

ZONAGEN INC  
Form 10-K  
March 30, 2005

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

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**Form 10-K**

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

**For the fiscal year ended December 31, 2004**

**or**

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

**For the transition period from to**

**Commission File No. 0-21198**

**Zonagen, Inc.**

*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction of  
incorporation or organization)*

**76-0233274**

*(IRS Employer  
Identification No.)*

**2408 Timberloch Place, Suite B-1  
The Woodlands, Texas**  
*(Address of principal executive offices)*

**77380**  
*(Zip Code)*

**(281) 719-3400**

**(Registrant's telephone number, including area code)**

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**Securities registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
Common Stock, \$.001 par value	Pacific Exchange, Inc.
Rights to purchase Series One Junior Participating Preferred Stock	Pacific Exchange, Inc.

**Securities registered pursuant to Section 12(g) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
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Common Stock, \$.001 par value  
Rights to purchase Series One Junior  
Participating Preferred Stock

Nasdaq SmallCap Market  
Nasdaq SmallCap Market

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

Indicate by check mark 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.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$11,000,000 as of June 30, 2004, the last business day of the registrant's most recently completed second fiscal quarter, based on the closing sales price of the registrant's common stock on the Nasdaq National Market on such date of \$2.56 per share. For purposes of the preceding sentence only, all directors, executive officers and beneficial owners of ten percent or more of the shares of the registrant's common stock are assumed to be affiliates.

As of December 31, 2004, there were 4,992,901 common shares outstanding and as of March 16, 2005, there were 10,079,601 shares of the registrant's common stock outstanding.

**Documents incorporated by reference:** Portions of the registrant's definitive proxy statement relating to the registrant's 2005 Annual Meeting of Shareholders, which proxy statement will be filed under the Securities Exchange Act of 1934 within 120 days of the end of the registrant's fiscal year ended December 31, 2004, are incorporated by reference into Part III of this Form 10-K.

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**ZONAGEN, INC.  
2004 FORM 10-K ANNUAL REPORT**

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words may, anticipate, believe, expect, estimate, project, suggest, intend and similar expressions are intended forward-looking statements. Such statements reflect the Company's current views with respect to future events and financial performance and are subject to certain risks, uncertainties and assumptions, including those discussed in Item 1. Description of Business Business Risks. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, expected, estimated, projected, suggested or intended.

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**PART I**

**ITEM 1. BUSINESS**

**Overview**

Zonagen, Inc. ( the Company , Zonagen, or we, us or our ) was organized on August 28, 1987 and is a development stage company. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders. Our lead product candidate, Progenta™, is an orally available small molecule compound that we are developing for the treatment of uterine fibroids and endometriosis. We are developing Progenta under an exclusive, worldwide license from the National Institutes of Health, or NIH. Progenta is being developed to alleviate adverse symptoms associated with both uterine fibroids and endometriosis by selectively blocking the progesterone receptor in women. We believe it may have advantages over the current standards of care for the treatment of uterine fibroids and endometriosis, which include surgery and treatment with gonadotropin releasing hormone agonists, or GnRH agonists, such as Lupron®. Unlike Progenta, GnRH agonists create a low estrogen, menopausal-like state in women, and estrogen is necessary for the maintenance of bone mineral density. Therefore, GnRH agonists tend to promote bone loss and cannot be used for more than six months at a time. When women cease treatment with GnRH agonists, fibroids rapidly regenerate and symptoms associated with endometriosis quickly reappear. We believe Progenta may have advantages over treatment with GnRH agonists because, in our animal research to date, Progenta does not appear to induce a low estrogen state and therefore should not promote bone loss, which could make Progenta a better treatment option for patients prior to surgery. In addition, we believe Progenta may provide an attractive alternative to surgery because of its potential to treat these conditions in a chronic fashion resolving the symptoms that most commonly lead to surgical treatment. We recently completed a Phase Ib clinical trial for Progenta in Poland for the treatment of uterine fibroids. We intend to begin a Phase II clinical trial for Progenta in the United States for the treatment of uterine fibroids during 2005, subject to review of our Phase Ib data by the U.S. Food and Drug Administration, or FDA. The FDA has agreed to meet with us on May 25, 2005 for the purpose of reviewing Zonagen's pre-IND proposal. We have not yet filed an investigational new drug application, or IND, with the FDA. If the FDA approves our IND, only then would we be permitted to conduct a clinical trial in the United States for Progenta. We also plan to conduct a Phase II clinical trial in Poland for Progenta for the treatment of endometriosis in 2005. However, we have not yet conducted any clinical trials for Progenta for the treatment of endometriosis, and any clinical trials we may conduct may not produce positive results.

Our second product candidate is Androxal™, an orally available small molecule compound being developed for the treatment of testosterone deficiency in men. Androxal, our proprietary compound, is designed to restore normal testosterone production in males with functional testes and diminished pituitary function, a condition commonly referred to in the aging male as andropause. We believe Androxal may have advantages over current therapies because it is being designed as an oral therapy that acts centrally to restore normal testosterone function in the body, rather than simply replacing diminished testosterone. The administration of replacement testosterone has been linked to numerous potential adverse effects, including shrinkage of the testes. In addition, a safe and effective oral treatment for testosterone deficiency has to date been unavailable. We recently completed a Phase I/II clinical trial for Androxal in the United States for the treatment of men with testosterone deficiency and submitted final data to the FDA. We met with the staff of the Division of Reproductive and Urologic Products of the FDA on November 10, 2004 to review our clinical plan for the approval of Androxal. The FDA agreed to review our protocols for our trials in a timely fashion under a special protocol assessment, or SPA. The FDA deems Androxal to be a new chemical entity, and additional lengthy animal studies will be required before long term human studies may be initiated or a New Drug Application, or NDA, may be filed.

On February 1, 2005, we completed our follow-on public offering of 5,060,000 shares of our common stock at \$4.00 per share (which included the underwriters' exercise of its over allotment option for 660,000 shares). The shares

offered by us were issued out of our existing treasury stock, and the offering resulted in net proceeds to us of approximately \$18.1 million.

**Business Strategy**

Our primary business strategy is to concentrate our resources on the clinical development of Progenta and Androxal. We intend to outsource our activities required to conduct these clinical trials and to continue to operate in

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a near-virtual manner until we complete our pivotal trials. We have no current intentions to build manufacturing or acquire sales and marketing capabilities but will seek to create value by developing our technology and realizing such value, if successful, by securing licensing fees, milestone payments and royalties through corporate collaborations. We also intend to sell or out-license our phentolamine-based sexual dysfunction products and/or in-license other product candidates for the treatment of hormonal and reproductive system disorders if the right opportunity presents itself.

## **Market Overviews**

### *Uterine Fibroids*

Uterine fibroids are common non-cancerous tumors that arise from the smooth muscle layer of the uterus. The National Uterine Fibroid Foundation estimates that possibly as many as 80% of all women in the United States have uterine fibroids, and one in four of these women have symptoms severe enough to require treatment. The two most common symptoms are abnormal uterine bleeding and pelvic pressure. Uterine fibroids may also cause fetal malpresentations and complications with labor. Pressure on internal organs caused by fibroids can cause difficulty in bowel movements, constipation, urinary frequency and incontinence.

In general, fibroids only need to be treated if they are causing symptoms. Currently, the primary treatment for patients with large or symptomatic fibroids is surgery. Hysterectomy, or surgical removal of the entire uterus, is the most frequent operative technique used to treat this disorder. In fact, fibroids are the most common indication for hysterectomy, accounting for approximately one-third of hysterectomies, or about 200,000 procedures annually, in the United States, according to the Center for Uterine Fibroids, or CUF. We estimate that the costs associated with these procedures reaches approximately \$1 to \$1.5 billion annually.

When women wish to preserve childbearing potential, a myomectomy may be performed. Unlike hysterectomy in which the entire uterus is removed, myomectomy is a surgical procedure in which individual fibroid(s) are removed. The CUF reports that approximately 18,000 myomectomies are performed annually in the United States, and this procedure, in general, diminishes menorrhagia, or prolonged and/or profuse menstrual flow, in roughly 80% of patients presenting with this symptom. Unfortunately, there is a significant risk of recurrence of fibroids after myomectomy. The CUF has also stated that, in some studies, up to 10% of women who underwent an initial myomectomy required a second major operative procedure, and one-quarter to one-half of women who underwent myomectomies had evidence of recurrence of their fibroids within one to ten years.

Drugs can help control fibroid-related symptoms. The most effective medications for the treatment of fibroids are GnRH agonists, including Lupron and Zoladex®, which are marketed by TAP Pharmaceuticals and Astra Zeneca PLC, respectively. GnRH agonists induce a low-estrogen, menopause-like state. Because fibroids are dependent on estrogen for their development and growth, induction of a low estrogen state causes reduction of tumor and uterus mass, resolving pressure symptoms. Specifically, uterine volume has been shown to decrease approximately 50% after three months of GnRH agonist therapy. In addition to decreasing the size of the uterus, treatment with GnRH agonists also stops menstrual flow, a disorder known as amenorrhea, allowing women with bleeding-induced anemia to significantly increase their iron stores.

However, there are two significant problems with GnRH agonists:

1. Bones require estrogen. GnRH agonists induce a low estrogen state in women, and estrogen is necessary for the maintenance of bone mineral density. Therefore, GnRH agonists tend to promote bone loss and cannot be used for more than six months at a time, usually in preparation for a surgical procedure.

2. When women cease treatment with GnRH agonists, their fibroids rapidly regenerate.

Therefore, use of GnRH agonists alone for treatment of fibroids is usually limited to a short one to three month preoperative course to shrink the uterus to facilitate a surgical procedure or to induce amenorrhea to improve hematologic condition before surgery.



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### *Endometriosis*

Endometriosis occurs when endometrial tissue, which is tissue that normally lines the inside of the uterus, is found outside of the uterus. This misplaced tissue develops into growths or lesions which react to the menstrual cycle the same way that the endometrium reacts, which results in internal bleeding and inflammation and can cause pain, infertility, scar tissue formation and bowel problems. According to the Endometriosis Association, endometriosis affects 5.5 million women in the United States and Canada and millions more worldwide.

Surgery is the current customary standard of care for endometriosis, either through laparoscopy or laparotomy. Conservative surgery seeks to remove or destroy the growths, relieve pain, and may allow pregnancy to occur in some cases. Hormonal therapy may be prescribed along with conservative surgery. Radical surgery, which may be necessary in severe cases, involves hysterectomy, removal of all growths, and removal of ovaries.

Physicians often prescribe pain medications, such as aspirin, acetaminophen, ibuprofen and naproxen, to reduce the pain associated with endometriosis. Hormonal treatments, such as the GnRH agonists described earlier, are designed to stop ovulation for as long as possible. Other hormonal treatments include oral contraceptives, progesterone drugs and danazol (a testosterone derivative). Surgery is expensive and invasive. GnRH agonists are currently the most effective form of treatment for endometriosis other than surgery but suffer from the same problems as described above when used for treating uterine fibroids, namely, bone loss and recurrence of the condition after cessation of treatment.

### *Testosterone Deficiency*

Low testosterone is linked to several negative physical and mental conditions in the aging male population, including loss of muscle tone, reduced sexual desire and deterioration of memory and certain other cognitive functions. Testosterone plays an essential role in the development of the normal male and in the maintenance of many male characteristics, including muscle mass and strength, bone mass, libido, potency, and spermatogenesis. Testosterone deficiency occurs with disorders that damage the testes, including traumatic or surgical castration (primary testicular failure) or disorders in which the gonadotropin stimulation of the testes is reduced, a condition known as hypogonadotropic hypogonadism. Men with hypogonadotropic hypogonadism have low plasma testosterone levels and luteinizing hormone levels that may be low or low-normal. This condition is a normal part of aging and is commonly referred to as andropause. According to the Urology Channel, recent estimates show that approximately 13 million men in the United States experience testosterone deficiency.

Current therapies focus on testosterone replacement. They deliver testosterone to the blood stream either transdermally or via injection. The current standard therapy in the industry is AndroGel®, a topical gel with sales of approximately \$283 million in 2003, marketed by Solvay Pharmaceuticals. Testim® is another topical gel currently sold and marketed by Auxilium Pharmaceuticals. Watson Pharmaceuticals markets a transdermal patch called AndroDerm®. There are several other companies attempting to get FDA approval for testosterone gels and at least two companies attempting to obtain generic approval for a topical testosterone gel. We anticipate that the U.S. market is approximately \$375 million today and could grow to nearly a billion dollars worldwide within the next several years as aging and the resulting effects on lifestyle become increasingly important.

However, there are two significant problems with the current therapies:

1. The use of any of the current therapies, including the transdermal therapies, may create high peaks of testosterone levels. Such high peaks can lead to excitation and aggressive behavior, sleeplessness, anxiety, depression and headaches and have been associated with prostate disease.
- 2.

While transdermal delivery through gels and patches produces a more constant drug level in the blood stream, transdermal delivery also results in elevated levels of dihydrotestosterone, or DHT. Elevated levels of DHT in the blood stream also have been associated with prostate disease.

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### **Our Product Candidates**

We intend to address the markets described above with our novel small molecule compounds, Progenta and Androxal, that we believe may have advantages over the current common standards of care in each respective market.

#### *Progenta*

We believe that current therapies for uterine fibroids and endometriosis are less than ideal and leave room for improved drugs with different modes of action. Particularly, we believe that anti-progestational agents like Progenta may have advantages over GnRH agonists because they are designed to selectively block progesterone without inducing a low estrogen state. Therefore, it may be possible to use Progenta on a long-term, or chronic, basis without the bone loss problems associated with GnRH agonists. Although we believe Progenta may be effective as an alternative six month pre-treatment to surgery for uterine fibroids, we also believe this product candidate may hold the potential to eventually become a chronic therapy for uterine fibroids and endometriosis that could eliminate the need for uterine fibroid surgery.

We currently have rights, under the terms of our license from the NIH, to a U.S. issued patent and a foreign filing made by the NIH regarding Progenta. Please see [Agreement with National Institutes of Health](#) for a description of the current status of our license with the NIH.

