regarding the safety of MUSE in combination with renewed sexual activity in older Americans.

In November, VIVUS was issued U.S. patent number 5,820,587 for "Method and Kit for Preventing Erectile Dysfunction." The patent describes and protects the use of MUSE, or other transurethral therapies, as a periodically administered treatment to prevent erectile dysfunction. The patent is based on the concept that regular administration of an appropriate therapy transurethrally increases blood flow to the penis, thereby maintaining functional erectile tissue within the penis.

RESULTS OF OPERATIONS

Years Ended December 31, 1998 and 1997

Product revenues for year ended December 31, 1998 were $39.0 million in the U.S. and $32.7 million internationally compared to $128.3 million in the U.S. and $1.0 internationally for the same period in 1997. The significant decline in U.S. product revenue is due to lower demand for the Company's product MUSE which resulted from the U.S. launch of sildenafil, a competitive oral treatment for erectile dysfunction. Underlying demand for MUSE domestically, as measured by retail prescriptions, has declined approximately 80% since the commercial launch of sildenafil in April 1998. Internationally, revenues increased to $32.7 million in 1998 as the Company's international marketing partners, Janssen and ASTRA, prepared to launch in various countries. As sildenafil is offered in other countries, it is likely that a large number of current and future impotence patients will want to try this new oral therapy and international demand for MUSE will be negatively impacted. As a result of this and approvals to market MUSE in Europe occurring later than

anticipated, the Company's international marketing partners, Janssen and ASTRA, have significantly reduced orders for MUSE which will have a material effect on the Company's business, financial conditions and results of operations.

Milestone revenue for the year ended December 31, 1998 included a $1 million and $2 million milestone payment from Janssen related to regulatory approvals of MUSE in South Korea and Canada respectively. This compared to the year ended December 31, 1997 which included a $5 million and $2 million in milestone payment related to signing the initial and expanded distribution agreement with Janssen, and a $2 million milestone payment associated with clearance from the MCA to market MUSE in the United Kingdom.

Cost of goods sold for the year ended December 31, 1998 were $55.6 million compared to $38.3 million for the same period in 1997. The increase was primarily a result of an inventory valuation reserve of $16.0 million, primarily related to excess raw materials and future inventory purchase commitments for raw materials in excess of anticipated future demand recorded as a part of the Company's restructuring in the third quarter of 1998. The Company expects higher costs per unit in future periods resulting from lower demand and production at significantly reduced levels.

Research and development expenses for the year ended December 31, 1998 were $16.2 million compared to $12.1 million in the year ended December 31, 1997. The increase was mainly due to increased spending associated with new product development. The Company's expects that research and development expense in future periods will decrease from 1998.

Selling, general and administrative expenses for the year ended December 31, 1998 were $40.5 million compared to $47.9 million in the year ended December 31, 1997. The decrease was primarily the result of lower marketing and advertising expenses in addition to personnel reductions in administration, sales and marketing. During 1998, the Company discontinued its direct-to-consumer-advertising, terminated its sales force services agreement with Innovex and agreed to facilitate the transition of its direct sales force to ALZA. The Company also announced its decision to seek a major pharmaceutical partner to market, distribute and sell MUSE in the U.S. and its comprehensive effort to reduce expenses.

During fiscal 1998, the Company took significant steps to restructure its operations in an attempt to bring the cost structure of the business in line with current revenue projections. These steps included significant reductions in headcount in all departments, as well as the closing of VIVUS' contract manufacturing site located within PACO Pharmaceutical Services, Inc., and the consolidation of employees at the Company's corporate headquarters into a smaller space within its current building. As a result, the Company recorded $60.7 million of costs and write downs during fiscal 1998; including a $16.0 million write-down of inventory, primarily raw materials and commitments, which is included in "Cost of Sales;" a $33.2 million write down of property; $8.3 million of other restructuring costs primarily related to personnel costs and operating lease commitments, and $3.2 million resulting from the termination of certain marketing and promotional programs.

Interest and other income for the year ended December 31, 1998 was $2.0 million, compared with $4.9 million for the same period in 1997. The decrease was primarily the result of lower average invested cash balances. The Company expects lower interest income for fiscal 1999 due to lower average invested cash balances.

Years Ended December 31, 1997 and 1996

Product revenue of $129.3 million and cost of goods sold of $38.3 million were recorded in 1997 compared with none in 1996. Product revenue and related cost of sales in 1997 were the result of the commercial launch of MUSE in the U.S. Product gross margin for 1997 was 70%.

Milestone revenue of $9.0 million was recorded in 1997 compared with $20.0 million in 1996. In 1997, milestone revenue was recorded as a result of signing the international marketing agreement with Janssen ($5 million) in January 1997, expanding the Janssen agreement ($2 million) in October 1997, and an Astra milestone payment associated with marketing approval from the MCA to market MUSE in the United Kingdom ($2 million) in November 1997. In 1996, milestone revenue was recorded as the result of signing the

international marketing agreement with ASTRA ($10 million), and upon filing the application for marketing authorization in the United Kingdom ($10 million).

Research and development expenses in 1997 decreased by 57% from 1996. This decrease resulted primarily from 1996 having higher pre-launch manufacturing costs, higher expenses associated with the preparation and filing of the Company's new drug application for MUSE and a $5.8 million charge related to the issuance of 400,000 shares of common stock to ALZA Corporation to maintain exclusive rights to certain patents and patent applications beyond 1998.

Selling, general and administrative expenses in 1997 increased by 309% from 1996. This increase resulted primarily from the addition of a direct sales force, higher product marketing expenses and costs associated with adding personnel to support the growth of the Company's operations and commercial launch of MUSE.

During the fourth quarter of 1997, the Company recorded a settlement of a lawsuit with a former consultant. Payment of the $5.1 million settlement was made on January 5, 1998.

Interest income in 1997 was $4.9 million compared with $3.5 million in 1996. The increase resulted from higher average invested cash balances primarily due to higher cash flows from operating activities which were partially offset by property and equipment purchases.

The provision for income taxes in 1997 was $3.2 million compared with none for 1996. The increase is the result of having pre-tax income primarily due to product revenue in 1997 as compared to a net loss in 1996. The effective tax rate computation for 1997 includes the effect of operating losses carried forward from prior years.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has financed operations primarily from the sale of preferred and common stock. Through December 31, 1998, VIVUS has raised $153.4 million from financing activities. Cash, cash equivalents and available-for-sale securities totaled $23.9 million at December 31, 1998 compared with $91.7 million at December 31, 1997. The $67.8 million decrease in cash during 1998 resulted from several factors, including the net loss for 1998, adjusted for non-cash expenses resulting from restructuring and write-downs, the Company's repurchase of its Common Stock during the first quarter of 1998, capital spending associated with the new manufacturing facility in New Jersey, raw material inventory purchases, and payments in the first quarter of 1998 for 1997 sales commissions and a lawsuit settlement payment.

Accounts receivable at December 31, 1998 was $5.2 million compared with $11.8 million at December 31, 1997. The decrease was primarily due to lower product sales.

Current liabilities were $24.6 million at December 31, 1998, compared with $26.7 million at December 31, 1997. Total liabilities were $32.4 million at December 31, 1998, compared with $26.7 million at December 31, 1997. The increase in liabilities primarily relates to costs associated with the restructuring, partially offset by the lawsuit settlement payment and payment of 1997 sales commissions.

Capital expenditures in the year ended December 31, 1998 were $18.6 million compared with $32.3 million for the same period in 1997. The higher capital expenditures in 1997 were primarily due to the initial phase of construction of the new manufacturing facility, in Lakewood, New Jersey and the purchase of additional manufacturing equipment. The Company anticipates that capital expenditures for 1999 will be minimal.

The Company anticipates that its existing capital resources combined with anticipated future revenues may not be sufficient to support the Company's operations through the commercial introduction of MUSE in all markets or for the introduction of any additional future products. The Company expects that it will be required to issue additional equity or debt securities or use other financing sources including, but not limited to corporate alliances and lease financing to fund operations and the future development and possible commercial launch of its future products. The sale of additional equity securities would result in additional dilution to the Company's stockholders. The Company's working capital and additional funding requirements will depend upon numerous factors, including: (i) results of operations; (ii) demand for MUSE; (iii) the outcome of litigation; (iv) the activities of competitors; (v) the progress of the Company's research and development programs; (vi) the timing and results of pre-clinical testing and clinical trials; (vii) technological advances; and (viii) the level of resources that the Company devotes to sales and marketing

capabilities.

This Form 10-K contains "forward-looking" statements about future financial results, future products and other events that have not yet occurred. For example, statements like we "expect," we "anticipate" or we "believe" are forward-looking statements. Investors should be aware that actual results may differ materially from our expressed expectations because of risks and uncertainties about the future. We will not necessarily update the information in this Form 10-K if any forward-looking statement later turns out to be inaccurate. Details about risks affecting various aspects of our business are discussed throughout this Form 10-K. Investors should read all of these risks carefully, and should pay particular attention to risks affecting the following areas: future capital needs and uncertainty of additional financing (page 9); history of losses and limited operating history (pages 9 and 10); limited sales and marketing experience and dependent on third parties (pages 10 and 11); intense competition (page 11); dependence on key personnel (page 11); and other risk factors as stated (pages 12 through 17).

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

VIVUS, INC.

1. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

The following financial statements are filed as part of this Report:

	PAGE
Report of Arthur Andersen LLP, independent auditors.....	26
Consolidated Balance Sheets as of December 31, 1997 and 1998.....	27
Consolidated Statements of Operations for the three years ended December 31, 1998.....	28
Consolidated Statements of Comprehensive Income for the three years ended December 31, 1998.....	29
Consolidated Statements of Stockholders' Equity for the three years ended December 31, 1998.....	30
Consolidated Statements of Cash Flows for the three years ended December 31, 1998.....	31
Notes to Consolidated Financial Statements.....	32

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Stockholders and Board of Directors of VIVUS, Inc.:

We have audited the accompanying consolidated balance sheets of VIVUS, Inc. (a Delaware corporation) and subsidiaries as of December 31, 1998 and 1997, and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of VIVUS, Inc. and subsidiaries at December 31, 1998 and 1997, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1998, in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has incurred significant losses during 1998 and has an accumulated deficit of approximately $110 million; at December 31, 1998, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ ARTHUR ANDERSEN LLP

San Jose, California
January 22, 1999

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT PER SHARE AMOUNT)

ASSETS

	DECEMBER 31,	
	1998	1997
Current assets:		
Cash	$ 2,989	$ 6,161
Available-for-sale securities	20,903	52,955
Accounts receivable (net of allowance for doubtful accounts of $341 and $137 at December 31, 1998 and 1997)	5,197	11,791
Inventories	5,272	9,084
Prepaid expenses and other assets	534	1,636
Total current assets	34,895	81,627
Property and equipment	19,213	36,462
Available-for-sale securities, non-current	--	32,580
Other	--	--
Total	$ 54,108	$150,669
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,277	$ 6,574
Accrued and other liabilities	21,294	20,165
Total current liabilities	24,571	26,739
Accrued and other long-term liabilities	7,860	--
Total liabilities	32,431	26,739
Commitments (Notes 8 and 9)		
Stockholders' equity:		
Common stock; $.001 par value; shares authorized -- 200,000 at December 31, 1998 and 1997; shares outstanding -- December 31, 1998, 31,890, and December 31, 1997, 33,168	32	33
Paid in capital	131,466	153,336
Accumulated other comprehensive income (loss)	(31)	98
Accumulated deficit	(109,790)	(29,537)
Total stockholders' equity	21,677	123,930
Total	$ 54,108	$150,669

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Revenue			
US product	$ 39,041	$128,320	$ --
International product	32,658	1,017	--
Milestone	3,000	9,000	20,000
Total revenue	74,699	138,337	20,000
Operating expenses:			
Cost of goods sold	55,616	38,288	
Research and development	16,178	12,123	28,279
Selling, general and administrative	40,477	47,931	11,733
Settlement of lawsuit	--	5,050	--
Write-down of property	32,163	--	--
Other restructuring costs	12,490	--	--
Total operating expenses	156,924	103,392	40,012
Income (loss) from operations	(82,225)	34,945	(20,012)
Interest and other income	1,972	4,856	3,485
Income (loss) before taxes	(80,253)	39,801	(16,527)
Provision for income taxes	--	3,184	--
Net income (loss)	$(80,253)	$ 36,617	$(16,527)
Net income (loss) per share:			
Basic	$ (2.52)	$ 1.11	$ (0.55)
Diluted	$ (2.52)	$ 1.03	$ (0.55)
Shares used in per share computation:			
Basic	31,876	32,996	29,833
Diluted	31,876	35,559	29,833

See notes to consolidated financial statements.

VIVUS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(IN THOUSANDS)

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Net Income (loss)	$(80,253)	$36,617	$(16,527)
Other comprehensive income:			
Unrealized gain (loss) on securies	(129)	21	(37)
Income tax expense (benefit)	--	(4)	--
	(129)	17	(37)
Comprehensive income (loss)	$(80,382)	$36,634	$(16,564)

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	COMMON STOCK AND PAID IN CAPITAL		UNREALIZED GAIN (LOSS) ON	DEFERRED	ACCUMULATED
	SHARES	AMOUNT	SECURITIES	COMPENSATION	DEFICIT
BALANCES, December 31, 1995	26,952	$ 91,485	$ 114	$(791)	$ (49,627)
Issuance of common stock at $14.56 per share for patent rights	400	5,821			
Sale of common stock at $13.38 per share for cash (net of issuance costs of $4,057)	4,600	57,468			
Sale of common stock through employee stock purchase plan	20	226			
Exercise of common stock options for cash	482	1,205			
Unrealized loss on securities			(37)		
Amortization of deferred compensation				443	
Net loss					(16,527)
BALANCES, December 31, 1996	32,454	156,205	77	(348)	(66,154)
Warrants exercised, net	166	--			
Sale of common stock through employee stock purchase plan	34	486			
Exercise of common stock options for cash	851	4,254			
Repurchase of common stock for cash	(337)	(7,716)			
Stock compensation costs		140		348	
Unrealized gain on securities			21		
Net income					36,617
BALANCES, December 31, 1997	33,168	153,369	98	--	(29,537)
Sale of common stock through employee stock purchase plan	77	489			
Exercise of common stock options for cash	288	576			
Repurchase of common stock for cash	(1,663)	(23,584)			
Stock compensation costs	20	648			
Unrealized loss on securities			(129)		
Net loss					(80,253)
BALANCES, December 31, 1998	31,890	$131,498	$ (31)	$ --	$(109,790)

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	$ (80,253)	$ 36,617	$ (16,527)
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:			
Depreciation and amortization	3,688	2,138	1,238
Property write-down	32,163	--	--
Inventory write-down	16,083	--	--
Stock compensation costs	648	488	443
Issuance of common stock for patent rights	--	--	5,821
Changes in assets and liabilities:			
Accounts receivable	6,594	(11,791)	--
Inventories	(12,271)	(4,544)	(4,540)
Prepaid expenses and other assets	1,102	(301)	(698)
Accounts payable	(3,297)	3,250	2,971
Accrued and other liabilities	8,989	16,737	913
Net cash provided by (used for) operating activities	(26,554)	42,594	(10,379)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Property and equipment purchases	(18,602)	(32,268)	(3,682)
Investment purchases	(180,791)	(323,609)	(177,074)
Proceeds from sale/maturity of securities	245,294	321,865	131,818
Net cash provided by (used for) investing activities	45,901	(34,012)	(48,938)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Sale of common stock	--	--	57,468
Exercise of common stock options	576	4,254	1,205
Sale of common stock through employee stock purchase plan	489	486	226
Repurchase of common stock	(23,584)	(7,716)	--
Net cash provided by (used for) financing activities	(22,519)	(2,976)	58,899
Net increase (decrease) in cash	(3,172)	5,606	(418)
CASH:			
Beginning of year	6,161	555	973
End of year	$ 2,989	$ 6,161	$ 555
NON-CASH INVESTING AND FINANCING ACTIVITIES:			
Unrealized gain (loss) on securities	$ 108	$ 21	$ (37)
SUPPLEMENTAL CASH FLOW DISCLOSURE:			
Income taxes paid	$ 71	$ 1,653	--

See notes to consolidated financial statements

VIVUS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

BUSINESS

VIVUS, Inc. was incorporated in California in 1991 to develop products for the treatment of erectile dysfunction. The Company was reincorporated in Delaware in 1996. The classification of the capital accounts reflects the effect of the reincorporation for all periods presented.

The Company obtained clearance from the U.S. Food and Drug Administration ("FDA") to manufacture and market MUSE in the U.S. in November 1996. The Company received approval to market MUSE in the United Kingdom from the Medicines Control Agency ("MCA") in November 1997, as well as approval to market MUSE by the European Union in December 1998. The Company is currently seeking marketing clearance in other countries. The Company commercially introduced MUSE in the U.S. in January 1997, and through the Company's partners, ASTRA and Janssen, launched MUSE in the United Kingdom, Sweden, Canada, and several other countries.

The Company is subject to a number of risks including its future capital needs and ability to obtain additional financing, its ability to successfully market, distribute and sell its products, its reliance on a single therapeutic approach for the treatment of erectile dysfunction, and intense competition. Accordingly, there can be no assurance of the Company's future success.

During 1998, the Company incurred a loss of $80 million and had negative operating cash flow of $26 million. These operating results were caused by a significant decline in market demand for the Company's product. This decline resulted from the domestic introduction of a competitor's product. International introductions of the competitor's products are also expected to have a similar adverse impact on demand for the Company's product in international markets. To address this adverse market condition, management recorded significant restructuring charges during 1998 (See note 6).

Management believes that these restructuring charges are adequate to bring future operating expenses in line with anticipated market demand, however, there can be no assurance that restructuring measures taken to date will be sufficient. In addition to the restructuring measures taken, the Company has plans to increase working capital by (i) obtaining approvals for the Company's products in various countries and realizing milestone payments associated with such approvals and (ii) continue its efforts related to obtaining additional marketing agreements. The Company's ability to continue as a going concern is dependent on the stabilization of market demand for the Company's product, and adequate downsizing by the Company to operate profitably at the reduced level of demand. Management plans to continue to monitor market demand and adjust operating expenses accordingly. The Company's financial statements have been prepared assuming it will continue as a going concern and do not reflect any costs or charges that could result from this uncertainty.

SIGNIFICANT ACCOUNTING POLICIES

Revenue Recognition

Product revenue is generally recognized upon shipment. While there were US product shipments in December 1996 in the U.S., the Company did not recognize product revenue nor the associated cost of sales on these shipments until 1997 because of extended rights-of-return privileges that were granted to customers only during this initial selling period. The Company invoices its international partners based on an agreed billing price per unit, that is subject to revision based on contractual formulas either up or down upon periodic reconciliations. Final pricing for product shipments to international partners is subject to contractual formulas based on the partners' net realizable price to their customers and the Company's cost of goods among other things. At the time of product shipment, the Company recognizes revenue at the lowest possible price in accordance with contractual formulas and will recognize additional revenue, if any, upon finalization of pricing with its international partners. As of December 31, 1998, the Company had deferred revenue of $5 million, representing amounts billed in excess of revenue recognized.

The Company recognized revenues of $9 million, $20 million, and $3 million in the years ended December 31, 1998, 1997, and 1996, respectively, as a result of achieving certain milestones related to its international marketing agreements. The amounts are not refundable and do not involve any significant future performance obligations.

Principles of Consolidation

The consolidated financial statements include VIVUS, Inc., VIVUS International Limited, a wholly-owned subsidiary, and VIVUS Ireland Limited, VIVUS UK Limited and VIVUS BV Limited, wholly-owned subsidiaries of VIVUS International Limited. All significant intercompany transactions and balances have been eliminated.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments purchased with an original maturity of 90 days or less to be cash equivalents.

Inventories

Inventories are stated at the lower of cost (first-in, first-out basis) or market. Cost includes material and conversion costs. Pending FDA marketing clearance, which was obtained in November 1996, the Company expensed to research and development all raw material purchases prior to October 1, 1996. Certain of these expensed raw material costs benefited 1997 and 1998 by reducing cost of sales by $4.7 million and $2.7 million, respectively. During the quarter ended September 30, 1998, the Company wrote down its inventory to align with new estimates of expected future demand for MUSE. The Company had built up its inventory level prior to and after Pfizer's launch of sildenafil and had not anticipated the impact that sildenafil (a competing product) would have on the demand for MUSE. The Company anticipated sales to ultimately increase as a result of an expanding impotence market. Given the protracted decline in demand for MUSE, the Company recorded a valuation reserve of $16.0 million, primarily related to excess raw materials and future inventory purchase commitments for raw materials. This write-down is included in "Cost of Sales," in 1998 as part of the Company's restructuring. See Note 3.

Available-for-Sale Securities

The Company accounts for available-for-sale securities in accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Available-for-sale securities represent debt securities that are stated at fair value. The difference between amortized cost (cost adjusted for amortization of premiums and accretion of discounts which are recognized as adjustments to interest income) and fair value, representing unrealized holding gains or losses, are recorded in "Accumulated Other Comprehensive Income," a separate component of stockholders' equity until realized. The Company's policy is to record debt securities as available-for-sale because the sale of such securities may be required prior to maturity. Any gains and losses on the sale of debt securities are determined on a specific identification basis.