In January 2005, we completed dosing in a three-month, 30-patient, randomized Phase Ib clinical trial in Poland comparing Progenta to placebo and Lucrin® (the trade name for leucrolide acetate in Poland) in treating uterine fibroids. 28 of the 30 enrolled patients completed dosing. Patients enrolled in the trial were randomly distributed across five parallel groups. Each group consisted of five to six patients, and each group was dosed with a different medication: placebo, 12.5 mg Progenta, 25 mg Progenta, 50 mg Progenta, or Lucrin. The placebo and Progenta groups were administered in a double-blind fashion, meaning that the attending physician and the patient were both unaware of which medication was administered. The placebo contains no active ingredient, and is used to assess the psychological impact of treatment and to assure that the positive or negative effects experienced by patients receiving medication in a clinical study are in fact drug-related. The Lucrin group was included in the clinical trial so that the effects of Progenta can be compared against a drug currently approved and marketed for the indication. This is referred to as having a positive control in the clinical trial.

The study consisted of three phases. One day dosing was conducted for both initial safety and pharmacokinetics. Patients then entered a one-week washout period, during which no drug was administered. This period was included as a safety assessment to determine how long the positive or negative effects of the drug are observed, as well as to determine if the drug has the potential to accumulate within the patient. Following the one week washout and safety assessment, women took the drug for an additional 30 days after which time they are readmitted into the clinic to evaluate steady state pharmacokinetics, effects on fibroid size, bone mineral density and hemoglobin. Women showing positive effects on fibroid volume and hemoglobin without adverse reactions were allowed to continue in the trial for an additional two months. Women not experiencing a benefit with the study drug were allowed to switch to the GnRH agonists for the duration of the study. At the end of the study, women on Progenta were evaluated after a 30 day follow up period for changes in bone mineral density, hemoglobin levels and fibroid size and compared against the changes experienced by the positive control group dosed with GnRH agonists.

This study is of a small sample size of five to six patients per group. The primary purpose of the study is to show that the drug is safe, over the period and number of patients exposed, and to determine whether the drug warrants further development. Only drugs with significant therapeutic effects could be expected to exhibit statistically significant separation from placebo for any endpoints in such a small study. The purpose of including a positive control is to provide further information regarding the activity of the drug and to not over- or under-interpret the results from the study. For example, if an approved drug does not achieve statistical significance in a given study it

suggests that the product candidate, if equally not significant, should not be abandoned. Typically, after such a small study is undertaken, a larger Phase II or Phase III trial is performed. In cases where the subsequent trial achieves statistical significance and shows an adequate dose response, it may be used as one of the two pivotal trials necessary to obtain regulatory approval for the product candidate. Longer term open label studies, where both

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patients and physicians know what drug is used, are usually conducted to fulfill the safety requirements for chronically administered drugs.

We announced initial three-month data from this study on February 24, 2005. All clinical trial results are subject to review by the FDA, and the FDA may disagree with our conclusions about safety or efficacy. All 28 women remaining in the trial completed the three month chronic exposure to Progenta or Lucrin. None of the women in the double blinded portion of this cohort elected to switch to Lucrin. Furthermore, none of the women in the study experienced any side effects or changes in clinical chemistry. To date, Progenta has been well tolerated. The women in the high dose Progenta group of the study experienced reduction in fibroid size, as measured by ultrasound, at least numerically equivalent to GnRH agonists. These results may be reversed by the final results of this clinical trial or from later stage clinical trials with significantly larger and more diverse patient populations treated for longer periods of time.

We intend to begin a Phase II clinical trial for Progenta in the United States for the treatment of uterine fibroids during 2005, subject to the review of our Phase Ib data by the FDA. We have not yet filed an IND with the FDA. If the FDA approves our IND, only then would we be permitted to conduct a clinical trial in the United States for Progenta. Based on our regulatory timeline, we do not foresee filing an NDA for Progenta prior to 2007.

Several animal studies, including a nine-month primate study, were previously conducted exploring both the safety and activity of the product candidate, which were funded by a Small Business Innovative Research, or SBIR, grant. The data from those studies currently are being analyzed. Furthermore, based on observations of menstrual bleeding patterns in the primate study, the Company does not believe that there will be any adverse effects on endometrial tissue. We also intend to conduct a Phase II clinical trial for Progenta in Poland for the treatment of endometriosis in 2005. However, we have not yet conducted any clinical trials for Progenta for the treatment of endometriosis, and any clinical trials we may conduct may not produce positive results.

### *Androxal*

We are developing Androxal as a once a day oral therapy for the treatment of men with testosterone deficiency. Androxal is being designed to act centrally, thereby causing an increase in certain hormones that stimulate increased production of testosterone by the testes. We believe that the endogenous production of testosterone brought about by a compound like Androxal would not provide the significant negative feedback that occurs with the administration of high concentrations of exogenous testosterone (as with Androgel). This negative feedback signals the body to stop producing testosterone naturally, and has been linked to numerous potential adverse effects, including shrinkage of the testes. We believe that Androxal has the potential to restore near normal levels of testosterone, in as close to a natural process as possible, by restoring testicular production of testosterone, rather than simply replacing testosterone, and that Androxal could be the first significant therapy approved in this market that treats testosterone deficiency in this manner. In addition, a safe and effective oral treatment for testosterone deficiency has to date been unavailable.

Because Androxal induces naturally occurring cycles of testosterone production internally, we believe it may have advantages over the current therapies on the market for the following reasons:

Our Phase I/II clinical trial results indicate that Androxal does not cause abnormal peaks in blood testosterone levels which can be caused by some current testosterone replacement therapies; and

the data so far do not indicate the elevated levels of dihydroxytestosterone, or DHT, associated with transdermal therapies.

All clinical trial results are subject to review by the FDA, and the FDA may disagree with our conclusions about safety or efficacy. In addition, these results are from early stage clinical trials, and may be reversed by the results of

larger or later stage clinical trials with significantly larger and more diverse patient populations treated for longer periods of time.

Our Androxal product candidate is covered by eight pending patent applications in the United States and 19 foreign pending patent applications. All of these applications relate to methods and materials for the treatment of

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testosterone deficiency in men. A third party holds an issued patent related to the use of an anti-estrogen such as clomiphene citrate for use in the treatment of androgen deficiency and disorders related thereto. Androxal is purified from clomiphene citrate. We believe that the claims of the other party's patent are invalid because several printed publications previously available in the public domain. On that basis, we filed a request for reexamination of the patent with the U.S. Patent and Trademark Office, or PTO, in light of a number of these publications. The PTO has since rejected all of such claims of the patent on the grounds that each of the claims are anticipated by, or obvious in view of, a number of printed publications that were already in the public domain. The third party filed a response to those rejections and the PTO recently finally rejected the claims in such response. The third party now has an opportunity to appeal such ruling, subject to certain timing requirements. We do not believe that the third party will overcome the rejections made by the PTO. Even if the other party appeals and such appeal is successful and its patent is upheld, we believe that our contemplated use of Androxal may not infringe any valid claims of the patent. However, it is possible that the claims of this patent could be construed so as to block our use of Androxal for indications such as the treatment of testosterone deficiency. If this were to occur, we may then be required to obtain a license from the holder of such patent in order to develop Androxal further, and such license may not be available on acceptable terms or at all. In this case, we would not be able to develop or commercialize Androxal.

In July 2004, we released results from a randomized Phase I/II clinical trial in the United States comparing Androxal to placebo and to Androgel in hypogonadal men. The trial tested 52 clinically diagnosed hypogonadal men with testosterone levels less than 300 ng/dL, whereas normal levels range from 298 to 1034 ng/dL. Patients were randomized into five different arms and each arm was dosed with a different medication: three dose levels of Androxal, placebo, or the low dose of Androgel. Upon completion of these arms of the trial, a sixth arm comprised of 10 men from the initial group was formed to test the high dose of Androgel. The placebo and Androxal doses were administered in a double-blind fashion, meaning that the attending physician and the patient are both unaware of which medication is administered. Androgel was administered as an open label treatment, where both patient and physician know what drug is being administered. Following a two week drug treatment, patients were followed for an additional seven to 10 days to evaluate their testosterone levels. There were no side effects noted in either the Androxal or Androgel arms of the study that were statistically different than placebo. Furthermore, all three dose levels of Androxal produced statistically significant changes in testosterone from baseline testosterone levels. The low, mid and high dose levels achieved mean increases of 169, 247 and 294 ng/dL, respectively, as compared to baseline. There were no statistically significant changes within the placebo group. Seven of 10 men in the low dose group, 10 of 11 in the mid dose group and 10 of 10 men in the high dose group had restoration of normal testosterone levels. All clinical trial results are subject to review by the FDA, and the FDA may disagree with our conclusions about safety and efficacy. We caution that these results may be reversed by the results of later stage clinical trials with significantly larger and more diverse patient populations treated for longer periods of time.

Comparing average testosterone levels during the trial period, all three doses of Androxal achieved blood levels of total testosterone that were statistically indistinguishable from the high dose of Androgel. In each patient studied, Androxal also produced average testosterone levels below 1000 ng/dL at day 14, whereas several Androgel patients had average testosterone levels far above the normal range. In the subset of men whose blood testosterone levels were measured six times over a 24-hour period, three of five men on the high dose of Androgel had multiple measurements above the normal range. In contrast, only one man out of 15 on Androxal had a single measurement above the normal range. Similar to our Progenta clinical trial, this study is of a small sample size. The primary purpose of the study is to show that the drug is safe, over the period and number of patients exposed, and to determine whether the drug warrants further development. We caution that these results may be reversed by the results of later stage clinical trials with significantly larger patient populations treated for longer periods of time.

We met with members of the staff of the Division of Reproductive and Urologic Products of the FDA on November 10, 2004 to review our clinical plan for the approval of Androxal. Based on the written record of this meeting, the FDA will require an additional clinical endpoint, for example, improved libido or improvement in

depression scores, associated with the primary endpoint of increased testosterone levels. The FDA agreed to review our protocols for our trials in a timely fashion under a special protocol assessment, or SPA. In the SPA process, the FDA reviews the design, size and planned analysis of our Phase III clinical trial and provides comments regarding the trial's adequacy to form a basis with respect to effectiveness for approval of a NDA, if the trial is successful in meeting its predetermined objectives. The FDA's written agreement is binding on its review decision, except in limited circumstances, such as when a substantial scientific issue essential to determining the safety or effectiveness of a product candidate is identified after the Phase III clinical trial is commenced. Even if a NDA is filed, there is no



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guarantee that the application will be approved. Any change to the protocol for our Phase III clinical trial included in the SPA would require prior FDA approval, which could delay our ability to implement such change. The FDA deems Androxal to be a new chemical entity, and additional lengthy animal studies will be required before long term human studies may be initiated. In particular, a twelve week study in dogs and rats must be completed before humans may be dosed in a Phase III clinical trial. In addition, before we can submit our NDA for Androxal, we will be required to successfully complete a two-year carcinogenicity study in rats. Therefore, we would not be able to file an NDA for Androxal prior to 2007.

Below is a summary of our product candidates and the related stages of development for each. The information in the column labeled Estimate of Completion of Current Phase contains forward-looking statements regarding timing of completion of product development phases. The successful development of our product candidates is highly uncertain. Estimated completion dates and R&D expenses can vary significantly for each product candidate and are difficult to predict. The actual timing of completion of those phases could differ materially from the estimates provided in the table.

<b>Product Candidate</b>	<b>Indication</b>	<b>Current Phase of Development</b>	<b>Collaborator</b>	<b>Estimate of Completion of Current Phase</b>
Progenta (1)	Uterine fibroids	Phase II (pending FDA review United States)	None	Initial study data end of 1 <sup>st</sup> half 2006
Androxal (2)	Testosterone deficiency	Phase III (Pending FDA review of protocol United States)	None	Initial study data end of 1 <sup>st</sup> half 2006
Progenta (3)	Endometriosis	Phase II (Europe)	None	Initial study data end of 1 <sup>st</sup> half 2006

- 
- (1) Female health small molecule opportunity. We intend to begin a Phase II clinical trial for Progenta in the United States for the treatment of uterine fibroids during 2005, subject to review of our Phase Ib data by the FDA. The FDA has agreed to meet with us on May 25, 2005 for the purpose of reviewing Zonagen's pre-IND proposal. We are seeking guidance from the FDA regarding our trial design for Progenta and the suitability of our recently completed Phase Ib clinical study data as support for the FDA to allow us to begin an advanced stage clinical trial program with Progenta in the United States. We have not yet filed an IND with the FDA. If the FDA approves our IND, only then would we be permitted to conduct a clinical trial in the United States for Progenta.
- (2) Internal small molecule program. We have described a patent potentially competitive with our patent on Androxal. We met with FDA staff members on November 10, 2004 to review our clinical plan for the approval of Androxal. The FDA agreed to review our protocols for our trials in a timely fashion under a SPA. The FDA deems Androxal to be a new chemical entity, and additional lengthy animal studies will be required before long term human studies may be initiated or a NDA may be filed.
- (3) Female health small molecule opportunity. We have not yet conducted any clinical trials for Progenta for the treatment of endometriosis, and any clinical trials we may conduct may not produce positive results.

**Additional Potential Indications for Progenta**

We believe Progenta may be effective for the treatment of breast cancer and as a hormone replacement therapy but are not actively developing Progenta for these indications at this time.

*Breast Cancer*

We believe Progenta may possess the potential capability to treat breast cancers that are resistant to Tamoxifen® therapy, a commonly used anti-estrogen breast cancer therapy. Our initial rodent studies funded by a SBIR grant showed a strong dose dependent effect on the reduction and elimination of tumors in a well accepted breast cancer model.

*Hormone Replacement Therapy*

We believe Progenta may have the potential to eliminate many of the side effects, particularly endometrial cancer, seen with estrogen-only therapies in women with low hormone levels. The side effects of estrogen-only hormone replacement therapies for women are alleviated with estrogen-progestin combination therapies. However,

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recent data have shown that such combination therapies may increase the risk of breast cancer, heart attacks, strokes and blood clots. Unlike progestins, Progenta is devoid of progesterone-like activity and instead opposes its actions. The result of this action could lead to a new class of hormone replacement therapies with Progenta combinations.

## **Out-Licensing Opportunities**

Our phentolamine-based products for the treatment of sexual dysfunction include VASOMAX®, an oral therapy for male erectile dysfunction, or MED; an oral therapy for female sexual arousal disorder; Bimexes™, an oral combination drug therapy for MED; and ERxin™, a multi-drug component injection therapy for MED. Although VASOMAX was previously approved for sale in eight non-U.S. countries, some approvals have lapsed and the existing approvals may be difficult to transfer to another entity or could also lapse. Although the products previously being developed to treat sexual dysfunction are our most advanced in terms of clinical development, they all contain phentolamine, which the FDA has on partial clinical hold. The interim results of a November 2000 mechanistic study designed to address the FDA's concerns over phentolamine were positive, but in October 2002, the FDA decided to require us to perform an additional two-year rat study in order to lift the partial clinical hold. At this time, we do not intend to conduct this additional study. There can be no assurance that even if we were to complete this additional study that the FDA would remove its partial clinical hold on phentolamine. All of our phentolamine-based products have been tested in humans, though each is at a different stage of development. Before the FDA will consider the approval to market any of our phentolamine-based products, the partial clinical hold must first be lifted.

In addition, Schering-Plough, Ltd. and Schering Corporation, the previous licensees of our phentolamine-based products, decided to withdraw their December 2001 submission to the Medicines Control Agency in the United Kingdom after receipt and review of comments from the Committee on Safety of Medicines on such submission. In July 2002, the Schering group agreed to terminate its worldwide licensing agreements with us. Schering returned all rights to our phentolamine-based product candidates to us for a nominal up front cash fee and certain continuing royalty obligations in the event we have any sales of VASOMAX or our other phentolamine-based products. We intend to outlicense some or all of this technology if the right opportunity presents itself, although we may not be able to realize any value from this technology.

## **Research and Development**

We have limited resources and utilize consultants and outside entities to perform clinical development and limited research activities in connection with preclinical studies and clinical trials. Our primary research and development, or R&D, expenses for 2004 are for the payment of consultants and contract research organizations in connection with our clinical trials for Progenta for the treatment of uterine fibroids and for Androxal for testosterone deficiency. In addition, we will incur expenses relating to the clinical development of Progenta for endometriosis. We believe that these expenses will continue to be our primary R&D expenses in the near future.

## **Agreement with National Institutes of Health**

In 1999, we licensed rights to Progenta from the NIH under an exclusive, worldwide license in the field of treatment of human endocrinologic pathologies or conditions in steroid sensitive tissues which expires upon the expiration of the last licensed patent. Under the terms of the agreement, we are obligated to meet developmental milestones as outlined in a commercial development plan. This development plan outlines a preclinical and clinical program leading to the stated objective of submitting an NDA for regulatory approval of Progenta for the treatment of uterine fibroids in 2008. We provide annual updates to the NIH on the progress of our development of Progenta. Based on our interaction with the NIH to date, we believe our license and relationship with NIH are in good standing. The NIH has the ability to terminate the agreement for lack of payment or if we are not meeting milestones as outlined in the commercial development plan and for other reasons as outlined in the agreement. The NIH retains, on behalf of

the government, a nonexclusive, nontransferable, worldwide license to practice the inventions licensed under the licensed patents by or on behalf of the government. For the purpose of encouraging basic research, the NIH retains the right to grant nonexclusive research licenses to third parties. Due to the work that was done on Progenta at the NIH prior to our license agreement, the government also has certain rights to use the product in the event of a national emergency pursuant to the Patent and Trademark Laws Amendments Act of 1980, as amended. During the period when we were considering redeployment of our assets, we were not in compliance with all of the original requirements stated in the commercial development plan. In July 2002, we and the NIH amended the license

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agreement to include a revision of the original commercial development plan relating to the targeted dates for certain objectives. Additional updates of the original commercial development plan have been reached with the NIH thereafter in order to expedite development. Although we believe that we have a good working relationship with the NIH, there can be no assurance that all of the objectives and conditions in the commercial development plan will be met on a timely basis or at all, or that, if we fail to meet any of such objectives, the NIH will again agree to amend this agreement to our satisfaction. Failure to comply with the material terms contained in the license agreement could result in termination of such agreement, which would prohibit us from further development of Progenta and severely harm our business prospects.

## **Manufacturing**

We do not have any facilities to manufacture products necessary for clinical trials or commercial sales and do not expect to establish any of our own manufacturing capacity in the foreseeable future. We have in the past relied and intend to continue to rely on third parties for the foreseeable future for the manufacture and supply of commercial quantities of any compounds or products that we may develop. Other than some initial amounts from the NIH, we have used the same outside supplier, Bridge Organics, for all of the Progenta needed for our clinical trials to date. We are in the process of seeking a suitable source for a long-term manufacturing agreement for the product candidate. There can be no assurance that we will be able to successfully negotiate a long-term agreement with any of such potential manufacturers at a reasonable price and on other acceptable terms or that any potential manufacturer will be able to reproduce the results obtained by Bridge Organics in manufacturing Progenta to date. We have obtained all of our supply of Androxal to date from BioVectra. Also, our dependence on third parties for the manufacture of any products we may develop may adversely affect our product margins and our ability to develop and to deliver products in a timely manner. Any such third-party suppliers or any manufacturing facility we establish will be required to meet FDA manufacturing requirements. FDA certification of manufacturing facilities for a drug, and compliance with current Good Manufacturing Practices requirements, is a prerequisite to approval of a NDA for that drug. We may encounter significant delays in obtaining supplies from third-party manufacturers or experience interruptions in our supplies. The effects of any such delays or interruptions will be more severe if we rely on a single source of supply. If we were unable to obtain adequate supplies, our business would be materially adversely affected.

## **Sales and Marketing**

We have no experience in the sales, marketing and distribution of pharmaceutical products. If in the future we fail to reach or elect not to enter into an arrangement with a collaborative partner with respect to the sales and marketing of any of our future potential product candidates, we would need to develop a sales and marketing organization with supporting distribution capability in order to market such products directly. Significant additional expenditures would be required for us to develop such a sales and marketing organization.

## **Patents and Proprietary Information**

Our ability to compete effectively with other companies is materially dependent on the proprietary nature of our patents and technologies. We actively seek patent protection for our proprietary technology in the United States and abroad. We have previously written off capitalized patents relating to the zona pellucida immuno-contraceptive vaccine and our phentolamine-based products, which includes VASOMAX, our hCG immuno-contraceptive vaccine, our two vaccine adjuvants and our two prostate cancer vaccines. However, we continue to maintain our phentolamine-based patents relating to these technologies and include these costs in R&D expenses.

Under a license agreement with the NIH, we have exclusive rights to a U.S. patent application, which recently has issued, and a foreign filing made by the NIH regarding Progenta. We also have the following patent applications pending relating to Androxal and methods of use: eight pending patent applications in the United States, and 19

foreign pending patent applications.

A third party holds an issued patent related to the use of an anti-estrogen such as clomiphene citrate for use in the treatment of androgen deficiency and disorders related thereto. Androxal is purified from clomiphene citrate. We believe that the claims of the other's party patent are invalid because of several printed publications previously available in the public domain. On that basis, we filed a request for reexamination of the patent with the PTO in light of a number of these publications. The PTO rejected all of such claims of the patent on the grounds that each of the

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claims are anticipated by, or obvious in view of, a number of printed publications that were already in the public domain. The third party filed a response to those rejections and the PTO recently finally rejected the claims in such response. The third party now has an opportunity to appeal such ruling, subject to certain timing requirements. We do not believe that the third party will overcome the rejections made by the PTO. Even if the other party appeals and such appeal is successful and its patent is upheld, we believe that our contemplated use of Androxal may not infringe any valid claims of the patent. However, it is possible that the claims of this patent could be construed so as to block our use of Androxal for indications such as the treatment of testosterone deficiency. If this were to occur, we may then be required to obtain a license from the holder of such patent in order to develop Androxal further, and such license may not be available on acceptable terms or at all. In this case, we would be not be able to develop or commercialize Androxal.

## **Competition**

We are engaged in pharmaceutical product development, an industry that is characterized by extensive research efforts and rapid technological progress. Many established pharmaceutical and biotechnology companies, universities and other research institutions with financial, scientific and other resources significantly greater than ours are marketing or may develop products that directly compete with any products we may develop. These entities may succeed in developing products that are safer, more effective or less costly than products we may develop. Even if we can develop products which should prove to be more effective than those developed by other companies, other companies may be more successful than us because of greater financial resources, greater experience in conducting preclinical studies and clinical trials and in obtaining regulatory approval, stronger sales and marketing efforts, earlier receipt of approval for competing products and other factors. If we commence significant commercial sales of any products, we or our collaborators will compete in areas in which Zonagen has no experience, such as manufacturing and marketing. There can be no assurance that our products, if commercialized, will be accepted and prescribed by healthcare professionals.

Our main competitors for the treatment of uterine fibroids and endometriosis are GnRH agonists, especially Lupron, the current most common therapeutic standard of care for uterine fibroids, with annual sales of \$787.8 million in the United States and Canada for all indications. Lupron is marketed by TAP Pharmaceuticals, which has far greater resources and marketing capabilities than we have. In addition, surgical treatment of both uterine fibroids and endometriosis competes with Progenta by removing uterine fibroids and by removing misplaced tissue in women with endometriosis. We believe we can potentially compete with Lupron and other GnRH agonists because we believe that Progenta will not present the same side effect of a decrease in bone mineral density given its specific focus on progesterone inhibition, which differentiates it from GnRH agonists that create a low estrogen state. There are additional companies developing similar progesterone-blocking technology. Asoprisnil, an anti-progestin being developed by TAP Pharmaceuticals in partnership with Schering AG, is currently in Phase III clinical trials.

Our main competitors for the treatment of testosterone deficiency are the testosterone replacement therapies currently being marketed. The current most common standard of care is Androgel, a topical gel for the replacement of testosterone, which is marketed by Solvay Pharmaceuticals, a considerably larger company than we are. There is another topical gel, Testim®, currently marketed by Auxilium Pharmaceuticals, and a transdermal patch, AndroDerm, marketed by Watson Pharmaceuticals. We believe we can compete with Androgel and the other replacement therapies because we believe that Androxal avoids the abnormally high peaks of testosterone levels and elevated levels of DHT which can be associated with current testosterone replacement therapies like Androgel. Based on our clinical trial supply cost to date, we currently expect that Androxal, if approved, can compete favorably on a cost basis with current testosterone replacement therapies.

## **Governmental Regulation**

Our research and development activities, preclinical studies and clinical trials, and ultimately the manufacturing, marketing and labeling of any products we may develop, are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries. The U.S. Federal Food, Drug and Cosmetic Act and the regulations promulgated thereunder and other federal and state statutes and regulations govern, among other things, the testing, manufacture, storage, record keeping, labeling, advertising, promotion, marketing and distribution of any products we may develop. Preclinical study and clinical trial requirements and the regulatory approval process take many years and require the expenditure of substantial resources. Additional



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government regulation may be established that could prevent or delay regulatory approval of our product candidates. Delays in obtaining or rejections of regulatory approvals would adversely affect our ability to commercialize any product candidate we develop and our ability to receive product revenues or to receive milestone payments or royalties from any product rights we might license to others. If regulatory approval of a product candidate is granted, the approval may include significant limitations on the indicated uses for which the product may be marketed or may be conditioned on the conduct of post-marketing surveillance studies.

The standard process required by the FDA before a pharmaceutical agent may be marketed in the United States includes: (1) preclinical tests; (2) submission to the FDA of an investigational new drug application which must become effective before human clinical trials may commence; (3) adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for its intended application; (4) submission of an NDA to the FDA; and (5) FDA approval of the NDA prior to any commercial sale or shipment of the drug.

Even if regulatory approvals for any products we may develop are obtained, we, our potential collaborators, our products, and the facilities manufacturing our products would be subject to continual review and periodic inspection. The FDA will require post-marketing reporting to monitor the safety of our products. Each U.S. drug-manufacturing establishment must be registered with the FDA. Domestic manufacturing establishments are subject to biennial inspections by the FDA and must comply with the FDA's requirements regarding current Good Manufacturing Practices. To supply drug products for use in the United States, foreign manufacturing establishments must comply with the FDA's Good Manufacturing Practices and are subject to periodic inspection by the FDA or by regulatory authorities in those countries under reciprocal agreements with the FDA. In complying with current Good Manufacturing Practices, manufacturers must expend funds, time and effort in the area of production and quality control to ensure full technical compliance. We do not have any drug manufacturing capabilities and must rely on outside firms for this capability. The FDA stringently applies regulatory standards for manufacturing. Identification of previously unknown problems with respect to a product, manufacturer or facility may result in restrictions on the product, manufacturer or facility, including warning letters, suspensions of regulatory approvals, operating restrictions, delays in obtaining new product approvals, withdrawal of the product from the market, product recalls, fines, injunctions and criminal prosecution.

Before any products we may develop could be marketed outside of the United States, they would be subject to regulatory approval similar to FDA requirements in the United States, although the requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country. No action can be taken to market any drug product in a country until the regulatory authorities in that country have approved an appropriate application. FDA approval does not assure approval by other regulatory authorities. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In some countries, the sale price of a drug product must also be approved. The pricing review period often begins after market approval is granted. Even if a foreign regulatory authority approves any products we may develop, no assurance can be given that it will approve satisfactory prices for the products.

Our research and development involves the controlled use of hazardous materials and chemicals. Although we believe that our procedures for handling and disposing of those materials comply with state and federal regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If such an accident occurs, we could be held liable for resulting damages, which could be material to our financial condition and business. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens, and the handling of biohazardous materials. Additional federal, state and local laws and regulations affecting us may be adopted in the future. Any violation of, and the cost of compliance with, these laws and regulations could materially and adversely affect us.

### *Third-Party Reimbursement and Pricing Controls*

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on the availability of reimbursement to the consumer from third-party payers, such as government and private insurance plans. Since we have no commercial products, we have not had to face this issue yet. However, third-party payers are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicaid, Medicare and private payers.

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Our products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis. The passage of the Medicare Prescription Drug and Modernization Act of 2003 imposes new requirements for the distribution and pricing of prescription drugs which may affect the marketing of our products.

In many foreign markets, including the countries in the European Union, pricing of pharmaceutical products is subject to governmental control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental pricing control. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our profitability.

### *The Hatch-Waxman Act*

Under the U.S. Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act, newly approved drugs and indications benefit from a statutory period of non-patent marketing exclusivity. The Hatch-Waxman Act provides five year marketing exclusivity to the first applicant to gain approval of an NDA for a new chemical entity, or NCE, meaning that the FDA has not previously approved any other new drug containing the same active ingredient. Both of our current product candidates are considered NCEs. The Hatch-Waxman Act prohibits an abbreviated new drug application, or ANDA, where the applicant does not own or have a legal right of reference to all the data required for approval, to be submitted by another company for another version of such drug during the five year exclusive period. Protection under the Hatch-Waxman Act will not prevent the filing or approval of another full NDA, however, the applicant would be required to conduct its own adequate and well-controlled clinical trials to demonstrate safety and effectiveness. The Hatch-Waxman Act also provides three years of marketing exclusivity for the approval of new NDAs with new clinical trials for previously approved drugs and supplemental NDAs, for example, for new indications, dosages, or strengths of an existing drug, if new clinical investigations are essential to the approval. This three year exclusivity covers only the new changes associated with the supplemental NDA and does not prohibit the FDA from approving ANDAs for drugs containing the original active ingredient or indications.