Property

Property and equipment is stated at cost. For financial reporting, depreciation and amortization are computed using the straight-line method over estimated useful lives of three to seven years. Leasehold improvements are amortized using the straight-line method over the lesser of the estimated useful lives on remaining lease term. During 1998, the Company took multiple steps to restructure the operations of the Company to bring the cost structure in line with current and anticipated future revenues. These steps included the closing of the Company's contract manufacturing facility within PACO Pharmaceutical Services, Inc.,

and the termination of the Company's leased corporate offices. The Company recorded a $32.2 million write-down of property and equipment. This write-down was calculated in accordance with the provisions of SFAS No. 121 and represents the excess of the carrying values of, property and equipment, primarily the Company's New Jersey manufacturing leaseholds and equipment, over the projected future discounted cash flows for the Company. See Note 4.

Income Taxes

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes," which requires an asset and liability approach for financial reporting of income taxes.

License Agreements

The Company has obtained rights to patented technologies related to its initial product MUSE under several licensing agreements. These agreements generally required milestone payments during the development period and royalties on product sales. Royalties on product sales are included in cost of goods sold. Milestone payments are included in research and development expenses in 1997 and prior years.

Net Income (Loss) Per Share

Basic earnings per share are computed using the weighted average number of common shares outstanding during the periods. Diluted earnings 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 and warrants under the treasury stock method. The computation of basic and diluted earnings per share for the years ended December 31, 1998, 1997 and 1996 are as follows:

(IN THOUSANDS, EXCEPT PER SHARE DATA)	1998	1997	1996
Net income (loss)	$(80,253)	$36,617	$(16,527)
Net income (loss) per share -- Basic	$ (2.52)	$ 1.11	$ (0.55)
Common equivalent shares:			
Options	--	(0.07)	--
Warrants	--	(0.01)	--
Net income (loss) per share -- Diluted	$ (2.52)	$ 1.03	$ (0.55)
Shares used in the computation of net income (loss) per share -- Basic	31,876	32,996	29,833
Common equivalent shares:			
Options	--	2,215	--
Warrants	--	348	--
Diluted shares	31,876	35,559	29,833

Options to purchase 286,500 shares at prices ranging from $24.81 to $37.38 which were outstanding at December 31, 1997 are not included in the computation of diluted EPS for 1997 because the option prices were greater than the average market price of common shares.

Foreign Currency

Assets and liabilities recorded in foreign currencies are translated at the exchange rate on the balance sheet date. Revenue, cost and expenses are translated at average rates of exchange in effect during the year. Net gains and losses resulting from foreign exchange transactions were not material in all periods.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Reclassifications have been made to the prior years' Consolidated Financial Statements to conform to the fiscal 1998 presentation.

NOTE 2. AVAILABLE-FOR-SALE SECURITIES

The fair value and the amortized cost of available-for-sale securities at December 31, 1998 and 1997 are presented in the table that follows. Fair values are based on quoted market prices obtained from an independent broker. For each category of investment securities, the table presents gross unrealized holding gains and losses. As of December 31, 1998 available-for-sale securities with maturities between one and two years, which total $12.7 million, are classified as short term assets as it is the Company's intention to sell these securities before maturity as necessary to meet current liability obligations.

As of December 31, 1998 (in thousands):

	AMORTIZED COST	FAIR MARKET VALUE	UNREALIZED HOLDING GAINS	UNREALIZED HOLDING LOSSES
U.S. government securities.....	$16,379	$16,380	$ 7	$ (6)
Corporate debt.....	4,558	4,568	10	--
Total.....	$20,937	$20,948	$ 17	$ (6)

As of December 31, 1997 (in thousands):

	AMORTIZED COST	FAIR MARKET VALUE	UNREALIZED HOLDING GAINS	UNREALIZED HOLDING LOSSES
U.S. government securities.....	$36,255	$36,276	$148	$(127)
Corporate debt.....	49,182	49,259	79	(2)
Total.....	$85,437	$85,535	$227	$(129)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

NOTE 3. INVENTORIES

Inventories are recorded net of reserves of $14.8 million and $5.4 million as of December 31, 1998 and 1997, respectively, and consist of (in thousands):

	1998	1997
Raw materials	$4,021	$8,603
Work in process	162	190
Finished goods	1,089	291
Total	$5,272	$9,084

NOTE 4. FIXED ASSETS

Property and equipment as of December 31 consists of (in thousands):

	1998	1997
Machinery and equipment	$18,762	$10,247
Computers and software	3,866	2,884
Furniture and fixtures	2,195	781
Building Improvements	11,642	--
Construction in progress	--	27,067
	36,465	40,979
Accumulated depreciation and amortization	(17,252)	(4,517)
Property and equipment, net	$19,213	$36,462

NOTE 5. ACCRUED AND OTHER LIABILITIES

Accrued and other liabilities as of December 31 consist of (in thousands):

	1998	1997
Restructuring	15,058	--
Unearned revenue	5,040	--
Research and clinical expenses	2,337	1,579
Royalties	2,133	1,155
Income taxes	2,082	1,531
Employee compensation and benefits	902	2,308
Sales and marketing expenses	664	4,913
Manufacturing expenses	368	2,619
Other	570	1,009
Settlement of lawsuit	--	5,050
	$29,154	$20,165

NOTE 6. RESTRUCTURING AND RELATED CHARGES

During the second quarter of 1998, the Company recorded restructuring and related costs of $6.5 million. The charge included costs of $3.2 million resulting from the termination of certain marketing and promotional programs, a provision of $2.3 million for reductions in the Company's workforce that includes severance compensation and benefit costs, and a $1.0 million in write-down of fixed assets.

During the third quarter of 1998, the Company took additional steps to restructure its operations and recorded $54.2 million of costs and write-downs. These charges included a $16.0 million write-down of inventory, primarily raw materials and commitments to buy raw materials, a $32.2 million write-down in property, and $6.0 million of other restructuring costs primarily related to personnel costs and operating lease commitments. These write-downs were calculated in accordance with the provisions of SFAS No. 121 and represents the excess of the carrying value of property and equipment, primarily the Company's New Jersey manufacturing leaseholds and equipment, over the projected future discounted cash flows for the Company.

RESTRUCTURING AND RELATED CHARGES IN FISCAL 1998 (IN THOUSANDS):

	SEVERANCE AND EMPLOYEE COSTS	INVENTORY AND RELATED COMMITMENTS	PROPERTY AND RELATED COMMITMENTS	MARKETING PROGRAMS	OTHER	TOTAL
Restructuring provision.....	$ 3,069	$ 16,083	$ 34,884	$ 3,191	$ 3,708	$ 60,735
Incurred to date.....	$(1,159)	$(10,699)	$(30,020)	$(1,884)	$(1,915)	$(45,677)
Balance at December 31, 1998.....	$ 1,910	$ 5,384	$ 4,664	$ 1,307	$ 1,793	$ 15,058

The Company expects that during the fiscal year 1999 it will make cash payments of approximately $7.2 million related to the restructuring, with the remaining $7.8 million in cash payments to occur over the fiscal years 2000, 2001 and 2002.

NOTE 7. STOCKHOLDERS' EQUITY

Common Stock

The Company is authorized to issue 200 million shares of common stock. As of December 31, 1998 and 1997, 31,890,091, and 33,167,964 shares were issued and outstanding.

The Company's Board of Directors approved a stock repurchase program in May 1997 whereby the Company could purchase up to two million shares of its common stock. As of December 31, 1997, the Company had repurchased 336,700 shares at a cost of $7,716,000. During January and February 1998, the Company repurchased 1,663,300 additional shares of its common stock at a cost of $23,583,990.

In June 1997, the Company effected a two-for-one common stock split. All common stock data in the accompanying consolidated financial statements for all years presented have been adjusted to reflect this stock split.

Preferred Stock

The Company is authorized to issue 5,000,000 shares of undesignated preferred stock. Shares of preferred stock may be issued by the Company in the future, without stockholder approval, upon such terms as the Company's Board of Directors may determine.

Stock Warrants

In connection with the issuance of convertible preferred stock in 1993, the Company issued warrants exercisable for up to 528,600 shares of common stock at an exercise price of $4.31 per share. In June 1997, 203,590 warrants were exercised and the Company issued 165,928 net shares based on the market price on June 23, 1997. The remaining 325,010 warrants outstanding as of December 31, 1998 expire in 1999.

NOTE 8. STOCK OPTION AND PURCHASE PLANS

Stock Option Plans

Under the 1991 Incentive Stock Plan (the Plan), the Company may grant incentive or nonstatutory stock options or stock purchase rights (SPRs). Up to 7, 800,000 shares of common stock have been authorized for issuance under the Plan. The Plan allows the Company to grant incentive stock options (ISOs) to employees and nonstatutory stock options (NSOs) to employees, directors and consultants at not less than the fair market value (for an ISO) of the stock at the date of grant (110% of fair market value for individuals who control more than 10% of the Company stock; otherwise, not less than 85% of fair market value for an NSO), as determined by the Board of Directors. Under the Plan, 25% of the options generally become exercisable after one year and 2.0833% per month thereafter. The term of the option is determined by the Board of Directors on the date of grant but shall not be longer than ten years. The Plan allows the Company to grant SPRs to employees and consultants at not less than 85% of the fair market value of the stock at the date of grant, as determined by the Board of Directors. Sales of stock under SPRs are made pursuant to restricted stock purchase agreements containing provisions established by the Board of Directors. The Company has a right to repurchase the shares at the original sale price, which expires at a rate to be determined by the Board of Directors. As of December 31, 1998, no SPRs have been granted under the Plan.

Under the 1994 Director Option Plan (the Director Option Plan), the Company reserved 400,000 shares of common stock for issuance to nonemployee directors of the Company pursuant to nonstatutory stock options issued at the fair market value of the Company's common stock at the date of grant. Under the Director Option Plan, nonemployee directors will receive an option to purchase 32,000 shares of common stock when they join the Board of Directors. These options vest 25% after one year and 25% annually thereafter. Each director shall receive an option to purchase 8,000 shares of the Company's common stock annually upon their reelection. These options are fully exercisable ratably over eight months.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions used for grants: risk-free rates ranging from 5 - 6% and corresponding to government securities with original maturities similar to the vesting periods; expected dividend yield of 0%; expected lives of .64 years beyond vest dates; and expected volatility of 55% in all years.