The Hatch-Waxman Act also permits a patent extension term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent extension cannot extend the remaining term of a patent beyond a total of 14 years. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and it must be applied for prior to expiration of the patent. The PTO, in consultation with the FDA, reviews and approves or rejects the application for patent term extension.

### **Litigation**

We are not currently a party to any material legal proceedings.

### **Nasdaq SmallCap Market Listing**

In January 2004, we accepted for purchase 6,547,635 shares (approximately 57% of our outstanding common stock, at that time) at a purchase price of \$2.10 per share in accordance with the terms of our self tender offer, which included 60,888 shares issuable upon exercise of options tendered by directors, for a total aggregate cost of approximately \$14.0 million, inclusive of costs associated with the offer. After the tender offer, we had 4,992,901 shares outstanding.

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On July 8, 2004, our common stock transferred from the Nasdaq National Market to the Nasdaq SmallCap Market after Nasdaq approved our application for this transfer. We applied for a Nasdaq SmallCap Market listing after Nasdaq informed us that we no longer met the \$10,000,000 minimum stockholders equity listing requirement for the Nasdaq National Market. This shortfall was a result of the completed January 2004 self tender offer.

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**Employees and Consultants**

*Employees*

At March 28, 2005, we had five full-time employees, a number which we believe is currently sufficient to advance the clinical development of our Progenta product candidate for the treatment of uterine fibroids and endometriosis and our Androxal product candidate for the treatment of testosterone deficiency. We utilize part-time consultants as well as contract research organizations and other outside specialty firms for various services such as clinical trial support, manufacturing and regulatory approval advice. We intend to increase the number of employees we have, particularly in the area of research and development. We believe our relationship with our employees is good.

*Scientific Advisors and Consultants*

We benefit from consultation with prominent scientists active in fields related to our technology. For this purpose, we have part-time consulting relationships with a number of scientific advisors. At our request, these advisors review the feasibility of product development programs under consideration, advise us with advances in areas related to our technology, and aid in recruiting personnel. All of the advisors are employed by academic institutions or other entities and may have commitments to or advisory agreements with other entities that limit their availability to us. Our consultants are required to sign an agreement providing that they are to disclose and assign to us any ideas, discoveries and inventions they develop in the course of providing consulting services. We also use consultants for various administrative needs. None of our consultants are otherwise affiliated with us.

In addition to the consultants described above, we have engaged two U.S. contract research organizations to conduct our clinical trials. Pharm-Olam International Ltd. conducts our clinical trial in Poland for Progenta for the treatment of uterine fibroids and Advanced Biomedical Research, Inc. conducted our clinical trial in the United States for Androxal for the treatment of testosterone deficiency. Under our arrangements with these contract research organizations, we design the protocols for the clinical trials and direct the contract research organizations in their efforts. Both Pharm-Olam and Advanced Biomedical have agreed that we own all of the data associated with the clinical trials.

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**RISK FACTORS**

*Our product candidates are at an early stage of development, and if we are not able to successfully develop and commercialize them, we may not generate sufficient revenues to continue our business operations.*

We currently have only two active product candidates, and both are in early stages of development. We recently completed a Phase I/II clinical trial for Androxal in the United States for the treatment of men with testosterone deficiency, and have completed a Phase Ib clinical trial for Progenta in Poland for the treatment of uterine fibroids. We have expended significant time, money and effort in the development of Progenta and Androxal and we will have to spend considerable additional time, money and effort before seeking regulatory approval to market these product candidates. For example, we will be required to complete additional animal studies before we can begin pivotal clinical trials for Androxal in humans.

Our business depends primarily on our ability to successfully complete clinical trials, obtain required regulatory approvals and successfully commercialize Progenta and Androxal. If we fail to commercialize Progenta and Androxal, we may be unable to generate sufficient revenues to attain profitability or continue our business operations and our reputation in the industry and in the investment community could likely be significantly damaged, each of which would cause our stock price to decline.

*Because the data from preclinical studies and early clinical trials for Progenta and Androxal are not necessarily predictive of future results, we can provide no assurances that these product candidates will have favorable results in clinical trials or receive regulatory approval.*

Before we can obtain regulatory approval for the commercial sale of any product candidate that we wish to develop, we are required to complete preclinical development and extensive clinical trials in humans to demonstrate its safety and efficacy. Positive data from preclinical studies or early clinical trials should not be relied upon as evidence that those studies or trials will produce positive results, or that later or larger-scale clinical trials will succeed. Initial clinical trials for Progenta and Androxal have been conducted only in small numbers of patients that may not fully represent the diversity present in larger populations, and thus the limited data we have obtained may not predict results from studies in larger numbers of patients drawn from more diverse populations, and therefore may not predict the ability of Progenta to treat uterine fibroids and endometriosis or Androxal to treat testosterone deficiency. We will be required to demonstrate through larger-scale clinical trials that these product candidates are safe and effective for use in a diverse population before we can seek regulatory approvals for their commercial sale. There is typically an extremely high rate of attrition from the failure of drug candidates proceeding through clinical trials. We will also be required to complete a two year rat carcinogenicity study before we are permitted to file a new drug application, or NDA, for Androxal. If Progenta, Androxal, or any other potential future product candidate fails to demonstrate sufficient safety and efficacy in any clinical trial, we would experience potentially significant delays in, or be required to abandon, development of that product candidate. If we delay or abandon our development efforts related to Progenta or Androxal, we may not be able to generate sufficient revenues to continue operations or become profitable.

*If we fail to obtain the capital necessary to fund our operations, we will have to delay, reduce or eliminate our research and development programs or commercialization efforts.*

We expect to make additional capital outlays and to increase operating expenditures over the next several years to support our preclinical development and clinical trial activities, particularly as we enter into pivotal clinical trials for Progenta and Androxal. Our existing financial resources, are expected to be sufficient to fund our operations through the first quarter 2006. Therefore we will need to seek additional funding through public or private financings, including equity or debt financings, and/or through other means, including collaborations and license agreements. We

do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on terms favorable to our stockholders or us. If adequate funds are not available to us, we may be required to:

delay, reduce the scope of or eliminate one or more of our development programs;

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relinquish, license or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves at an earlier stage or on terms that are less favorable than might otherwise be available; or

liquidate and dissolve our company.

Our future capital requirements will depend upon a number of factors, including:

the size, complexity, results and timing of our clinical programs;

the cost to obtain sufficient supply of the compounds necessary for our product candidates at a reasonable cost;

the time and costs involved in obtaining regulatory approvals;

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and

competing technological and market developments.

These factors could result in variations from our currently projected operating and liquidity requirements.

*We have a history of operating losses, and we expect to incur increasing net losses and may not achieve or maintain profitability for some time or at all.*

We have experienced significant operating losses in each fiscal year since our inception. As of December 31, 2004, we had an accumulated deficit of approximately \$86.8 million. We expect to continue incurring net losses and may not achieve or maintain profitability for some time or at all. As we increase expenditures for clinical development of Progenta and Androxal, we expect our operating losses to increase for at least the next few years. Our ability to achieve profitability will depend, among other things, on successfully completing the development of Progenta and Androxal, obtaining regulatory approvals, establishing marketing, sales and manufacturing capabilities or collaborative arrangements with others that possess such capabilities, and raising sufficient funds to finance our activities. There can be no assurance that we will be able to achieve profitability or that profitability, if achieved, can be sustained.

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

We may raise additional funds through public or private equity offerings, debt financings or corporate collaborations and licensing arrangements. We cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that we raise additional capital by issuing equity securities, our stockholders ownership will be diluted. Any debt financing we enter into may involve covenants that restrict our operations. These restrictive covenants may include limitations on borrowing and specific restrictions on the use of our assets, as well as prohibitions on our ability to create liens, pay dividends, redeem capital stock or make investments. In addition, if we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish potentially valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to us. For example, we might be forced to relinquish all or a portion of our sales and marketing rights with respect to Progenta, Androxal or other potential products or license intellectual property that enables licensees to develop competing products.



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*We licensed our rights to Progenta from the National Institutes of Health, or NIH, and our inability to fulfill our commitments and obligations under such license may result in forfeiture of our rights.*

Our rights to Progenta are licensed exclusively to us from the NIH under a license agreement. This license agreement contains numerous detailed performance obligations, with time sensitive dates for compliance, relating to clinical development and commercialization activities required by us or our designated third-party providers, as well as additional financial milestones and royalties. Failure to achieve the benchmarks specified in the commercial development plan attached to the license agreement or meet payment obligations could result in termination of the license agreement and the loss of our rights to develop and commercialize Progenta. During the period when we were considering redeployment of our assets, we were not in compliance with all of the original requirements stated in the commercial development plan. In July 2002, the license agreement was amended to include a revision of the original commercial development plan relating to the targeted dates for certain objectives. Additional updates of the original commercial development plan have been reached with the NIH thereafter in order to expedite development. There can be no assurance that we will be able to meet any or all of such performance objectives in the future on a timely basis or at all, or that, if we fail to meet any of such objectives, the NIH will again agree to amend such agreement to our satisfaction. The NIH has the ability to terminate the agreement for failure to comply with the material terms contained in the license agreement and for other reasons as outlined in the agreement. Should the NIH terminate the license agreement, we would lose all rights to commercialize Progenta, which would have a material adverse effect on us.

*There is a patent holder that claims priority over our patent application for Androxal.*

U.S. Patent No. 6,391,920 was issued to a competitor on May 21, 2002 and is directed to the use of an anti-estrogen such as clomiphene citrate for use in the treatment of androgen deficiency and disorders related thereto. Androxal is purified from clomiphene citrate. We filed a request for reexamination of this patent with the U.S. Patent and Trademark Office, or PTO. The PTO rejected all claims of this patent on the grounds that each of the claims are anticipated by, or obvious in view of, a number of printed publications that were already in the public domain. The third party filed a response to those rejections and the PTO recently finally rejected the claims in such response. The third party now may appeal such ruling, subject to certain timing requirements. If the other party appeals on a timely basis, and such appeal is successful, it is possible that the claims of this patent could be construed so as to block our use of Androxal for indications such as the treatment of testosterone deficiency. If this were to occur, we may then be required to obtain a license from the holder of such patent in order to develop Androxal further and such license may not be available on acceptable terms or at all. In this case, we would not be able to develop or commercialize Androxal.

*We cannot assure that our manufacture, use or sale of Progenta and Androxal will not infringe on the patent rights of others.*

There can be no assurance that the manufacture, use or sale of Progenta or Androxal and any potential future product candidates will not infringe the patent rights of others. We may be unable to avoid infringement of the patent rights of others and may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. There can be no assurance that a license to the allegedly infringed patents will be available to us on terms and conditions acceptable to us, if at all, or that we will prevail in any patent litigation. Patent litigation is extremely costly and time-consuming, and there can be no assurance that we will have sufficient resources to defend any possible litigation related to such infringement. If we do not obtain a license on acceptable terms under such patents, or are found liable for infringement, or are not able to have such patents declared invalid, we may be liable for significant money damages, may encounter significant delays in bringing Progenta and Androxal to market, or may be precluded from participating in the manufacture, use or sale of Progenta or Androxal, any of which would materially and adversely affect our business.

*We face substantial uncertainty in our ability to protect our patents and proprietary technology.*

Our ability to commercialize our products will depend, in part, on our or our licensors' ability to obtain patents, to enforce those patents and preserve trade secrets, and to operate without infringing on the proprietary rights of

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others. The patent positions of biopharmaceutical companies are highly uncertain and involve complex legal and factual questions. There can be no assurance that:

patent applications for our product Androxal, will result in issued patents

patent protection will be secured for any particular technology;

any patents that have been or may be issued to us, such as our pending patent application for Androxal, or our licensors, such as the patents underlying our Progenta compound, when issued, will be valid or enforceable;

any patents will provide meaningful protection to us;

others will not be able to design around the patents; or

our patents will provide a competitive advantage or have commercial application.

The failure to obtain and maintain adequate patent protection would have a material adverse effect on us and may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing of any product.

*We cannot assure that our patents will not be challenged by others.*

There can be no assurance that patents owned by or licensed to us will not be challenged by others. We could incur substantial costs in proceedings, including interference proceedings before the PTO and comparable proceedings before similar agencies in other countries in connection with any claims that may arise in the future. These proceedings could result in adverse decisions about the patentability of our or our licensors' inventions and products, as well as about the enforceability, validity or scope of protection afforded by the patents. Any adverse decisions about the patentability of our product candidates could cause us to either lose rights to develop and commercialize our product candidates or to license such rights at substantial cost to us. In addition, even if we were successful in such proceedings, the cost and delay of such proceedings would most likely have a material adverse effect on our business.

*Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information, may not adequately protect our intellectual property, and will not prevent third parties from independently discovering technology similar to or in competition with our intellectual property.*

We rely on trade secrets and other unpatented proprietary information in our product development activities. To the extent we rely on trade secrets and unpatented know-how to maintain our competitive technological position, there can be no assurance that others may not independently develop the same or similar technologies. We seek to protect trade secrets and proprietary knowledge, in part, through confidentiality agreements with our employees, consultants, advisors, collaborators and contractors. Nevertheless, these agreements may not effectively prevent disclosure of our confidential information and may not provide us with an adequate remedy in the event of unauthorized disclosure of such information. If our employees, scientific consultants, advisors, collaborators or contractors develop inventions or processes independently that may be applicable to our technologies, product candidates or products, disputes may arise about ownership of proprietary rights to those inventions and processes. Such inventions and processes will not necessarily become our property, but may remain the property of those persons or their employers. Protracted and costly litigation could be necessary to enforce and determine the scope of our proprietary rights. If we fail to obtain or maintain trade secret protection for any reason, the competition we face could increase, reducing our potential revenues and adversely affecting our ability to attain or maintain profitability.