Details of option activity under these plans are as follows:

	NUMBER OF SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding, December 31, 1995	3,264,632	4.93
Granted	1,444,746	16.40
Exercised	(485,796)	2.48
Canceled	(25,732)	10.24
Outstanding, December 31, 1996	4,197,850	9.13
Granted	1,289,722	22.32
Exercised	(850,550)	5.00
Canceled	(115,827)	12.90
Outstanding, December 31, 1997	4,521,195	$13.57
Granted	1,093,338	4.96
Exercised	(379,375)	4.23
Canceled	(2,163,416)	14.23
Canceled -- re-priced options	(1,910,523)	15.16
Issued -- re-priced options	1,910,523	3.42
Outstanding December 31, 1998	3,071,742	3.90

OPTIONS OUTSTANDING				OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING DECEMBER 31, 1998	WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED-AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE DECEMBER 31, 1998	WEIGHTED-AVERAGE EXERCISE PRICE
$0.09 - $ 2.72	994,617	8.16 Years	$2.08	315,779	$0.76
$2.94	1,128,727	7.3 Years	2.94	--	--
$3.00 - $25.88	948,398	7.08 Years	6.96	332,326	9.15
$0.09 - $25.88	3,071,742	7.51 Years	$3.90	648,105	$5.06

At December 31, 1998, 6,261,743 options remained authorized and unissued and options to purchase 648,105 shares were exercisable under these plans. The weighted averages of fair values of options granted during 1998, 1997, and 1996, respectively, were $4.96, $9.32, and $6.76.

During 1997, options to purchase 100,000 shares of common stock were granted to research consultants at the fair market value on the date of grant. Compensation costs, including the impact of re-pricing, using the Black-Scholes option-pricing model are estimated to be approximately $1.1 million over the option's vesting period of which $648,000 and $140,000 were recorded as expenses for the years ended December 31, 1998 and December 31, 1997, respectively.

In October 1998, the Company's Board of Directors authorized the re-pricing of all non-executive employees' options, certain consultants' options, and 50% of executives' options to the closing value as of October 19, 1998. The remaining 50% of executive options were re-priced at 150% of the closing value as of the same date. All re-priced stock options have a six-month "black out" period, whereby the re-priced stock options are not exercisable, even if vested.

The Company accounts for these plans under APB Opinion No. 25. Except for compensation discussed in the preceding paragraph, no compensation cost has been recognized because the exercise price equals the market value of stock on the date of grant. Options under these plans generally vest over four years, and all options expire after ten years.

Under FASB Statement No. 123 (FASB 123), "Accounting for Stock-based Compensation", the estimated fair value of options is amortized to expense over the options' vesting period. In accordance with the disclosure requirements of FASB 123, if the Company had elected to recognize this expense, income (loss) and income (loss) per share would have been reduced to the following pro forma amounts (In thousands, except per share data):

	1998	1997	1996
Pro forma net income (loss)	$(83,129)	$31,958	$(20,039)
Pro forma net income (loss) per share:			
Basic	$ (2.61)	$ 0.97	$ (0.67)
Diluted	$ (2.61)	$ 0.90	$ (0.67)

Because the FASB 123 method of accounting has not been applied to options granted prior to January 1, 1996, the resulting pro forma amounts may not be representative of that to be expected in future years.

Stock Purchase Plan

In June 1994, the Company implemented an employee stock purchase plan under which eligible employees may authorize payroll deductions of up to 10% of their base compensation (as defined) to purchase common stock at a price equal to 85% of the lower of the fair market value as of the beginning or the end of the offering period. A total of 400,000 shares were reserved for issuance under the employee stock purchase

plan. As of December 31, 1998, 172,346 shares have been issued to employees. During 1998, the weighted average fair market value of shares issued under the employee stock purchase plan was $6.32 per share.

NOTE 9. LICENSE AGREEMENTS

The Company has entered into several agreements to license patented technologies that are essential to the development and production of the Company's product. In connection with these agreements, upon meeting certain milestones (as defined) and contingent on the issuance of patents in certain countries, the Company is obligated to (1) pay license fees of $2,575,000 (of which $2,175,000 was paid prior to December 31, 1997 and $400,000 was paid in January 1998); (2) issue 896,492 shares of the Company's common stock (all of which has been issued); and (3) pay royalties on product sales covered by the license agreements (4% of U.S. and Canadian product sales and 3% of sales elsewhere in the world). In 1996, the Company issued an additional 400,000 shares of common stock to maintain exclusive rights to certain patents and patent applications beyond 1998. In connection with this issuance, the Company recorded a charge of $5,821,000 to the consolidated statements of operations. In 1997 and 1998, the Company recorded royalty expenses as cost of goods sold based on product sales.

NOTE 10. LEASE COMMITMENTS

The Company leases its manufacturing facilities under a five-year non-cancelable operating lease expiring in 2002. The Company has the option to extend this lease for two renewal terms of five years each. The Company cancelled the lease on its principal administrative and research and development laboratory facility that had a fifteen-year term expiring in 2012. The Company was able to secure a sub-lease that expires in November 1999 for significantly reduced space within the same building.

Future minimum lease payments under operating leases are as follows (In thousands):

1999	$ 961
2000	763
2001	763
2002	163
2003	9
	$2,659

Rent expense under operating leases totaled $2,472,000, $1,302,000, $560,000, for the years ended December 31, 1998, 1997, 1996, respectively.

NOTE 11. INCOME TAXES

Deferred income taxes result from differences in the recognition of expenses for tax and financial reporting purposes, as well as operating loss and tax credit carryforwards. Significant components of the Company's deferred income tax assets as of December 31 are as follows (in thousands):

	1998	1997
Deferred tax assets:		
Net operating loss carryforwards	$17,309	$ --
Research and development credit carryforwards	4,625	--
Capitalized research and development expenses	1,385	1,947
Inventory reserve	5,808	3,022
Amortization	--	--
Accruals and other	11,007	648
Deferred gain	(573)	(859)
Depreciation	5,466	1,260
	45,027	6,018
Valuation allowance	(45,027)	6,018
Total	$ --	$ --

For federal and state income tax reporting purposes, net operating loss carryforwards of approximately $53,304,000 and $8,981,000 are available to reduce future taxable income, if any. These carryforwards begin to expire in 2018. In 1995, the Company implemented an international product distribution strategy for its products. Implementation included the transfer of international product manufacturing and marketing rights to VIVUS International Limited in a taxable transaction. The transfer of rights and related allocation of research and development costs resulted in the current utilization of $29,467,000 of the net operating loss carryforward. Should significant changes in the Company's ownership occur, the annual amount of tax loss and credit carryforwards available for future use would be limited.

The provision for income taxes consisted of the following components as of December 31, 1997, (in thousands):

	1997
Current	
Federal	$2,170
State	1,332
Total current	3,502
Deferred (prepaid)	
Federal	(318)
State	0
Total deferred (prepaid), net	(318)
Total provision for income taxes	$3,184

The provisions for income taxes differs from the amount computed by applying the statutory federal income tax rates as follows, as of December 31, 1997:

	1997
Provision computed at federal statutory rates	35%
State income taxes, net of federal tax effect	6
Net operating losses utilized	(20)
Tax credits utilized	(10)
Income not subject to federal and state taxation	(4)
Other	1
Provision for income taxes	8%

NOTE 12. LEGAL MATTERS

In December 1997, the Company reached a settlement agreement with a former consultant of the Company whereby the former consultant dropped his claims against the Company and certain of its officers and directors. The Company agreed to pay the former consultant $5.1 million. The Company recorded the settlement in 1997 and paid the $5.1 million on January 5, 1998 in accordance with the agreement.

In February 1998, the Company and certain of its officers and directors were named in a class action lawsuit filed in California state court alleging violations of state securities laws. The lawsuit involves events which allegedly took place between May 15, 1997 and December 9, 1997. In March 1998, a purported shareholder class action was filed in the United States District Court for the Northern District in California. The federal complaints were filed on behalf of a purported class of persons who purchased stock between May 2, 1997 and December 9, 1997. The Company believes that the allegations of this lawsuits are without merit and intends to vigorously defend these cases. The Company does not believe that resolution of these cases will have an adverse material impact on the operations or financial position of the Company.

In October 1998, the Company was named in a civil action filed in the Superior Court of New Jersey. This complaint seeks specific performance and other relief in connection with the Company's leased manufacturing facilities, located in Lakewood, New Jersey. The Company's lease agreement requires that the Company provide a removal security deposit in the form of cash or a letter of credit. The Company and lessor ("plaintiff") have not been able to agree on the amount of such deposit and the plaintiff filed suit asking for specific performance in the amount of $3.3 million. The Company believes that the amount sought by the plaintiff is excessive and not mandated by the terms of the lease. However, if the Company is required to post a deposit of $3.3 million, this will have a material adverse effect on the financial condition of the Company.

In the normal course of business, the Company receives and makes inquiries regarding patent infringement and other legal matters. The Company believes that it has meritorious claims and defenses and intends to pursue any such matters vigorously. The Company is not aware of any asserted or unasserted claims against it, excluding the settlement above, where the resolution would have an adverse material impact on the operations or financial position of the Company.

NOTE 13. COMPREHENSIVE INCOME

The Company has adopted SFAS No. 130, "Reporting Comprehensive Income" in 1998. Accordingly, the Consolidated Statements of Comprehensive Income appear on page 29 of this report.

NOTE 14. SEGMENT INFORMATION

During 1998, the Company adopted Statement of Financial Accounting Statement SFAS No. 131, "Disclosure About Segments of an Enterprise and Related Information." SFAS 131 requires a new basis of

determining reportable business segments, i.e. the management approach. This approach requires that business segment information used by management to assess performance and manage company resources for information disclosure. On this basis, the Company primarily sells its product through wholesale channels in the United States. International sales are made only to the Company's two international partners. All transactions are denominated in U.S. dollars, therefore, the Company considers the arrangement as operating in a single segment.

During 1998, five customers accounted for 35%, 13%, 11%, 11%, and 10% of total product revenue, and during 1997, five customers accounted for 24%, 18%, 14%, 13% and 11% of total product revenue.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

PART III

ITEM 10. EXECUTIVE OFFICERS AND DIRECTORS OF THE REGISTRANT

The information required by this item is incorporated by reference from the discussion in the Company's Proxy Statement captioned "Proposal One: Election of Directors."

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the discussion in the Company's Proxy Statement captioned "Executive Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item is incorporated by reference from the discussion in the Company's Proxy Statement captioned "Record Date and Share Ownership."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

This information required by this item is incorporated by reference from the discussion in the Company's Proxy Statement captioned "Certain Transactions and Reports."

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES AND REPORTS ON FORM 8-K

(a) The following documents are filed as part of this Report:

1. FINANCIAL STATEMENTS

2. FINANCIAL STATEMENT SCHEDULES

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto incorporated by reference herein.

3. EXHIBITS

NUMBER	
##3.2	Amended and Restated Certificate of Incorporation of the Company
****3.3	Bylaws of the Registrant, as amended
###3.4	Certificate of Designations of Rights, Preferences and Privileges of Series A Participating Preferred Stock
##4.1	Specimen Common Stock Certificate of the Registrant
*4.2	Registration Rights, as amended
*4.4	Form of Preferred Stock Purchase Warrant issued by the Registrant to Invemed Associates, Inc., Frazier Investment Securities, L.P., and Cristina H. Kepner

NUMBER	
###4.5	Second Amended and Restated Preferred Shares Rights Agreement, dated as of April 15, 1997 by and between the Registrant and Harris Trust Company of California, including the Certificate of Determination, the form of Rights Certificate and the Summary of Rights attached thereto as Exhibits A, B, and C, respectively
*+10.1	Assignment Agreement by and between Alza Corporation and the Registrant dated December 31, 1993
*+10.2	Memorandum of Understanding by and between Ortho Pharmaceutical Corporation and the Registrant dated February 25, 1992
*10.3	Assignment Agreement by and between Ortho Pharmaceutical Corporation and the Registrant dated June 9, 1992
*+10.4	License Agreement by and between Gene A. Voss, M.D., Allen C. Eichler, M.D., and the Registrant dated December 28, 1992
*+10.5A	License Agreement by and between Ortho Pharmaceutical Corporation and Kjell Holmquist AB dated June 23, 1989
*+10.5B	Amendment by and between Kjell Holmquist AB and the Registrant dated July 3, 1992
*10.5C	Amendment by and between Kjell Holmquist AB and the Registrant dated April 22, 1992
*+10.5D	Stock Purchase Agreement by and between Kjell Holmquist AB and the Registrant dated April 22, 1992
*+10.6A	License Agreement by and between Amsu, Ltd., and Ortho Pharmaceutical Corporation dated June 23, 1989
*+10.6B	Amendment by and between Amsu, Ltd., and the Registrant dated July 3, 1992
*10.6C	Amendment by and between Amsu, Ltd., and the Registrant dated April 22, 1992
*+10.6D	Stock Purchase Agreement by and between Amsu, Ltd., and the Registrant dated July 10, 1992
*10.7	Supply Agreement by and between Paco Pharmaceutical Services, Inc., and the Registrant dated November 10, 1993
*10.10	Lease by and between McCandless-Triad and the Registrant dated November 23, 1992, as amended
****10.11	Form of Indemnification Agreements by and among the Registrant and the Directors and Officers of the Registrant
**10.12	1991 Incentive Stock Plan and Form of Agreement, as amended
*10.13	1994 Director Option Plan and Form of Agreement
*10.14	Form of 1994 Employee Stock Purchase Plan and Form of Subscription Agreement
*10.17	Letter Agreement between the Registrant and Leland F. Wilson dated June 14, 1991 concerning severance pay
***+10.21	Distribution Services Agreement between the Registrant and Synergy Logistics, Inc. (a wholly-owned subsidiary of Cardinal Health, Inc.) dated February 9, 1996
***+10.22	Manufacturing Agreement between the Registrant and CHINOIN Pharmaceutical and Chemical Works Co., Ltd. dated December 20, 1995

NUMBER	
++10.22A	Amendment One, dated as of December 11, 1997, to the Manufacturing Agreement by and between VIVUS and CHINOIN Pharmaceutical and Chemical Works Co., Ltd. dated December 20, 1995
#+10.23	Distribution and Services Agreement between the Registrant and Alternate Site Distributors, Inc. dated July 17, 1996
*****+10.24	Distribution Agreement made as of May 29, 1996 between the Registrant and Astra AB
#10.25	Menlo McCandless Office Lease made as of August 30, 1996 by and between Registrant and McCandless-Triad
#10.26	Sublease Agreement made as of August 22, 1996 by and between Registrant and Plant Research Technologies
##+10.27	Distribution Agreement made as of January 22, 1997 between the Registrant and Jenssen Pharmaceutical International, a division of Cilag AG International
++10.27A	Amended and Restated Addendum 1091, dated as of October 29, 1997, between VIVUS International Limited and Janssen Pharmaceutical International
##10.28	Lease Agreement made as of January 1, 1997 between the Registrant and Airport Associates
##10.29	Lease Amendment No. 1 as of February 15, 1997 between Registrant and Airport Associates
#####10.29A	Lease Amendment No. 2 dated July 24, 1997 by and between the Registrant and Airport Associates
#####10.29B	Lease Amendment No. 3 dated July 24, 1997 by and between the Registrant and Airport Associates
##10.30	Lease agreement by and between 605 East Fairchild Associates, L.P. and Registrant dated as of March 5, 1997
####++10.31	Manufacture and Supply Agreement between Registrant and Spolana Chemical Works, A.S. dated May 30, 1997
@10.32A	Agreement between ADP Marshall, Inc. and the Registrant dated December 19, 1997
@10.32B	General Conditions of the Contract for Construction
@10.32C	Addendum to General Conditions of the Contract for Construction
@+10.33	Sales Force Services Agreement dated as of February 1, 1998 between the Registrant and Innovex, Inc.
@@+10.34	Agreement dated as of June 30, 1998 between Registrant and Alza Corporation.
@@+10.35	Sales Force Transition Agreement dated July 6, 1998 between Registrant and Alza Corporation.
10.36	Form of, "Change of Control Agreements", dated July 8, 1998 by and between the Registrant and certain Executive Officers of the Company.
10.30A	Amendment of lease agreement made as of October 19, 1998 by and between Registrant and 605 East Fairchild Associates, L.P.
10.37	Sublease agreement made as of November 17, 1998 between Caliper Technologies, Inc. and Registrant.
++10.22B	Amendment Two, dated as of December 18, 1998 by and between VIVUS, Inc. and CHINOIN Pharmaceutical and Chemical Works Co.

NUMBER	
++10.31A	Amendment One, dated as of December 12, 1998 by and between VIVUS, Inc. and Spolana Chemical Works, A.S.
27.1	Financial Data Schedule

- ---

* Incorporated by reference to the same-numbered exhibit filed with the Registrant's Registration Statement on Form S-1 No. 33-75698, as amended.

** Incorporated by reference to the same numbered exhibit filed with the Registrant's Registration Statement on Form S-1 No. 33-90390, as amended.

*** Incorporated by reference to the same-numbered exhibit filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995, as amended.

**** Incorporated by reference to the same numbered exhibit filed with the Registrant's Form 8-B filed with the Commission on June 24, 1996.

***** Incorporated by reference to the same numbered exhibit filed with the Registrant's Current Report on Form 8-K/A filed with the Commission on June 21, 1996.

Incorporated by reference to the same-numbered exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996.

Incorporated by reference to the same-numbered exhibit filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996, as amended.

Incorporated by reference to exhibit 99.1 filed with Registrant's Amendment Number 2 to the Registration Statement of Form 8-A (File No. 0-23490) filed with the Commission on April 23, 1997.

Incorporated by reference to the same-numbered exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1997.

Incorporated by reference to the same numbered exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1997.

@ Incorporated by reference to the same-numbered exhibit filed with the Registrant's Annual Report on form 10-K for the year ended December 31, 1997.

@@ Incorporated by reference to the same-numbered exhibit filed with the Registrant's Quarterly Report on form 10-Q for the quarter ended June 30, 1998.

\+ Confidential treatment granted.

++ Confidential treatment requested.

(b) Reports on Form 8-K

None

(c) Exhibits

See Item 14(a)(3) above

(d) Financial Statement Schedule

See Item 14(a)(2) above

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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:

VIVUS, INC.,
a Delaware Corporation

By: /s/ RICHARD WALLISER

Richard Walliser
Vice President of Finance and
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: March 30, 1999

EXHIBIT 24.1

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Leland F. Wilson and Richard Walliser as his attorney-in-fact for him, in any and all capacities, to sign each amendment to this Report on Form 10-K, 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 said attorney-in-fact or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
/s/ LELAND F. WILSON Leland F. Wilson	President, Chief Executive Officer (Principal Executive Officer) and Director	March 30, 1999
/s/ VIRGIL A. PLACE Virgil A. Place	Chairman of the Board and Chief Scientific Officer and Director	March 30, 1999
/s/ RICHARD WALLISER Richard Walliser	Vice President of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	March 30, 1999
/s/ JOSEPH E. SMITH Joseph E. Smith	Director	March 30, 1999
/s/ BRIAN H. DOVEY Brian H. Dovey	Director	March 30, 1999
/s/ LINDA JENCKES Linda Jenckes	Director	March 30, 1999

VIVUS, INC.

REPORT ON FORM 10-K FOR
THE YEAR ENDED DECEMBER 31, 1998

INDEX TO EXHIBITS*

EXHIBIT NUMBER	EXHIBIT NAME	SEQUENTIALLY NUMBERED PAGE
10.36	Form of, "Change of Control Agreements," dated July 1998 by and between the Registrant and Executive Officers of the Company.....	
10.30A	Amendment of lease agreement made as of October 19, 1998 by and between Registrant and 605 East Fairchild Associates, L.P.	
10.37	Sublease agreement made as of November 17, 1998 between Caliper Technologies, Inc. and Registrant.	
**10.22.B	Amendment Two, dated as of December 18, 1998 by and between VIVUS, Inc. and CHINOIN Pharmaceutical and Chemical Works Co.	
**10.31A	Amendment One, dated as of December 12, 1998 by and between VIVUS, Inc. and Spolana Chemical Works, A.S.	
21.2	List of Subsidiaries.....	
23.1	Consent of Independent Public Accountants.....	
24.1	Power of Attorney (see "Power of Attorney").....	
27.1	Financial Data Schedule.....	

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* Only exhibits actually filed are listed. Exhibits incorporated by reference are set forth in the exhibit listing included in Item 14 of the Report on Form 10-K.

** Confidential treatment requested.

EXHIBIT 10.22B

AMENDMENT TWO
TO THE MANUFACTURING AGREEMENT
BY AND BETWEEN VIVUS AND CHINOIN

This Amendment Two ("Amendment Two"), effective as of December 18, 1998 ("Amendment Date"), by and between VIVUS, Inc., having a principal place of business at 605 East Fairchild Drive, Mountain View, CA 94043, United States of America ("VIVUS"), and CHINOIN Pharmaceutical and Chemical Works, Ltd., having a principal place of business at H-1045, Budapest, To u. 1-5 Hungary ("CHINOIN") (VIVUS and CHINOIN collectively, the "Parties"), amends (i) that certain Manufacturing Agreement by and between and Parties dated December 20, 1995 (the "Agreement") and (ii) Amendment One to the Agreement dated December 11, 1997 ("Amendment One").

The Parties desire to amend the Agreement and Amendment One as set forth herein below;

NOW, THEREFORE, the Parties agree as follows:

1. AMENDMENT. This Amendment Two hereby amends the Agreement to incorporate the terms and conditions set forth in this Amendment Two. The relationship of the Parties shall continue to be governed by the terms and conditions of the Agreement and Amendment One, as amended herein; and in the event that there is any conflict between the terms and conditions of the Agreement or Amendment One and this Amendment Two, the terms and conditions of this Amendment Two shall control. As used in this Amendment Two, all capitalized terms shall have the meanings defined for such terms in this Amendment Two or, if not defined in this Amendment Two, the meanings defined in the Agreement.