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*We have not filed an Investigational New Drug application to conduct clinical trials for Progenta in the United States and we may not be able to obtain FDA approval of such application to permit us to conduct clinical trials for Progenta in the United States.*

Prior to commencing any clinical trials for Progenta in the United States, we will need to submit an IND application to the FDA. Any IND application that we submit to the FDA for Progenta will likely incorporate the results of our clinical trial in Poland. The FDA may not accept the results of this clinical trial and may request further preclinical data before approving the IND. Moreover, the FDA may subject the trial data that we submit to additional scrutiny and we may incur additional costs and delays responding to FDA requests for supplemental information or clarification. If we are unable to obtain FDA approval for an IND for Progenta, we will not be permitted to conduct clinical trials for Progenta in the United States and ultimately seek or obtain regulatory approval for commercialization in the United States. As a result, any delay in an IND becoming effective for Progenta would delay the further development and potential commercialization of our lead product candidate and delay our ability to generate product sales.

*Delays in the commencement of clinical testing of our current and potential product candidates could result in increased costs to us and delay our ability to generate revenues.*

Our product candidates will require continued preclinical testing and extensive clinical trials prior to the submission of a regulatory application for commercial sales. We recently completed our Phase I/II clinical trial for Androxal in the United States for the treatment of men with testosterone deficiency and have completed our Phase Ib clinical trial for Progenta in Poland. We have very limited experience conducting clinical trials for these product candidates. In part, because of this limited experience, we do not know whether future planned clinical trials will begin on time, if at all. Delays in the commencement of clinical testing could significantly increase our product development costs and delay any product commercialization. In addition, many of the factors that may cause, or lead to, a delay in the commencement of clinical trials may also ultimately lead to denial of regulatory approval of a product candidate.

The commencement of clinical trials can be delayed for a variety of reasons, including delays in:

obtaining approval of an IND application from the FDA for Progenta and any other potential product candidates;

conducting additional animal studies required by the FDA before commencement of pivotal clinical trials for Androxal;

conducting and completing a two-year rat carcinogenicity study required by the FDA prior to submission of an NDA for Androxal and Progenta;

demonstrating sufficient safety and efficacy in past clinical trials to obtain regulatory approval to commence a further clinical trial;

reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites;

manufacturing sufficient quantities of a product candidate; and

obtaining institutional review board approval to conduct a clinical trial at a prospective site.

In addition, the commencement of clinical trials may be delayed due to insufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, and the eligibility criteria for the clinical trial.

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*Delays in the completion of, or the termination of, clinical testing of our current and potential product candidates could result in increased costs to us, and could delay or prevent us from generating revenues.*

Once a clinical trial has begun, it may be delayed, suspended or terminated by us or the FDA, or other regulatory authorities due to a number of factors, including:

ongoing discussions with the FDA or other regulatory authorities regarding the scope or design of our clinical trials;

the U.S. FDA may not accept data obtained from clinical studies conducted in Poland, particularly relating to our trials with Progenta, as meeting all applicable U.S. FDA clinical trial standards;

requests by the FDA for supplemental information or clarification of the results of our clinical trials in Poland;

lower than anticipated retention rate of patients in clinical trials;

inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;

lack of adequate funding to continue clinical trials;

negative results of clinical trials;

insufficient supply or deficient quality of drug candidates or other materials necessary for the conduct of our clinical trials; or

serious adverse events or other undesirable drug-related side effects experienced by participants.

Many of these factors that may lead to a delay, suspension or termination of clinical testing of a current or potential product candidate may also ultimately lead to denial of regulatory approval of a current or potential product candidate. We experienced a clinical hold beginning in 1999 during our development of VASOMAX, which resulted in our abandonment of development of that product candidate. If we experience delays in the completion of, or termination of, clinical testing of any product candidates in the future, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to generate product revenues will be delayed.

*Even if we successfully complete clinical trials for Progenta and Androxal, there are no assurances that we will be able to submit, or obtain FDA approval of, a new drug application.*

There can be no assurance that, if our clinical trials for Progenta and Androxal are successfully completed, we will be able to submit a new drug application, or NDA, to the FDA or that any NDA we submit will be approved by the FDA in a timely manner, if at all. After completing clinical trials for a product candidate in humans, a drug dossier is prepared and submitted to the FDA as an NDA, and includes all preclinical and clinical trial data that clearly establish both short-term and long-term safety, as well as carcinogenicity studies for a product candidate that will be used as a chronic treatment, and data that establishes the statistically significant efficacy of a product candidate, in order to allow the FDA to review such drug dossier and to consider a product candidate for approval for commercialization in the United States. If we are unable to submit an NDA with respect to Progenta or Androxal, or if any NDA we submit is not approved by the FDA, we will be unable to commercialize that product. The FDA can and does reject NDAs and requires additional clinical trials, even when drug candidates perform well or achieve favorable results in large-scale Phase III clinical trials. If we fail to commercialize Progenta or Androxal, we may be unable to generate sufficient revenues to continue operations or attain profitability and our reputation in the industry and in the

investment community would likely be damaged.

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*If commercialized, our product candidates may not be approved for sufficient governmental or third-party reimbursements, which would adversely affect our ability to market our product candidates.*

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on the availability of reimbursement to the consumer from third-party payers, such as government and private insurance plans. Since we have no commercial products, we have not had to face this issue yet; however, third-party payers are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicaid, Medicare and private payers for Progenta and Androxal. Our products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis. The passage of the Medicare Prescription Drug and Modernization Act of 2003 imposes new requirements for the distribution and pricing of prescription drugs which may negatively affect the marketing of our potential products.

*If we successfully develop products but those products do not achieve and maintain market acceptance, our business will not be profitable.*

Even if Progenta and Androxal are approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product by physicians, healthcare professionals and third-party payers and our profitability and growth will depend on a number of factors, including:

relative convenience and ease of administration;

the prevalence and severity of any adverse side effects;

availability, effectiveness and cost of alternative treatments;

pricing and cost effectiveness of Progenta and Androxal;

effectiveness of our or our collaborators sales and marketing strategies; and

our ability to obtain sufficient third-party insurance coverage or reimbursement.

If Progenta does not provide a treatment regimen that is more beneficial than Lupron, a GnRH agonist and the current therapeutic standard of care for uterine fibroids, or otherwise provide patient benefit, it likely will not be accepted favorably by the market. Similarly, if Androxal does not provide a treatment regime that is more beneficial than Androgel, the current standard of care for the treatment of testosterone deficiency, or otherwise provide patient benefit, it likely will not be accepted favorably by the market. If any products we may develop do not achieve market acceptance, then we will not generate sufficient revenue to achieve or maintain profitability.

In addition, even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if:

new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete;

unforeseen complications arise with respect to use of our products; or

sufficient third-party insurance coverage or reimbursement does not remain available.



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*We currently rely on third-party manufacturers and other third parties for production of our product candidates, and our dependence on these manufacturers may impair the development of our product candidates.*

Currently, we do not have the ability internally to manufacture the product candidates that we need to conduct our clinical trials. We have entered into purchase orders with third-party manufacturers to produce our supplies of Progenta and Androxal; however, we have no long-term contracts with suppliers of either product candidate. To date, other than some initial amounts from the NIH, we have obtained all of our supply of Progenta for our clinical trials from Bridge Organics pursuant to purchase orders on an as needed basis.

We are in the process of identifying a manufacturer for a long-term supply contract of the product candidate. There are several potential manufacturers capable of manufacturing Progenta. There can be no assurance that we will be able to successfully negotiate a long-term agreement with any of such potential manufacturers at a reasonable price and on other acceptable terms or that any potential manufacturer will be able to reproduce the results obtained by Bridge Organics in manufacturing Progenta to date. We have obtained all of our supply of Androxal to date from BioVectra. We have not faced any material problems with BioVectra in supplying us with our necessary quantities of Androxal for our clinical trials and anticipate utilizing them for commercial production if Androxal is approved. There are numerous other suitable manufacturers capable of manufacturing Androxal.

For the foreseeable future, we expect to continue to rely on third-party manufacturers and other third parties to produce, package and store sufficient quantities of Progenta, Androxal and any future product candidates for use in our clinical trials. These product candidates are complicated and expensive to manufacture. If our third-party manufacturers fail to deliver our product candidates for clinical use on a timely basis, with sufficient quality, and at commercially reasonable prices, we may be required to delay or suspend clinical trials or otherwise discontinue development and production of our product candidates. While we may be able to identify replacement third-party manufacturers or develop our own manufacturing capabilities for these product candidates, this process would likely cause a delay in the availability of our product candidates and an increase in costs. We may also be required to enter into long-term manufacturing agreements that contain exclusivity provisions and/or substantial termination penalties. In addition, third-party manufacturers may have a limited number of facilities in which our product candidates can be produced, and any interruption of the operation of those facilities due to events such as equipment malfunction or failure or damage to the facility by natural disasters could result in the cancellation of shipments, loss of product in the manufacturing process or a shortfall in available product candidates.

We also depend on outside vendors for the supply of the active pharmaceutical ingredients and raw materials used to produce our product candidates. Although we believe there are numerous third-party suppliers available, if our current third-party suppliers were to cease production or otherwise fail to supply us with quality raw materials and we were unable to contract on acceptable terms for these raw materials with alternative suppliers, our ability to have our product candidates manufactured and to conduct preclinical testing and clinical trials of our product candidates would be adversely affected.

*Our product candidates have only been manufactured in small quantities to date, and we may face delays or complications in manufacturing quantities of our product candidates in sufficient quantities to meet the demands of late stage clinical trials and marketing.*

We cannot assure that we will be able to successfully increase the manufacturing capacity or scale-up manufacturing volume per batch, whether on our own or in reliance on third-party manufacturers, for any of our product candidates in a timely or economical manner, or at all. To date our product candidates have been manufactured exclusively by third parties in small quantities for pre-clinical and clinical trials. We will need to arrange for the production of significantly larger quantities of our product candidates for future clinical trials and for future commercial sale in the event that our product candidates are approved by the FDA or foreign regulatory bodies.

Significant scale-up of manufacturing may require certain additional validation studies, which the FDA must review and approve. If we or our third-party manufacturers are unable to successfully increase the manufacturing capacity for a product candidate, the regulatory approval or commercial launch of that product candidate may be delayed or there may be a shortage in supply of that product candidate.

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*Our product candidates require precise, high-quality manufacturing which may not be available at acceptable costs.*

Progenta and Androxal are novel compounds that have never been produced in large scale. As in the development of any new compound, there are underlying risks associated with its manufacture. These risks include, but are not limited to, cost, process scale-up, process reproducibility, construction of a suitable process plant, timely availability of raw materials, as well as regulatory issues associated with the manufacture of an active pharmaceutical agent. Any of these risks may prevent us from successfully developing Progenta or Androxal. Our failure, or the failure of our third-party manufacturers to achieve and maintain these high manufacturing standards, including the incidence of manufacturing errors and reliable product packaging for diverse environmental conditions, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business.

*We may experience delays in the development of our product candidates if the third-party manufacturers of our product candidates cannot meet FDA requirements relating to Good Manufacturing Practices.*

Our third-party manufacturers are required to produce our product candidates under FDA current Good Manufacturing Practices in order to meet acceptable standards for our clinical trials. If such standards change, the ability of third-party manufacturers to produce our product candidates on the schedule we require for our clinical trials may be affected. In addition, third-party manufacturers may not perform their obligations under their agreements with us or may discontinue their business before the time required by us to gain approval for or commercialize our product candidates. Any difficulties or delays in the manufacturing and supply of our product candidates could increase our costs or cause us to lose revenue or postpone or cancel clinical trials.

The FDA also requires that we demonstrate structural and functional comparability between the same drug product produced by different third-party manufacturers. Because we may use multiple sources to manufacture Progenta and Androxal, we may need to conduct comparability studies to assess whether manufacturing changes have affected the product safety, identity, purity or potency of any commercial product candidate compared to the product candidate used in clinical trials. If we are unable to demonstrate comparability, the FDA could require us to conduct additional clinical trials, which would be expensive and significantly delay commercialization of our product candidates.

*We rely on third parties to conduct clinical trials for our product candidates, and their failure to timely and properly perform their obligations may result in costs and delays that prevent us from obtaining regulatory approval or successfully commercializing our product candidates.*

We rely on independent contractors, including researchers at clinical research organizations and universities, in certain areas that are particularly relevant to our research and product development plans, such as the conduct of clinical trials. Pharm-Olam International Ltd. conducted our clinical trial in Poland for Progenta for the treatment of uterine fibroids and Advanced Biomedical Research, Inc. conducted our clinical trial in the United States for Androxal for the treatment of testosterone deficiency. The competition for these relationships is intense, and we may not be able to maintain our relationships with them on acceptable terms. These independent contractors generally may terminate their engagements with us at any time. As a result, we can control their activities only within certain limits, and they will devote only a certain amount of their time conducting research on and trials of our product candidates and assisting in developing them. If they do not successfully carry out their duties under their agreements with us, fail to inform us if these trials fail to comply with clinical trial protocols, or fail to meet expected deadlines, our clinical trials may need to be extended, delayed or terminated. We may not be able to enter into replacement arrangements without undue delays or excessive expenditures. If there are delays in testing or regulatory approvals as a result of the failure to perform by our independent contractors or other outside parties, our drug development costs will increase and we may not be able to attain regulatory approval for or successfully commercialize our product candidates.

*Our liability insurance may not provide adequate coverage nor may it always be available on favorable terms or at all.*

Neither Progenta nor Androxal has been approved for commercial sale. However, the current and future use of our product candidates by us and potential corporate collaborators in clinical trials, and the sale of any approved

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products in the future, may expose us to liability claims. These claims might be made directly by consumers or healthcare providers or indirectly by pharmaceutical companies, potential corporate collaborators or others selling such products. We may experience financial losses in the future due to product liability claims. We have obtained limited general commercial liability insurance coverage for our clinical trials. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or for liabilities in excess of our insurance limits, our assets may not be sufficient to cover such claims and our business operations could be impaired.

*We face significant competition with many companies with substantially greater resources than we have and other possible advantages.*

We are engaged in biopharmaceutical product development, an industry that is characterized by extensive research efforts and rapid technological progress. The biopharmaceutical industry is also highly competitive. Our success will depend on our ability to acquire, develop and commercialize products and our ability to establish and maintain markets for Androxal and Progenta or any products for which we receive marketing approval. Potential competitors in North America, Europe and elsewhere include major pharmaceutical companies, specialty pharmaceutical companies and biotechnology firms, universities and other research institutions and government agencies. Many of our competitors have substantially greater research and development and regulatory capabilities and experience, and substantially greater management, manufacturing, distribution, marketing and financial resources, than we do. Accordingly, our competitors may:

develop or license products or other novel technologies that are more effective, safer or less costly than the product candidates that we are developing;

obtain regulatory approval for products before we do; or

commit more resources than we can to developing, marketing and selling competing products.

The main therapeutic products competitive with Progenta for the treatment of uterine fibroids and endometriosis are GnRH agonists, especially Lupron, which is marketed by TAP Pharmaceuticals. There are additional companies developing similar progesterone-blocking technology. Asoprisnil, an anti-progestin being developed by TAP Pharmaceuticals in partnership with Schering AG, is currently in Phase III clinical trials. TAP Pharmaceuticals is a much larger company than we are with greater resources and greater ability to promote their products than we currently have. In addition, surgical treatment of both uterine fibroids and endometriosis competes with Progenta by removing uterine fibroids and by removing misplaced tissue in women with endometriosis.

Our main competitors for the treatment of testosterone deficiency are the testosterone replacement therapies currently being marketed. The current standard of care is Androgel, a topical gel for the replacement of testosterone developed by Solvay Pharmaceuticals. Solvay is a much larger company than we are with greater resources and marketing ability. Androxal would also compete with other forms of testosterone replacement therapies such as oral treatments, patches, injectables and a tablet applied to the upper gum. There is another topical gel currently marketed by Auxilium Pharmaceuticals called Testim, and a transdermal patch marketed by Watson Pharmaceuticals called AndroDerm. There can be no assurance that our product candidates will be more successful than competitive products. In addition, other potential competitors may be developing testosterone therapies similar to ours.

*We are thinly staffed and highly dependent on a limited number of management persons and key personnel, and if we lose these members of our team or are unable to attract and retain additional qualified personnel, our future growth and ability to compete would suffer.*

The competition for qualified personnel in the biopharmaceutical field is intense, and our future success depends upon our ability to attract, retain and motivate highly skilled scientific, technical and managerial employees. We have only five full-time employees at the present time, including our President and CEO, Joseph S.

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Podolski, and our Vice President, Business Development and CFO, Louis Ploth, Jr. We are highly dependent on Messrs. Podolski and Ploth for the management of our company and the development of our technologies. Both Messrs. Podolski and Ploth have employment agreements with us. There can be no assurance that either or both of Messrs. Podolski and Ploth will remain with us through development of our current product candidates. We do not maintain key person life insurance on any of our directors, officers or employees. The loss of the services of Mr. Podolski or Mr. Ploth could delay or curtail our research and product development efforts.

Additionally, in order to commercialize our products successfully, we will be required to expand our workforce, particularly in the areas of clinical trials management, regulatory affairs, business development, sales and marketing and administrative and accounting functions. These activities will require the addition of new personnel and the development of additional expertise by management. We face intense competition for qualified individuals from numerous biopharmaceutical companies, as well as academic and other research institutions. Our intention is to hire three to seven employees over the next two years. To the extent we are not able to attract and retain employees on favorable terms, we may face delays in the development or commercialization of our product candidates and extensive costs in retaining current employees or searching for and training new employees.

*Our plan to use collaborations to leverage our capabilities may not be successful.*

As part of our business strategy, we intend to enter into collaboration arrangements with strategic partners to develop and commercialize our product candidates. For our collaboration efforts to be successful, we must identify partners whose competencies complement ours. We must also successfully enter into collaboration agreements with them on terms attractive to us and integrate and coordinate their resources and capabilities with our own. We may be unsuccessful in entering into collaboration agreements with acceptable partners or negotiating favorable terms in these agreements. In addition, we may face a disadvantage in seeking to enter into or negotiating collaborations with potential partners because other potential collaborators may have greater management and financial resources than we do. Also, we may be unsuccessful in integrating the resources or capabilities of these collaborators. In addition, our collaborators may prove difficult to work with or less skilled than we originally expected. If we are unsuccessful in our collaborative efforts, our ability to develop and market product candidates could be severely limited.

*Healthcare reform measures could adversely affect our business.*

The business and financial condition of pharmaceutical companies are affected by the efforts of governmental and third-party payers to contain or reduce the costs of healthcare. In the United States and in foreign jurisdictions there have been, and we expect that there will continue to be, a number of legislative and regulatory proposals aimed at changing the healthcare system. For example, in some countries other than the United States, pricing of prescription drugs is subject to government control, and we expect proposals to implement similar controls in the United States to continue. The pendency or approval of such proposals could result in a decrease in our stock price or limit our ability to raise capital or to obtain strategic collaborations or licenses.

*We face high volatility in our stock price.*

We are a development stage company and the market prices for securities of development companies in the biotechnology sector have been highly volatile and may continue to be very volatile in the future.

The following listed factors as well as other factors may have a significant impact on the price of our common stock:

announcements of technology innovations and new products developed by other competitors;

developments relating to proprietary rights and patents;

publicity relating to actual or potential medical results relating to products under development or being commercialized by our other competitors;

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regulatory developments concerning our products in the United States and foreign countries;

issues concerning the safety of our products in development or similar products being developed by our competitors; and

economic and other external factors or a disaster or crisis.

**ITEM 2. PROPERTIES**

The Company executed a new 74 month lease effective May 1, 2004, for 4,800 square feet of laboratory and office space located in its current building in The Woodlands, Texas. This space replaces its prior 2,518 square foot facility which was under a lease that expired on June 30, 2004.

**ITEM 3. LEGAL PROCEEDINGS**

We are not currently a party to any material legal proceedings.

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

No matters were submitted to a vote of the Company's security holders in the fourth quarter of 2004.

**Table of Contents****PART II****ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

The Company's common stock is quoted on The Nasdaq SmallCap Market and the Pacific Exchange under the symbol ZONA. The following table shows the high and low sale prices per share of common stock, as reported by The Nasdaq National Market through July 7, 2004 and thereafter by the Nasdaq SmallCap Market, during the periods presented.

	Price Range	
	High	Low
2003		
First Quarter	\$ 1.20	\$ 0.87
Second Quarter	1.73	1.15
Third Quarter	1.97	1.28
Fourth Quarter	1.91	1.50
2004		
First Quarter	\$ 4.35	\$ 1.83
Second Quarter	5.40	2.44
Third Quarter	5.95	2.76
Fourth Quarter	4.50	3.07

All of the foregoing prices reflect interdealer quotations, without retail mark-up, markdowns or commissions and may not necessarily represent actual transactions in the common stock.

On March 16, 2005, the last sale price of the common stock, as reported by the Nasdaq SmallCap Market, was \$3.00 per share. On March 16, 2005, there were approximately 202 holders of record and approximately 3,600 beneficial holders of the Company's common stock.

**Dividends**

The Company has never paid dividends on the common stock. The Company currently intends to retain earnings, if any, to support the development of the Company's business and does not anticipate paying dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of the Company's Board of Directors after taking into account various factors, including the Company's financial condition, operating results, current and anticipated cash needs and plans for expansion.

On September 1, 1999, the Board of Directors of the Company adopted a stockholder rights plan, which has been subsequently amended on September 6 and October 30, 2002 (as amended, the Rights Plan) pursuant to which a dividend consisting of one preferred stock purchase right (a Right) was distributed for each share of common stock held as of the close of business on September 13, 1999, and is to be distributed to each share of common stock issued thereafter until the earlier of (i) the Distribution Date (as defined in the Rights Plan), (ii) the Redemption Date (as defined in the Rights Plan) or (iii) September 13, 2005. The Rights Plan is designed to deter coercive takeover tactics and to prevent an acquirer from gaining control of the Company without offering fair value to the Company's stockholders. The Rights will expire on September 13, 2005, subject to earlier redemption or exchange as provided in the Rights Plan. Each Right entitles the holder thereof to purchase from the Company one one-hundredth of a share of a new series of Series One Junior Participating Preferred Stock of the Company at a price of \$20.00 per one

one-hundredth of a share, subject to adjustment. The Rights are generally exercisable only if a Person (as defined) acquires beneficial ownership of 20 percent or more of the Company's outstanding common stock.

A complete description of the Rights, the Rights Agreement between the Company and Computershare Investor Services, LLC, (as successor in interest to Harris Trust and Savings Bank), as Rights Agent, and the Series One Junior Participating Preferred Stock is hereby incorporated by reference from the information appearing under the caption Item 1. Description of the Registrant's Securities to be Registered contained in the Registration Statement

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on Form 8-A filed on September 3, 1999, and as amended by amendments to such Registration Statement on Form 8-A/A filed on September 11 and October 31, 2002.

**ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA**

The statement of operations data for the years ended December 31, 2004, 2003 and 2002, and the balance sheet data as of December 31, 2004 and 2003, have been derived from our audited financial statements included elsewhere in this annual report on Form 10-K that have been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm. The statements of operations data for the years ended December 31, 2001 and 2000, and the balance sheet data as of December 31, 2002, 2001 and 2000 have been derived from our audited financial statements not included in this annual report on Form 10-K. Our historical results are not necessarily indicative of results to be expected for any future period. The data presented below have been derived from financial statements that have been prepared in accordance with accounting principles generally accepted in the United States and should be read with our financial statements, including notes, and with Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this annual report on Form 10-K.

**STATEMENTS OF OPERATIONS DATA:**

	<b>2000</b>	<b>Year Ended December 31,</b>			<b>2004</b>
		<b>2001</b>	<b>2002</b>	<b>2003</b>	
		<b>(In thousands except per share amounts)</b>			
Revenues and Other Income:					
Licensing fees	\$ 2,115	\$ 2,162	\$ 4,228	\$	\$
Product royalties	164	58			
Research and development grants	72	115	315	595	118
Interest income	2,239	1,526	711	318	104
Gain on disposal of fixed assets				102	
Other income					35
<b>Total revenues</b>	<b>4,590</b>	<b>3,861</b>	<b>5,254</b>	<b>1,015</b>	<b>257</b>
Expenses:					
Research and development	4,495	3,028	6,420	2,161	2,471
General and administrative	2,796	1,672	2,716	2,183	1,483
<b>Total expenses</b>	<b>7,291</b>	<b>4,700</b>	<b>9,136</b>	<b>4,344</b>	<b>3,954</b>
Net loss before cumulative effect of change in accounting principle	(2,701)	(839)	(3,882)	(3,329)	(3,697)
Cumulative effect of change in accounting principle	(8,454)				
<b>Net loss</b>	<b>\$ (11,155)</b>	<b>\$ (839)</b>	<b>\$ (3,882)</b>	<b>\$ (3,329)</b>	<b>\$ (3,697)</b>
Loss per share - basic and diluted:					
Net loss before cumulative effect of change in accounting principle	\$ (0.24)	\$ (0.07)	\$ (0.34)	\$ (0.29)	\$ (0.72)

Cumulative effect of change in accounting principle	(0.75)				
Net loss per share(1)	\$ (0.99)	\$ (0.07)	\$ (0.34)	\$ (0.29)	\$ (0.72)
Shares used in loss per share calculation	11,303	11,333	11,412	11,487	5,117

**BALANCE SHEET DATA:**

Cash, cash equivalents and marketable securities	\$ 32,951	\$ 30,056	\$ 25,138	\$ 22,946	\$ 5,536
Total assets	40,374	36,914	27,370	24,028	6,606
Deficit accumulated during the development stage	(75,007)	(75,846)	(79,728)	(83,057)	(86,754)
Total stockholders equity	31,060	30,569	26,851	23,487	5,992

(1) See Note 2. Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a description of the computation of loss per share.

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

*The following management's discussion and analysis should be read in conjunction with our historical consolidated financial statements and their notes included elsewhere in this Form 10-K. This discussion contains forward-looking statements that reflect our current views with respect to future events and financial performance. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, such as those set forth under "Risk Factors" and elsewhere in this Form 10-K.*

**Overview**

Zonagen, Inc. (the Company, Zonagen, or we, us or our) was organized on August 28, 1987 and is a development stage company. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders. Our lead product candidate, Progenta, is an orally available small molecule compound that we are developing for the treatment of uterine fibroids and endometriosis. We recently completed a Phase Ib clinical trial for Progenta in Poland for the treatment of uterine fibroids. We intend to begin a Phase II clinical trial for Progenta in the United States for the treatment of uterine fibroids during 2005, subject to review of our Phase Ib data by the U.S. Food and Drug Administration, or FDA. The FDA has agreed to meet with us on May 25, 2005 for the purpose of reviewing Zonagen's pre-IND proposal. We also plan to conduct a Phase II clinical trial in Poland for Progenta for the treatment of endometriosis in 2005. Our second product candidate is Androxal, an orally available small molecule compound being developed for the treatment of testosterone deficiency in men. We recently completed a Phase I/II clinical trial in the United States for Androxal for the treatment of men with testosterone deficiency and submitted final data to the FDA. We met with FDA staff members on November 10, 2004 to review our clinical plan for the approval of Androxal. The FDA has agreed to review our protocols for our trials in a timely fashion under a special protocol assessment, or SPA. The FDA deems Androxal to be a new chemical entity, and additional lengthy animal studies will be required before long term human studies may be initiated and an NDA may be filed.

We have five full-time employees who utilize the services of contract research organizations, contract manufacturers and various consultants to assist us in performing regulatory services for the clinical development of our products. We are completely dependent on our various contract groups to adequately perform the activities required to obtain regulatory approval of our products.

On February 1, 2005, we completed our follow-on public offering of 5,060,000 shares of our common stock at \$4.00 per share (which included the underwriters' exercise of its over allotment option for 660,000 shares). The shares offered by us were issued out of our existing treasury stock, and the offering resulted in net proceeds to us of approximately \$18.1 million.

The clinical development of pharmaceutical products is a complex undertaking, and many products that begin the clinical development process do not obtain regulatory approval. The costs associated with our clinical trials may be impacted by a number of internal and external factors, including the number and complexity of clinical trials necessary to obtain regulatory approval, the number of eligible patients necessary to complete our clinical trials and any difficulty in enrolling these patients, and the length of time to complete our clinical trials. Given the uncertainty of these potential costs, we are unable to estimate the total costs we will incur for the clinical development of our product candidates. We do, however, expect these costs to increase substantially in future periods as we continue later-stage clinical trials, initiate new clinical trials for additional indications and seek to obtain regulatory approvals. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, have a material adverse effect on our results of operations.

We have not generated any revenue from commercial sale of our current product candidates, Progenta and Androxal. We will not receive any revenue from commercial sales unless we complete the clinical trial process, obtain regulatory approval, and successfully commercialize one or more of our product candidates. If we were to obtain regulatory approval of Progenta, we will need to develop a long-term, commercially viable source of bulk Progenta to successfully commercialize the product candidate. We cannot be certain when or if any net cash inflow from any of our current product candidates will commence.