2. MODIFICATION TO THE AGREEMENT

2.1 The Parties confirm that in the frame of the Agreement VIVUS has firmly ordered from CHINOIN under PO# [*] the supply of [*] Product for the year 1998. After CHINOIN having delivered [*], VIVUS has requested CHINOIN to stop manufacturing and to postpone all further shipments. [*] of Product already manufactured remained on stock at CHINOIN. A further [*] of Product ordered and the [*] minimum purchasing obligation of VIVUS for the calendar year of 1999, total [*], an obligation of VIVUS, has not been manufactured by CHINOIN.

2.2 The Parties agree that VIVUS shall not be required to purchase from CHINOIN any amount of the Product in the remainder of calendar year 1998 and VIVUS shall have only the following firm commitments to purchase the Product from CHINOIN during the validity of the Agreement:

2.2.1. VIVUS agrees to take delivery of [*] of the Product already manufactured and in stock at CHINOIN by December 31, 1999,

*Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to omitted portions.

latest. Notwithstanding any provisions in the Agreement or Amendment One to the contrary, including but not limited to Section 2.9, VIVUS agrees to pay CHINOIN in full for this [*] of the Product or any part thereof in four equal monthly installments within four months after accepting delivery.

VIVUS will place with CHINOIN not less than eighty percent (80%) of its orders for the Product (based on mass) until VIVUS accepts delivery from CHINOIN all of this [*] of the Product.

2.2.2. VIVUS agrees to purchase an additional [*] of the Product (i.e., in addition to the [*] referred to in Section 2.2.1. above) at a later date during the validity of the Agreement.

VIVUS will place with CHINOIN not less than sixty percent (60%) of its new orders for the Product (based on mass) until VIVUS accepts delivery from CHINOIN of all of this additional [*] of the Product.

2.2.3. VIVUS agrees to place not less than sixty percent (60%) of its orders for the Product (based on mass), if any at all, from CHINOIN after having completed all of its purchasing obligations as detailed above in Sections 2.2.1 and 2.2.2 of this Amendment Two. However, CHINOIN will not be obliged to supply in any case more than [*] of Product annually.

2.2.4 Section 2.12 of the Agreement, as originally agreed upon and amended by Amendment One, is hereby deleted in its entirety.

2.2.5 Parties agree that any minor quantity deviations less than plus-minus 100 grams of the quantity of Product available at the time VIVUS accepting shipment from the quantity stipulated in this Amendment Two will be accepted without correction at the next shipment or stipulated quantity. CHINOIN agrees to notify VIVUS about any reduction of its [*] stock exceeding [*] due to sale to third parties or to other reasons. Such variation will be added to the [*] obligation of VIVUS as stipulated in Section 2.2.2 above.

2.2.6 In the event VIVUS terminates the Agreement without cause prior to accepting delivery, or the Agreement expires on December 31, 2002 without VIVUS accepting delivery of a part or all of the quantities of the Product stipulated in Section 2.2.2 as amended by the stipulations of Section 2.2.5, VIVUS will pay to CHINOIN before leaving the Agreement a monetary settlement to compensate reasonable lost net profits consistent with CHINOIN's historical net profits on the manufacture of the Product. Such historical net profit to be determined by an audit performed by a certified public accountant or other representative acceptable to CHINOIN of CHINOIN financial records.

*Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to omitted portions.

All sales values of the quantities not accepted for delivery by VIVUS and subject to monetary settlement as above will be calculated as if delivered in the calendar year of termination or expiry above the quantities actually delivered in that year, if any, with prices stipulated in Section 2.7 of this Agreement as amended by Amendment One.

CHINOIN agrees that the settlement of such agreed monetary settlement by VIVUS will satisfy in full any and all of VIVUS' obligations referred to in the Sections above to CHINOIN under the Agreement, Amendment One, and this Amendment Two.

2.3 CHINOIN agrees that it will not manufacture the [*] of the Product referred to in Sections 2.2.2 and 2.2.5 above unless and until VIVUS requests in writing that CHINOIN do so. CHINOIN will not be entitled to receive from VIVUS any lost profits based on any portions of such 4.35 kilograms that CHINOIN manufactures without having received a written request from VIVUS to do so.

3. ENTIRE AGREEMENT. The Agreement and any Exhibits and Addenda thereto together with this Amendment Two and Amendment One constitute the entire agreement between the Parties with respect to the subject matter thereof and supersede all prior and contemporaneous communications, representations, agreements or understandings, either written or oral, between the Parties.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment Two.

VIVUS, INC.	CHINOIN PHARMACEUTICAL AND CHEMICAL WORKS CO., LTD.
By: /s/ LELAND F. WILSON	By: /s/ PHILIPPE BESSE
Name: Leland F. Wilson	Name: Philippe Besse
Title: President and CEO	Title: Executive Vice President

*Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to omitted portions.

EXHIBIT 10.30A

AGREEMENT

This Agreement is executed as of this 19th day of October, 1998 by and between VIVUS, INC., a Delaware corporation ("Tenant"), and 605 EAST FAIRCHILD ASSOCIATES, L.P. a California limited partnership ("Landlord").

1. Recitals. This Agreement is being entered into with respect to the following facts and objectives.

(a) Tenant and Landlord are parties to that certain Lease Agreement dated as of March 7, 1997 covering property generally known as 605 East Fairchild Drive, Mountain View, California ("Lease").

(b) Tenant has requested that Landlord agree to (i) amend the Lease to provide for an early expiration date, (ii) return the amount of its Security Deposit that remains unused as of the Closing Date (defined below) and (iii) pay Tenant certain amounts following the Closing Date. Landlord has agreed to Tenant's requests subject to the terms and conditions of this Agreement.

(c) The Real Estate Taxes (as defined in the Lease) for which Tenant is responsible pursuant to the Lease have not yet been fully assessed due to the recent completion of construction of the Building (as defined in the Lease). Tenant and Landlord wish to provide for a deposit to be made by Tenant on the Closing Date for the estimated amount of unpaid Real Estate Taxes ("Tax Payment") for the period applicable to Tenant

or, in the event Tenant does not make the Tax Payment, for Landlord to be entitled to use a portion of the Security Deposit as the Tax Payment.

2. Agreement.

(a) Subject to terms and conditions of subparagraph (b) below Tenant and Landlord agree as follows: (i) the Lease shall be deemed amended on the Closing Date to provide for a lease term ending on the Closing Date, and the term of the Lease shall expire on the Closing Date, (ii) Landlord shall be obligated to make the payments provided for in subparagraph (d) below, and (iii) Tenant shall make the Tax Payment provided for in subparagraph (e) below, and (iv) Landlord shall return to Tenant any prepaid monthly rent that would be applicable to periods after the Closing Date and to pay Tenant any overpaid Additional Charges after reconciliation pursuant to paragraph 4(c)(3) of the Lease. Nothing herein shall in any way relieve either party of obligations under the Lease for periods prior to the Closing Date and for obligations that survive the termination or expiration of the Lease, including the provisions of paragraphs 12 and 40 of the Lease.

(b) The obligations of Landlord hereunder are subject to the occurrence of the following conditions precedent on or before December 1, 1998, which date may be extended for a period of up to fifteen (15) days by written notice given to Tenant by Landlord ("Outside Date"): (i) Landlord and Caliper Technologies Corp. ("Caliper") shall have executed and delivered

a binding lease on terms and conditions acceptable to Landlord ("New Lease") for the 605 East Fairchild Drive building, and the New Lease shall be in full force and effect, (ii) Landlord shall have received approval from General American Life Insurance Company ("Lender") of the New Lease and this Agreement, (iii) Tenant shall have (A) vacated the Premises (as defined in the Lease) and removed all of its furniture, equipment and other personal property (excepting that Tenant shall not be required to vacate any portion of the Premises which Tenant has subleased from Caliper via a sublease agreement which has been approved by Landlord, such approval not to be un-reasonably withheld or delayed, and Tenant shall not be required to remove any property purchased by Caliper from Tenant) and (B) delivered to Landlord a letter confirming that it has surrendered possession of the Premises (subject to the possible sublease relationship with Caliper).

(c) The "Closing Date" shall be the date when all of the conditions specified in subparagraph (b) above are satisfied or waived in writing by Landlord, but no later than the Outside Date.

(d) Landlord shall pay Tenant One Hundred Thousand Dollars ($100,000) in ten (10) monthly installment payments of Ten Thousand Dollars ($10,000) each commencing thirty (30) days following the Close Date; provided, however, Landlord shall be entitled to suspend such payments if Caliper is in default (beyond any applicable notice) under the New Lease. Such

payments shall resume if and when default has been cured or otherwise satisfied by Caliper.

(e) The Tax Payment to be made by Tenant hereunder shall be the amount of Real Estate Taxes payable by Tenant under the Lease applicable to the period beginning January 1, 1998 and ending on the Closing Date. The Tax Payment shall be determined in good faith by Landlord based upon the advise of a third party consulting firm engaged by Landlord with expertise in such matters. Landlord shall give Tenant written notice of the amount of the Tax Payment upon such determination. In the event Tenant fails or refuses to make the Tax Payment within five (5) days following written notice to Tenant of the amount thereof, Landlord shall be entitled to proceed against the Security Deposit for the amount of the Tax Payment hereunder. Upon the Closing Date the Tax Payment shall become the property of Landlord, subject only to reconciliation required pursuant to this subparagraph. At such time as the actual Real Estate Taxes for said period are determined, Landlord shall perform a reconciliation and refund any excess payment or bill Tenant for any short fall and Tenant shall pay such amount within ten (10) days after receipt of such bill. Such bill shall be accompanied by reasonable supporting documentation.

3. Attorneys' Fees. If either party commences an action against the other party arising out of or in connection with this Agreement, the prevailing party shall be entitled to recover from the other party reasonable attorneys' fees and costs

of suit.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

"Tenant"

Vivus, INC., a Delaware corporation

By: /s/ Richard Wallisen

Its Chief Financial Officer

"Landlord"

605 EAST FAIRCHILD ASSOCIATES, L.P., a California limited partnership

By: M-D Ventures, Inc.
Its: General Partner

By: /s/ Steve Dostart

Its: Vice President

EXHIBIT 10.31A

AMENDMENT TO MANUFACTURE AND SUPPLY AGREEMENT

This Amendment ("Amendment"), effective as of December 12, 1998 ("Amendment Date") by and between VIVUS, Inc., having a principal place of business at 605 East Fairchild Drive, Mountain View, CA 94043, United States of America ("VIVUS"), and Spolana Chemical Works, A.S., having a place of business at 27711 Neratovice, Czech Republic ("Spolana") including all Exhibits and addenda thereto (VIVUS and Spolana collectively, the "Parties"), amends that certain Manufacturing and Supply Agreement by and between the Parties as of May 1997, including all Exhibits and addenda thereto (the "Agreement") as of the Amendment Date.