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We have experienced negative cash flows from operations since inception and have funded our activities to date primarily from equity financings and corporate collaborations. On February 1, 2005 the Company completed both a follow-on public offering of 4,400,000 shares of its common stock at \$4.00 per share and the exercise of the over allotment provision of 660,000 for a total aggregate sale of 5,060,000 shares of common stock. All of the shares were offered by the Company which resulted in net proceeds to the Company of approximately \$18.1 million. We believe that our existing capital resources under our current operating plan will be sufficient to fund our operations through the first quarter 2006. There can be no assurance that changes in our current strategic plans or other events will not result in accelerated or unexpected expenditures.

We will need to raise additional capital through the sale of equity securities and/or through partnerships to continue the clinical development of our products. If we are not able to raise capital through the sale of equity securities, or cannot locate an alternative source of financing, the outcome would have a material adverse effect on us and the clinical development timeline of our product candidates. If we are not able to raise adequate capital for our clinical development plans, then we will have to adjust our plans, which will delay the approval process of our product candidates.

Our results of operations may vary significantly from year to year and quarter to quarter, and depend, among other factors, on our ability to be successful in our clinical trials, the regulatory approval process in the United States and other foreign jurisdictions and the ability to complete new licenses and product development agreements. The timing of our revenues may not match the timing of our associated product development expenses. To date, research and development expenses have generally exceeded revenue in any particular period and/or fiscal year.

As of December 31, 2004, we had an accumulated deficit of \$86.8 million. Due to various tax regulations, including change in control provisions in the tax code, the value of our tax assets to us can be substantially diminished. For additional information relating to our net operating loss carryforward, see Note 6. Federal Income Taxes of the Notes to Consolidated Financial Statements. Losses have resulted principally from costs incurred in conducting clinical trials for VASOMAX, in research and development activities related to efforts to develop our products and from the associated administrative costs required to support those efforts. We do not intend to commit any additional resources toward the development of these products. There can be no assurance that we will be able to successfully complete the transition from a development stage company to the successful introduction of commercially viable products. Our ability to achieve profitability will depend, among other things, on successfully completing the clinical development of our products in a reasonable time frame and at a reasonable cost, obtaining regulatory approvals, establishing marketing, sales and manufacturing capabilities or collaborative arrangements with others that possess such capabilities, our and our partners ability to realize value from our research and development programs through the commercialization of those products and raising sufficient funds to finance its activities. There can be no assurance that we will be able to achieve profitability or that profitability, if achieved, can be sustained. See Item 1. Business Risk Factors and Note 1. Organization and Operations of Notes to Consolidated Financial Statements.

## **Historical Background**

Prior to 2004, we focused most of our resources on the development of VASOMAX and related phentolamine-based products for the treatment of male erectile dysfunction. Beginning in 1999, the FDA placed our phentolamine-based products on clinical hold, which was subsequently lifted to a partial clinical hold the following year. As a result of the setbacks associated with this FDA hold, as well as other setbacks with the European regulatory agency in connection with phentolamine, we undertook two separate efforts in 2000 and 2002 to identify strategic alternatives. These efforts culminated in the signing of a definitive merger agreement in October 2002 with a potential strategic partner, which was subsequently terminated in March 2003 for regulatory and other reasons. During the remainder of 2003, the board continued to review all of the options available to us.



As a result of the numerous board discussions during 2003, our board of directors approved a modified Dutch auction self tender offer to purchase up to 8,571,428 shares of our then-outstanding common stock at a purchase price not greater than \$2.10 nor less than \$1.83 per share. In January 2004, we accepted for purchase 6,547,635 shares (approximately 57% of our outstanding common stock, at that time) at a purchase price of \$2.10 per share in accordance with the terms of our self tender offer, which included 60,888 shares issuable upon exercise of options tendered by directors, for a total aggregate cost of approximately \$14.0 million, inclusive of costs associated with the offer. Four of the five members of our board of directors at that time tendered all of their shares

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and in-the-money options (except in-the-money options exercisable for 5,000 shares held by one director) in the tender offer. Joseph S. Podolski, our President and CEO, did not tender any of his shares or options. These four board members did not stand for re-election at our 2003 annual meeting of stockholders, which was held on January 14, 2004. At that meeting, four new directors were elected.

We will continue our efforts to sell or out-license our phentolamine-based product candidates, including VASOMAX. We will no longer maintain our current patent portfolio for any of our immunotherapies, including our hCG and zona pellucida immuno-contraceptive vaccines and associated vaccine adjuvants. There can be no assurance that we will be able to create any value from out-licensing activities of our prior development programs.

## **Critical Accounting Policies and the Use of Estimates**

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. Please see Note 2, Summary of Significant Accounting Policies, for a discussion of our critical accounting policies. Actual results could differ materially from those estimates. The items in our financial statements requiring significant estimates and judgments are as follows:

The Company maintains an inventory of bulk phentolamine which is the active ingredient in VASOMAX, the Company's oral treatment for male erectile dysfunction, or MED. Due to the termination of the Schering-Plough Agreements in July 2002, the future uncertainty surrounding the VASOMAX product and the fact that the Company is not presently committing resources toward the approval of VASOMAX, the Company recorded a reserve for both its bulk phentolamine inventory previously valued at \$4.4 million and its patent estate valued at approximately \$1.0 million in the quarter ended June 30, 2002.

During 2000, the Company adopted U.S. Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements (SAB 101) which requires up-front, non-refundable license fees to be deferred and recognized over the performance period. In situations where the Company receives payment in advance of the performance of services, such amounts are deferred and recognized as revenue as the related services are performed. The Company recognizes revenue from non-refundable, up-front license and milestone payments, not specifically tied to a separate earnings process, ratably over the performance period of the agreement. When payments are specifically tied to a separate earnings process, revenue is recognized when earned. Prior to January 1, 2000, the Company had recognized revenue from non-refundable fees when the Company had no obligation to refund the fees under any circumstances, and there were no additional contractual services to be provided or costs to be incurred by the Company in connection with the non-refundable fees. The cumulative effect of adopting SAB 101 at January 1, 2000 resulted in a one-time, non-cash charge of \$8.5 million, with a corresponding increase to deferred revenue that was recognized in subsequent periods. The \$8.5 million represents portions of 1997 and 1998 payments received from Schering-Plough in consideration for the exclusive license of the Company's VASOMAX product for the treatment of MED. For the years ended December 31, 2004 and 2003, the Company did not recognize any licensing fees revenue that was included in the cumulative effect adjustment as of January 1, 2000. Due to the mutual termination of the Company's agreements with Schering-Plough in July 2002, the Company recognized the remaining \$3.2 million of deferred revenue in the quarter ended September 30, 2002.

The Company has had losses since inception and, therefore, has not been subject to federal income taxes. The Company has accumulated approximately \$2.9 million of research and development tax credits. As of December 31, 2004 and 2003, the Company had approximately \$78.5 million and \$75.6 million, respectively, of net operating loss (NOL) carry-forwards for federal income tax purposes. Additionally, approximately

\$1.3 million of NOLs, and approximately \$52,000 of research and development tax credits, will expire in 2005. Under SFAS No. 109, Accounting for Income Taxes, an NOL requires the recognition of a deferred tax asset. As the Company has incurred losses since inception, and there is no certainty of future revenues, the Company's deferred tax assets have been reserved in full in the accompanying consolidated financial statements.

**Table of Contents****RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2004, the FASB issued SFAS No. 123 (revised 2004), Share-Based Payment. SFAS No. 123(R) will require that the compensation cost relating to share-based payment transactions be recognized in financial statements. That cost will be measured based on the fair value of the equity or liability instruments issued. SFAS No. 123(R) covers a wide range of share-based compensation arrangements including share options, restricted share plans, performance-based awards, share appreciation rights, and employee share purchase plans. SFAS No. 123(R) replaces FASB Statement No. 123, Accounting for Stock-Based Compensation, and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees. SFAS No. 123, as originally issued in 1995, established as preferable a fair value-based method of accounting for share-based payment transactions with employees. However, that Statement permitted entities the option of continuing to apply the guidance in APB Opinion No. 25, as long as the footnotes to financial statements disclosed what net income would have been had the preferable fair value-based method been used. Public entities will be required to apply SFAS No. 123(R) as of the first interim or annual reporting period that begins after June 15, 2005. We are in the process of evaluating the impact the adoption of SFAS No. 123(R) will have on our consolidated financial position, results of operations and cash flows.

**Results of Operations***Comparison of Years Ended December 31, 2004 and 2003*

*Revenues.* Total revenues for 2004 were \$257,000 as compared to \$1.0 million for 2003. Research and development grants for 2004 were \$118,000 as compared to \$595,000 for 2003 relating to the Company's Small Business Innovative Research, or SBIR grants.

Interest income decreased 67% to \$104,000 for 2004 as compared with \$318,000 for 2003 primarily due to lower cash balances due to the Company's completion of its self tender offer in January 2004.

The Company sold substantially all of its fixed assets for approximate net proceeds of \$225,000 and recognized a gain of \$102,000 over their book value for the year ended 2003.

Other income totaled \$35,000 for 2004 as compared zero for 2003. The increase in other income was from the sale of some of the Company's preclinical phentolamine data that is to be used for a purpose that does not compete with the Company's sexual dysfunction technologies.

*Research and Development Expenses.* Research and development ( R&D ) expenses include contracted research, regulatory affairs activities and general research and development expenses. Following the April 2002 withdrawal of the Company's regulatory application for VASOMAX in the United Kingdom by Schering-Plough, the Company continued scaling back non-SBIR grant R&D spending activities through October 2003 to maintain its cash reserves for future redeployment. R&D expenses increased 14% to \$2.5 million in 2004, as compared with \$2.2 million in 2003. The increase in 2004 is primarily due to an increase of \$1.0 million related to the Company's clinical development program for Progenta, an impairment charge against the Company's patent portfolio related to its vaccine adjuvants, prostate cancer vaccines and hCG immuno-contraceptive vaccine in the amount of \$308,000 which was offset by a corresponding decrease of \$468,000 of costs associated with the Company's SBIR grant funded R&D, a decrease of \$320,000 in costs associated with Androxal clinical development, a decrease of \$122,000 which occurred in 2003 relating to prior employees severance compensation and a decrease of \$92,000 in facilities rent costs due to a decrease in facility size in 2004.

*General and Administrative Expenses.* General and administrative ( G&A ) expenses decreased 32% to \$1.5 million in 2004 as compared with \$2.2 million in 2003. The decrease in expenses is primarily due to a decrease in the

Company's directors' and officers' insurance premium of \$473,000 related to the Company's self tender offer which was completed in January 2004, costs associated with potential strategic alternative opportunities of \$388,000 and a reduction in professional services due to a \$200,000 reimbursement of the deductible from the Company's directors' & officers' insurance policy relating to the Company's previous class action lawsuit which was received in the quarter ended December 31, 2004, partially offset by an increase in non cash stock option compensation expenses.

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### *Comparison of Years Ended December 31, 2003 and 2002*

*Revenues.* Total revenues for 2003 were \$1.0 million as compared to \$5.3 million for 2002. Licensing fees for 2003 were zero as compared to \$4.2 million in 2002. Due to the termination of the Company's agreements with Schering-Plough in July 2002, the Company recognized the remaining \$3.2 million of deferred revenue in the quarter ended September 30, 2002. Research and development grants for 2003 were \$595,000 as compared to \$315,000 for 2002 relating to the Company's SBIR grants. The Company did not receive any milestone payments from Schering-Plough in 2002 for VASOMAX under the agreements that were mutually terminated in July 2002. Product royalties from sales of VASOMAX in Latin America were zero for the year ended December 31, 2002. Due to the termination of the Company's agreements with Schering-Plough, the Company does not expect to receive any royalties in the foreseeable future.

Interest income decreased 55% to \$318,000 in 2003 as compared with \$711,000 in 2002 primarily due to a reduction in interest rates and lower cash balances.

The Company sold substantially all of its fixed assets for approximate net proceeds of \$225,000 and recognized a gain of \$102,000 over their book value. These proceeds were collected in July 2003.

*Research and Development Expenses.* R&D expenses include contracted research, regulatory affairs activities and general research and development expenses. Following the April 2002 withdrawal of the Company's regulatory application for VASOMAX in the United Kingdom by Schering-Plough, the Company continued scaling back R&D spending activities to maintain its cash reserves for potential future redeployment. R&D expenses decreased 66% to \$2.2 million in 2003, as compared with \$6.4 million in 2002, which included net non-cash expenses of \$4.1 million related to the Company's VASOMAX product. Due to the termination of the Company's agreements with Schering-Plough in July 2002, the future uncertainty surrounding the VASOMAX product and the fact that the Company was not presently committing resources toward the approval of VASOMAX, the Company wrote-off non-cash expenses for its bulk phentolamine inventory previously valued at \$4.4 million and its VASOMAX patent estate previously valued at approximately \$1.0 million in the quarter ended June 30, 2002, and in July 2002, a liability due to Schering-Plough of \$1.3 million relating to a prior joint clinical development program for VASOMAX was forgiven and taken as a reduction to R&D expenses. In addition, R&D expenses in the quarter ended June 30, 2002 were reduced by \$188,000 due to a reimbursement of prior clinical expenses for VASOMAX® that was received from a clinical research organization after a reconciliation was completed comparing actual expenses to payments made by the Company. R&D expenses excluding the four adjustments listed above would have been \$2.5 million for the year ended December 31, 2002.

*General and Administrative Expenses.* G&A expenses decreased 20% to \$2.2 million in 2003 as compared with \$2.7 million in 2002. The decrease in expenses is primarily due to the decrease in costs associated with potential strategic alternative opportunities, professional services and non-cash compensation expenses offset by an increase in insurance expense.