The Parties desire to amend the Agreement as set forth herein below:

NOW, THEREFORE, the Parties agree as follows:

1. AMENDMENT. This Amendment hereby amends the Agreement to incorporate the terms and conditions set forth in this Amendment. The relationship of the Parties shall continue to be governed by the terms and conditions of the Agreement, as amended herein; and in the event that there is any conflict between the terms and conditions of the Agreement and this Amendment, the terms and conditions of this Amendment shall control. As used in this Amendment, all capitalized terms shall have the meanings defined for such terms in this Amendment or, if not defined in the Amendment, the meanings defined in the Agreement.

2. MODIFICATION TO THE AGREEMENT.

2.1 VIVUS agrees to pay to Spolana the remaining balance of invoices outstanding as of the Amendment Date, which total [*], within fifteen (15) business days after the Amendment Date.

2.2 Sections 2.2, 2.3.1 and 2.3.3 of the Agreement are hereby deleted in their entirety.

2.3 The Parties agree that VIVUS shall not be required to purchase from Spolana any amount of the Product in the remainder of calendar year 1998 or in calendar year 1999 and VIVUS shall have only the following commitment to purchase the Product from Spolana:

a) VIVUS shall purchase from Spolana [*]

*Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to omitted portions.

(b) VIVUS agrees to place any new orders of the Product with its existing suppliers on a pro rata basis (based on historical quantities purchased from such suppliers) until the Existing Inventory is fully delivered.

2.4 The Parties agree that, other than as provided in Section 2.3 of this Amendment, during the period from the Amendment Date until the termination of the Agreement, VIVUS shall not be required to purchase from Spolana any minimum amount of the Product.

2.5 The Agreement is hereby amended to add the following new Section 3.7:

"3.7 Change Notification. Spolana shall notify VIVUS through written correspondence to Vice President, Regulatory Affairs, Mountain View, California, copied to Director, Corporate QA, Lakewood, New Jersey, of any proposed changes in the chemistry, manufacturing or controls for pharmaceutical grade Alprostadil (Prostaglandin E(1))(for purposes of this Section 3.7, a "Proposed Change"). VIVUS shall provide written acknowledgement of the receipt of such correspondence within ten (10) business days. The Parties understand that such acknowledgement of receipt does not necessarily represent VIVUS' agreement with or acceptance of the proposed change. Within thirty (30) working days following such acknowledgement of receipt, VIVUS will inform Spolana that (i) VIVUS accepts such Proposed Change, (ii) VIVUS does not accept such Proposed Change, or (iii) VIVUS requires further clarification, information or action by Spolana before it can assess such Proposed Change (for purposes of this Section 3.7, such communication a "Change Assessment"). The Parties understand and agree that in the event that Spolana does not receive from VIVUS a Change Assessment with respect to a particular Proposed Change, Spolana may assume VIVUS accepts such Proposed Change."

2.5 Section 6.1 of the Agreement is hereby amended to read in its entirety as follows:

"6.1 Term. The term of this Agreement shall commence on the Effective Date and shall continue in full force until the second anniversary of the Amendment Date, unless this Agreement is terminated earlier in accordance with this Article 6."

2.6 Section 6.2 of the Agreement is hereby amended to read in its entirety as follows:

"6.2 Termination for Convenience. Spolana may terminate this Agreement upon thirty (30) days prior written notice to VIVUS; provided, however, that VIVUS shall not be required to purchase any amount of the Product from Spolana that VIVUS has not ordered prior to such termination."

3. ENTIRE AGREEMENT. The Agreement and any Exhibits and addenda thereto together with this Amendment constitute the entire agreement between the Parties with respect to the subject matter thereof and supersede all prior and contemporaneous communications, representations, agreements or understandings, either written or oral, between the Parties.

IN WITNESS WHEREOF, the Parties have executed this Amendment.

VIVUS, INC.	SPOLANA CHEMICAL WORKS, A.S.
By: /s/ LELAND F. WILSON	By: /s/ JIRI ZERZANI
Name: Leland F. Wilson	Name: Jiri Zerzani
Title: President and CEO	Title: Commercial Director

EXHIBIT 10.36

CHANGE OF CONTROL AGREEMENT

This Change of Control Agreement (the "Agreement") is made and entered into effective as of _____, by and between _____ (the "Employee") and Vivus, Inc., a Delaware corporation (the "Company").

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.

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 a Hostile Takeover and, under certain circumstances, 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 of Directors 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 4 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, including (without limitation) any termination prior to a Change of Control, the Employee shall not be entitled to any payments or benefits, other than as provided by this Agreement. The terms of this Agreement shall terminate upon the earlier of (i) the date on which Employee ceases to be employed by the Company, (ii) the date that all obligations of the parties hereunder have been satisfied, or (iii) twenty-four (24) months after a Change of Control. 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. Change of Control.

(a) Termination Following A Change of Control. Subject to Section 4 below, if the Employee's employment with the Company is terminated at any time within twenty-four (24) months after a Change of Control, 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 as an Involuntary Termination (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 of Directors of the Company.

(ii) Involuntary Termination. If the Employee's employment is terminated as a result of an Involuntary Termination other than for Cause, the Employee shall be entitled to receive the following benefits: (i) monthly severance payments during the period from the date of the Employee's termination until the date twenty-four (24) 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 Change of Control; (ii) monthly severance payments during the Severance Period equal to 1/12th 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 (i) above (iii) the pro-rated 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 (or a successor corporation) with such payment being made on the termination date (iv) continuation of benefits through the end of the Severance Period substantially identical to those to which the Employee was entitled immediately prior to the Change of Control; and (v) outplacement services with a total value not to exceed Twenty Thousand Dollars ($20,000). The severance payments described in subsections (i) and (ii) above shall be paid during the Severance Period in accordance with the Company's standard payroll practices.

(b) Termination Apart from A Change of Control. In the event the Employee's employment terminates for any reason, either prior to the occurrence of a Change of Control or after the twenty-four (24) month period following the effective date of a Change of Control, then the Employee shall not be entitled to receive any severance payments under this Agreement. The Employee's benefits will be terminated under the terms of the Offer Letter and 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 of Directors of 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 of Directors of the Company; or

(ii) Merger/Sale of Assets. A merger or consolidation of the Company whether or not approved by the Board of Directors of the Company, 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 of Directors of the Company, 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 July 1, 1998 or (B) are elected, or nominated for election, to the Board of Directors of the Company 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 of Directors of the Company.

(c) Involuntary Termination. "Involuntary Termination" shall include any termination by the Company other than for Cause and/or the Employee's voluntary termination, upon 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; (ii) any reduction of the Employee's base compensation (other than in connection with a general decrease in base salaries to become in sync with employees of the acquirer); or (iii) the Employee's refusal to relocate to a facility or location more than 30 miles from the Company's current location.

"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 to the Employee constitute "parachute payments" within the meaning of Section 28OG of the Internal Revenue Code of 1986, as amended (the "Code") and, but for this Section 4, would be subject to the excise tax imposed by Section 4999 of the Code, the Company shall reduce the aggregate amount of such payments and benefits such that the present value thereof (as determined under the Code and the applicable regulations) is equal to 2.99 times the Employee's "base amount" as defined in Section 28OG(b)(3) of the Code.

5. Certain Business Combinations. In the event it is determined by the Board, upon receipt of a written opinion of the Company's independent auditors, that the enforcement of any Section of this Agreement, would preclude accounting for any proposed business combination of the Company involving a Change of Control as a pooling of interests, and the Board otherwise desires to approve such a proposed business transaction which requires as a condition to the closing of such transaction that it be accounted for as a pooling of interests, then any such Section of this Agreement shall be null and void. For purposes of this Section, the Board's determination shall require the unanimous approval of the non-employee Board members.

6. 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.

7. 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.

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, 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.

(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.

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.	(Name of Employee)
_____	_____
Leland F. Wilson President & Chief Executive Officer	
Date:_____	Date:_____

EXHIBIT 10.37

SUBLEASE

THIS SUBLEASE ("Sublease"), dated November 17, 1998 for reference purposes only, is entered into by and between Caliper Technologies Corp., a Delaware corporation ("Sublandlord") and VIVUS, INC., a Delaware corporation, ("Subtenant").

RECITALS

A. Sublandlord leases certain premises (the "Master Lease Premises") located in that certain building ("Building") at 605 East Fairchild Drive, Mountain View, California, from 605 East Fairchild Associates, L.P., a California limited partnership ("Master Landlord"), pursuant to that certain Lease Agreement dated October 15, 1998 (the "Master Lease"). Capitalized terms used but not defined herein have the same meanings as they have in the Master Lease.

B. Sublandlord desires to sublease a portion of the Master Lease Premises to Subtenant, and Subtenant desires to sublease a portion of the Master Lease Premises from Sublandlord on the terms and provisions hereof.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, Sublandlord and Subtenant covenant and agree as follows:

AGREEMENT

1. SUBLEASED PREMISES. On and subject to the terms and conditions below, Sublandlord hereby leases to Subtenant, and Subtenant hereby leases from Sublandlord, the premises described in Exhibit A (the "Subleased Premises"). The Subleased Premises contain approximately 6000 square feet.

2. TERM. Subject to obtaining the consent of Master Landlord as described below, this Sublease shall commence on December 1, 1998, (the "Commencement Date") and shall expire, at 11:59 p.m. on November 30, 1999, unless extended or sooner terminated pursuant to any provision hereof. Provided Subtenant is not in default hereunder, following expiration of the initial term of this Sublease, the term hereof shall be deemed extended on a month to month basis, unless either party shall give sixty days prior written notice of its election to terminate this Sublease.

3. POSSESSION. If for any reason Sublandlord cannot deliver possession of the Subleased Premises to Subtenant on the Commencement Date, Sublandlord shall not be subject to any liability therefor, nor shall such failure affect the validity of this Sublease or the obligations of Subtenant hereunder or extend the term hereof

4. RENT.

(a) Commencing on the Commencement Date and continuing throughout the term of this Sublease, Subtenant shall pay monthly rent ("Rent") to Sublandlord in the amount of Eighteen Thousand Dollars ($18,000).

Rent shall be payable to Sublandlord in lawful money of the United States, in advance, without prior notice, demand, or offset, on or before the first day of each calendar month during the term hereof. All Rent shall be paid to Sublandlord at the address specified for notice to Sublandlord below. If the Commencement Date does not fall on the first day of a calendar month, Rent for the first month shall be prorated on a daily basis based upon a thirty day calendar month. It is the intention of the parties hereto that the foregoing Rent shall constitute gross rent for fully serviced Subleased Premises and Subtenant shall not be liable for any additional rent, operating charges, maintenance, taxes, utilities, or expenses, except for telephone and telecommunication services and except as hereinafter provided.

(b) Upon execution of this Sublease, Subtenant shall pay to Sublandlord the sum of Thirty Six Thousand Dollars ($36,000), constituting payment in advance of the first month's Rent, together with the Security Deposit, as set forth in Section 5 below.

5. SECURITY DEPOSIT. Upon execution of this Sublease, Subtenant shall deposit with Sublandlord the sum of Eighteen Thousand Dollars ($18,000) as a security deposit ("Security Deposit"). If Subtenant fails to pay Rent or other charges when due under this Sublease, or fails to perform any of its other obligations hereunder, Sublandlord may use or apply all or any portion of the Security Deposit for the payment of any Rent or other amount then due hereunder and unpaid, for the payment of any other sum for which Sublandlord may become obligated by reason of Subtenant's default or breach, or for any loss or damage sustained by Sublandlord as a result of Subtenant's default or breach. If Sublandlord so uses any portion of the Security Deposit, Subtenant shall restore the Security Deposit to the full amount originally deposited within ten days after Sublandlord's written demand. Sublandlord shall not be required to keep the Security Deposit separate from its general accounts, and shall have no obligation or liability for payment of interest on the Security Deposit. The Security Deposit, or so much thereof as had not theretofore been applied by Sublandlord, shall be returned to Subtenant within ten days of the expiration or earlier termination of this Sublease, provided Subtenant has surrendered possession of the Subleased Premises in accordance with the terms of this Sublease.

6. ASSIGNMENT AND SUBLETTING. Subtenant may not assign, sublet, transfer, pledge, hypothecate or otherwise encumber the Subleased Premises, in whole or in part, or permit the use or occupancy of the Subleased Premises by anyone other than Subtenant unless Subtenant has obtained Sublandlord's consent thereto (which shall not be unreasonably withheld) and the consent of Master Landlord. Regardless of Sublandlord's consent, no subletting or assignment shall release Subtenant from its obligations hereunder.

7. ACCEPTANCE OF SUBLEASED PREMISES IN "AS-IS" CONDITION. Sublandlord does not warrant the condition of the Subleased Premises. Subtenant acknowledges, represents and warrants that it has been in possession of the Subleased Premises, and of the entire Master Lease Premises, prior to the commencement of this Sublease, pursuant to the terms of a separate lease between Master Landlord and Subtenant, and hereby accepts the Subleased Premises in its "as-is" condition.

8. TENANT IMPROVEMENTS; ALTERATIONS.

a. NO INITIAL IMPROVEMENTS; AS-IS. Sublandlord has no obligation to construct any initial tenant improvements and Subtenant acknowledges that it accepts the Subleased Premises in its "as-is" condition.

b. ADDITIONAL ALTERATIONS. Subtenant shall not make or suffer to be made any additional alterations, additions or improvements to the Subleased Premises without the prior written consent of both Sublandlord and Master Landlord, which may be withheld in the sole discretion of either.

9. USE. Subtenant may use the Subleased Premises only for general office purposes and no other purpose. Subtenant shall promptly comply with all applicable statutes, ordinances, rules, regulations, orders, restrictions of record, and requirements in effect during the term of this Sublease governing, affecting and regulating Subtenant's use of the Subleased Premises. Subtenant shall not use or permit the use of the Subleased Premises in a manner that will create waste or a nuisance, interfere with or disturb other tenants in the Building or violate the provisions of the Master Lease.

10. PARKING. Subtenant shall have the right to use 35 parking spaces.

11. INCORPORATION OF SUBLEASE.

(a) All of the terms and provisions of the Master Lease, except as provided in subsection (b) below, are incorporated into and made a part of this Sublease and the rights and obligations of the parties under the Master Lease are hereby imposed upon the parties hereto with respect to the Subleased Premises, Sublandlord being substituted for the "Landlord" (referred to herein as the Master Landlord) in the Master Lease, Subtenant being substituted for the "Tenant" in the Master Lease and the "term of this Sublease" being substituted for any reference to the initial or any extended term of the Master Lease. It is further understood that where reference is made in the Master Lease to the "Premises," the same shall mean the Subleased Premises as defined herein; where reference is made to the "Commencement Date," the same shall mean the Commencement Date as defined herein; and where reference is made to "this Lease," the same shall mean this Sublease.

(b) The following Sections of the Master Lease are not incorporated herein: Sections 1, 2, 3, 4, 5, 8, 9a, 9d, 11, 12c, 12e, 14a, 14b, 22, 23, 26, 34, 36, 38, 39, 40c, 41, 42, 43, 44, 45, and all exhibits thereto.

(c) Subtenant hereby assumes and agrees to perform for Sublandlord's benefit, during the term of this Sublease, all of Sublandlord's obligations with respect to the Subleased Premises under the Master Lease, except as otherwise provided herein. Subtenant shall not commit or permit to be committed any act or omission which violates any term or condition of the Master Lease. Except as otherwise provided herein, this Sublease shall be subject and subordinate to all of the terms of the Master Lease.

To the extent that the provision of any services or the performance of any maintenance or any other act respecting the Subleased Premises or Building is the responsibility of Master Landlord

(collectively "Master Landlord Obligations"), upon Subtenant's request, Sublandlord shall use reasonable efforts to cause Master Landlord to perform such Master Landlord Obligations. It is expressly understood that the services and repairs which are incorporated herein by reference, will in fact be furnished by Master Landlord, and not by Sublandlord, except to the extent otherwise provided in the Master Lease. In addition, Sublandlord shall not be liable for any maintenance, restoration (following casualty or destruction) or repairs in or to the Building or Subleased Premises, other than its obligation hereunder to use reasonable efforts to cause Master Landlord to perform its obligations under the Master Lease. In addition, Subtenant shall have the right to contact Master Landlord directly to cause it to so perform.

12. INSURANCE. Subtenant shall be responsible for insuring its personal property, tenant improvements and equipment in the amount of their full replacement value and shall maintain comprehensive general liability insurance in the amount of One Million Dollars ($1,000,000) per occurrence respecting the use and occupancy of the Subleased Premises. Such insurance shall insure the performance by Subtenant of its indemnification obligations hereunder and shall name Master Landlord and Sublandlord as additional insureds. All insurance required under this Sublease shall contain an endorsement requiring thirty (30) days written notice from the insurance company to Subtenant and Sublandlord before cancellation or change in the coverage, insureds or amount of any policy. Subtenant shall provide Sublandlord with certificates of insurance evidencing such coverage prior to the commencement of this Sublease.

13. DAMAGE, DESTRUCTION, CONDEMNATION. If the Master Lease terminates as a result of a casualty or condemnation, this Sublease shall terminate as well. In the event that the Subleased Premises are damaged, destroyed, or subject to a taking by condemnation and the rent for the space within the Subleased Premises is abated under the Master Lease, the rent under this Sublease shall be proportionately abated.

14. NOTICES. The addresses specified in the Master Lease for receipt of notices to each of the parties are deleted and replaced with the following:

TO SUBLANDLORD AT:	Caliper Technologies Corp. 605 E. Fairchild Drive Mountain View, CA 94043
	Attn: VP of Operations
WITH COPY TO:	Cooley Godward LLP One Maritime plaza, 20th Floor San Francisco, Ca 94111-3580
	Attn: Anna B. Pope, Esq.
TO SUBTENANT AT:	the Subleased Premises.

15. EARLY TERMINATION OF SUBLEASE. If, without the fault of Sublandlord, the Sublease should terminate prior to the expiration of this Sublease, Sublandlord shall have no liability to Subtenant on account of such termination. To the extent that the Master Lease grants Sublandlord any discretionary right to terminate the Master Lease, whether due to casualty, condemnation, or otherwise, Sublandlord shall be entitled to exercise or not exercise such right without Subtenant's approval. Within forty eight hours of Sublandlord's receipt of any notice of default under the Master Lease, Sublandlord shall give a copy of such notice to Subtenant.

16. CONSENT OF SUBLANDLORD AND MASTER LANDLORD. If Subtenant desires to take any action which requires the consent or approval of Sublandlord pursuant to the terms of this Sublease, prior to taking such action, including, without limitation, making any alterations, then, notwithstanding anything to the contrary herein, (a) Sublandlord shall have the same rights of approval or disapproval as Master Landlord has under the Master Lease, and (b) Subtenant shall not take any such action until it obtains the consent of Sublandlord and Master Landlord, as may be required under this Sublease or the Master Lease. This Sublease shall not be effective unless and until any required written consent of the Master Landlord shall have been obtained.

17. BROKERS. Each party hereto represents and warrants that it has dealt with no broker, in connection with this Sublease and the transactions contemplated herein. Each party shall indemnify, protect, defend and hold the other party harmless from all costs and expenses (including reasonable attorneys' fees) arising from or relating to a breach of the foregoing representation and warranty. Sublandlord shall pay all brokerage commissions to such brokers.

18. SURRENDER OF SUBLEASED PREMISES. Upon the expiration or earlier termination of this Sublease, Subtenant shall surrender the Subleased Premises in the same condition as they were in on the Commencement Date, except for ordinary wear and tear and damage due to casualty not caused by Subtenant or condemnation.

19. NO THIRD PARTY RIGHTS. The benefit of the provisions of this Sublease is expressly limited to Sublandlord and Subtenant and their respective permitted successors and assigns. Under no circumstances will any third party be construed to have any rights as a third party beneficiary with respect to any of said provisions.

20. COUNTERPARTS. This Sublease may be signed in two or more counterparts, each of which shall be deemed an original and all of which shall constitute one agreement.

IN WITNESS WHEREOF, the parties have executed this Sublease as of the date first written above.

SUBLANDLORD

By: /s/

Its:

SUBTENANT

VIVUS, INC.

By: /s/ Richard Walliser

Its: CFO

CALIPER TECHNOLOGIES CORP.

By: /s/

Its: Orlando Romera, Director of Facilities

EXHIBIT 21.2

LIST OF SUBSIDIARIES

The following is a list of subsidiaries of VIVUS, Inc.

1. VIVUS International Limited a wholly owned subsidiary of VIVUS, Inc.
2. VIVUS UK Limited, a wholly owned subsidiary of VIVUS International Limited
3. VIVUS BV Limited, a wholly owned subsidiary of VIVUS International Limited
4. VIVUS Ireland Limited, a wholly owned subsidiary of VIVUS International Limited

Exhibit 23.1

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation of our report dated January 22, 1999 included in this Form 10-K, into the Company's previously filed Registration Statements (File No. 333-06486 and 333-299939) on Form S-8.

ARTHUR ANDERSEN LLP

San Jose, California
March 30, 1999

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For Purposes of this Exhibit, Primary Means Basic