## **Liquidity and Capital Resources**

Since its inception, the Company has financed its operations primarily with proceeds from private placements and public offerings of equity securities and with funds received under collaborative agreements. On February 1, 2005 the Company completed a public offering of 5,060,000 shares (including the underwriters' over-allotment option) and received net proceeds of approximately \$18.1 million. The Company's primary use of cash to date has been in operating activities to fund research and development, including preclinical studies and clinical trials, and general and administrative expenses. The Company had cash, cash equivalents and marketable securities of approximately \$5.5 million at December 31, 2004 as compared to \$22.9 million at December 31, 2003. The decrease in cash balances

from December 31, 2004 as compared to the same period in the prior year is primarily due to the completion of the Company's self tender offer in January 2004 in which the Company purchased 6,547,635 shares at an aggregate cost of approximately \$14 million. Excluding maturities and purchases of marketable securities, net cash of approximately \$3.0 million, \$3.0 million, and \$3.6 million was used in operating activities during 2004, 2003, and 2002, respectively. Although the use of cash for the years ended December 31, 2004 and 2003 remained constant, the Company increased its spending by \$695,000 for the year ended December 31, 2004 in its clinical development programs as compared to the previous year. This increase was offset by a decrease in the Company's directors' and officers' insurance premium, costs associated with potential strategic alternative opportunities and

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professional services. In addition, there continued to be a reduction in contracted clinical costs associated with the development of VASOMAX and the Company's other phentolamine-based products due to the 1999 U.S. clinical hold placed on those products. The Company spent approximately \$1.4 million in connection with clinical development programs during 2004 as compared to approximately \$727,000 in 2003 and \$761,000 in 2002.

As of December 31, 2004, in addition to general operating obligations, the Company also had non-cancelable purchase orders relating to the clinical development of both Progenta and Androxal in the amounts of \$739,700 and \$185,300, respectively. As of December 31, 2003, the Company had non-cancelable purchase orders relating to the clinical development of Androxal in the amount of \$11,600.

The Company has had losses since inception and, therefore, has not been subject to federal income taxes. The Company has accumulated approximately \$2.9 million of research and development tax credits. As of December 31, 2004 and 2003, the Company had approximately \$78.5 million and \$75.6 million, respectively, of net operating loss (NOL) carry-forwards for federal income tax purposes. Additionally, approximately \$1.3 million of NOLs, and approximately \$52,000 of research and development tax credits will expire in the year 2005. Due to various tax regulations, including change in control provisions in the tax code the value of this tax asset to the Company can be substantially diminished. For additional information relating to the Company's Net Operating Loss carryforward see Note 6. Federal Income Taxes of the Notes to Consolidated Financial Statements.

The Company has experienced negative cash flows from operations since inception and has funded its activities to date primarily from equity financings and corporate collaborations. The Company will require substantial funds for research and development, including preclinical studies and clinical trials of our product candidates, and to commence sales and marketing efforts if appropriate, if the FDA or other regulatory approvals are obtained. The Company believes that its existing capital resources under its current operating plan will be sufficient to fund the Company's operations through the first quarter 2006. There can be no assurance that changes in our current strategic plans or other events will not result in accelerated or unexpected expenditures.

The Company's capital requirements will depend on many factors, including the costs and timing of seeking regulatory approvals of the Company's products; the problems, delays, expenses and complications frequently encountered by development stage companies; the progress of the Company's preclinical and clinical activities; the costs associated with any future collaborative research, manufacturing, marketing or other funding arrangements; the Company's ability to obtain regulatory approvals; the success of the Company's potential future sales and marketing programs; the cost of filing, prosecuting and defending and enforcing any patent claims and other intellectual property rights; changes in economic, regulatory or competitive conditions of the Company's planned business; and additional costs associated with being a publicly-traded company. Estimates about the adequacy of funding for the Company's activities are based on certain assumptions, including the assumption that the development and regulatory approval of the Company's products can be completed at projected costs and that product approvals and introductions will be timely and successful. There can be no assurance that changes in the Company's research and development plans, acquisitions or other events will not result in accelerated or unexpected expenditures. To satisfy its capital requirements, the Company may seek to raise additional funds in the public or private capital markets. The Company may seek additional funding through corporate collaborations and other financing vehicles. There can be no assurance that any such funding will be available to the Company on favorable terms or at all. If the Company is successful in obtaining additional financing, the terms of such financing may have the effect of diluting or adversely affecting the holdings or the rights of the holders of the Company's common stock.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

None.



**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The financial statements required by this item are set forth in Item 15 of this Report.

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

Not applicable.

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**ITEM 9A. CONTROLS AND PROCEDURES**

The Company's chief executive officer and chief financial officer have evaluated the Company's disclosure controls and procedures as of December 31, 2004, the end of the period covered by this report. Based upon that evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

There were no changes in the Company's internal control over financial reporting during the fiscal quarter ending December 31, 2004 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

Not applicable.

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**PART III**

**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The information required by this item as to the directors and executive officers of the Company, the Section 16(a) reporting compliance information and the information relating to the Company's Code of Ethics is hereby incorporated by reference from the information appearing under the captions "Election of Directors", "Section 16(a) Beneficial Ownership Reporting Compliance" and "Board Committees" in the Company's proxy statement (the "Proxy Statement") for its 2005 annual meeting of stockholders. Such Proxy Statement will be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), within 120 days of the end of the Company's fiscal year ended December 31, 2004.

**ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item as to the management of the Company is hereby incorporated by reference from the information appearing under the captions "Executive Compensation" and "Election of Directors Director Compensation" in the Company's Proxy Statement. Such Proxy Statement will be filed with the Securities and Exchange Commission pursuant to the Exchange Act within 120 days of the end of the Company's fiscal year ended December 31, 2004. Notwithstanding the foregoing, in accordance with the instructions to Item 402 of Regulation S-K, the information contained in the Company's proxy statement under the sub-heading "Report of the Compensation Committee of the Board of Directors" and "Performance Graph" shall not be deemed to be filed as part of or incorporated by reference into this Annual Report on Form 10-K.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The information required by this item as to the ownership by management and others of securities of the Company is hereby incorporated by reference from the information appearing under the caption "Security Ownership of Certain Beneficial Owners and Management" in the Company's Proxy Statement. Such Proxy Statement will be filed with the Securities and Exchange Commission pursuant to the Exchange Act within 120 days of the end of the Company's fiscal year ended December 31, 2004.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The information required by this item as to certain business relationships and transactions with management and other related parties of the Company is hereby incorporated by reference from the information appearing under the caption "Certain Transactions" in the Company's Proxy Statement. Such Proxy Statement will be filed with the Securities and Exchange Commission pursuant to the Exchange Act within 120 days of the end of the Company's fiscal year ended December 31, 2004.

**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required by this item as to the principal accountant fees and services and the Audit Committee's pre-approval policies and procedures is hereby incorporated by reference from the information appearing under the captions "Fees Paid to Registered Independent Public Accounting Firm" and "Audit Committee Pre-Approval Policies and Procedures" in the Company's Proxy Statement. Such Proxy Statement will be filed with the Securities and

Exchange Commission pursuant to the Exchange Act within 120 days of the end of the Company's fiscal year ended December 31, 2004.

**Table of Contents****PART IV****ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K**

(a) Documents Filed as a Part of this Report.

<b>Financial Statements</b>	<b>Page</b>
<u>Report of Independent Registered Public Accounting Firm</u>	F-1
<u>Consolidated Balance Sheets as of December 31, 2004 and 2003</u>	F-2
<u>Consolidated Statements of Operations for the Years Ended December 31, 2004, 2003 and 2002 and (unaudited) from Inception (August 20, 1987) through December 31, 2004</u>	F-3
<u>Consolidated Statement of Stockholders' Equity (from inception)</u>	F-4
<u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2004, 2003 and 2002 and (unaudited) from Inception (August 20, 1987) through December 31, 2004</u>	F-10
Notes to Consolidated Financial Statements	F-11

All schedules are omitted because they are not applicable, not required, or because the required information is included in the financial statements or the notes thereto.

(b) Exhibits.

Exhibits to the Form 10-K have been included only with the copies of the Annual Report on Form 10-K filed with the Securities and Exchange Commission. Upon request to the Company and payment of a reasonable fee, copies of the individual exhibits will be furnished.

<b>Exhibit Number</b>	<b>Identification Of Exhibit</b>
3.1(a)	Restated Certificate of Incorporation. Exhibit 3.3 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended (Registration Statement), is incorporated herein by reference.
3.1(b)	Certificate of Designation of Series One Junior Participating Preferred Stock dated September 2, 1999. Exhibit A to Exhibit 4.1 to the Company's Registration Statement on Form 8-A as filed with the Commission on September 3, 1999 (the Rights Plan Registration Statement), is incorporated herein by reference.
3.2	Restated Bylaws of the Company. Exhibit 3.4 to the Registration Statement is incorporated herein by reference.
4.1	Specimen Certificate of Common Stock, \$.001 par value, of the Company. Exhibit 4.1 to the Registration Statement is incorporated herein by reference.
4.2	Rights Agreement dated September 1, 1999 between the Company and Computershare Investor Services LLC (as successor in interest to Harris Trust & Savings Bank), as Rights Agent. Exhibit 4.1 to the Rights Plan Registration Statement is incorporated herein by reference.
4.3	

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First Amendment to Rights Agreement, dated as of September 6, 2002, between the Company, Harris Trust & Savings Bank and Computershare Investor Services LLC. Exhibit 4.3 to Amendment No. 1 to the Rights Plan Registration Statement on Form 8-A/A as filed with the Commission on September 11, 2002 is incorporated herein by reference.

- 4.4 Second Amendment to Rights Agreement, dated as of October 30, 2002, between the Company and Computershare Investor Services LLC. Exhibit 4.4 to Amendment No. 2 to the Rights Plan Registration Statement on Form 8-A/A as filed with the Commission on October 31, 2002 is incorporated herein by reference.

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<b>Exhibit Number</b>	<b>Identification Of Exhibit</b>
4.5	Form of Rights Certificate. Exhibit B to Exhibit 4.1 to the Rights Plan Registration Statement is incorporated herein by reference.
10.1+	Amended and Restated 1993 Employee and Consultant Stock Option Plan. Exhibit 10.3 to the Registration Statement is incorporated herein by reference.
10.2+	First Amendment to the Zonagen, Inc. Amended and Restated 1993 Stock Option Plan. Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999 (the 1999 Form 10-K) is incorporated herein by reference.
10.3+	1996 Non-Employee Directors' Stock Option Plan. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1997 is incorporated herein by reference.
10.4+	2000 Non-Employee Directors' Stock Option Plan. Appendix B to the Company's Definitive Proxy Statement filed on April 26, 2000 is incorporated herein by reference.
10.5+	First Amendment to the Zonagen, Inc. 2000 Non-Employee Directors' Stock Option Plan. Exhibit 10.21 to the 2000 Form 10-K is incorporated herein by reference.
10.6+	Second Amendment to 2000 Non-Employee Directors' Stock Option Plan. Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (the 2002 Form 10-K) is incorporated herein by reference.
10.7+	Zonagen, Inc. 2004 Stock Option Plan. Exhibit 10.17 to the Company's Registration Statement on Form S-1 (No. 333-119861), as amended, is incorporated herein by reference.
10.8+	Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.5 to the Registration Statement is incorporated herein by reference.
10.9+	First Amendment to Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2001 is incorporated herein by reference.
10.10+	Second Amendment to Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.17 to the 2002 Form 10-K is incorporated herein by reference.
10.11+	Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.5 to the 1999 Form 10-K is incorporated herein by reference.
10.12+	First Amendment to Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.7 to the 2000 Form 10-K is incorporated herein by reference.
10.13+	Second Amendment to Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.18 to the 2002 Form 10-K is incorporated herein by reference.
10.14*	Lease Agreement dated May 11, 2004 between the Company and Sealy Woodlands, L.P.





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<b>Exhibit Number</b>	<b>Identification Of Exhibit</b>
10.15++	Letter Agreement dated July 15, 2002 between the Company, Schering Plough Ltd. and Schering-Plough Corporation. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2002 is incorporated herein by reference.
10.16++	PHS Patent License Agreement dated April 16, 1999 between the Company and certain agencies of the United States Public Health Service within the Department of Health and Human Services, with amendments. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2003 is incorporated herein by reference.
23.1*	Consent of PricewaterhouseCoopers LLP
31.1*	Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer)
31.2*	Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer)
32.1*	Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer)
32.2*	Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer)

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\* Filed herewith.

+ Management contract or compensatory plan.

++ Portions of this exhibit have been omitted based on a request for confidential treatment pursuant to Rule 24b-2 of the Exchange Act. Such omitted portions have been filed separately with the Commission.

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**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.

ZONAGEN, INC.

By: /s/ Joseph S. Podolski  
Joseph S. Podolski  
President and Chief Executive Officer

Dated: March 30, 2005

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Joseph S. Podolski  Joseph S. Podolski	President, Chief Executive Officer  and Director (Principal Executive Officer)	March 30, 2005
/s/ Louis Ploth, Jr  Louis Ploth, Jr.	Chief Financial Officer, VP Business  Development, Director and Secretary (Principal Financial Officer and Principal Accounting Officer)	March 30, 2005
/s/ Daniel F. Cain  Daniel F. Cain	Director	March 30, 2005
/s/ Jean L. Fourcroy, M.D., Ph.D., M.P.H.  Jean L. Fourcroy, M.D., Ph.D., M.P.H.	Director	March 30, 2005
/s/ Nola Masterson  Nola Masterson	Director	March 30, 2005
/s/ David Poorvin, Ph.D.  David Poorvin, Ph.D.	Director	March 30, 2005

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders of Zonagen, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, stockholders' equity, and cash flows present fairly, in all material respects, the financial position of Zonagen, Inc., and subsidiaries (a development stage company) at December 31, 2004 and 2003 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Houston, Texas  
March 25, 2005

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED BALANCE SHEETS

(in thousands except share amounts)

	December 31, 2004	December 31, 2003
<b>ASSETS</b>		
Current Assets		
Cash and cash equivalents	\$ 736	\$ 20,946
Marketable securities	4,800	2,000
Prepaid expenses and other current assets	34	235
Total current assets	5,570	23,181
Fixed Assets, net	18	
Other Assets, net	1,018	847
Total assets	\$ 6,606	\$ 24,028
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current Liabilities		
Accounts payable	\$ 144	\$ 126
Accrued expenses	470	415
Total current liabilities	614	541
Commitments & Contingencies		
Stockholders Equity		
Undesignated Preferred Stock, \$.001 par value, 5,000,000 shares authorized, none issued and outstanding		
Common Stock, \$.001 par value, 20,000,000 shares authorized, 11,989,936 and 11,929,048 shares issued, respectively; 4,992,901 and 11,479,648 shares outstanding, respectively	12	12
Additional paid-in capital	114,455	114,065
Deferred compensation	(234)	
Cost of treasury stock, 6,997,035 and 449,400 shares, respectively	(21,487)	(7,533)
Deficit accumulated during the development stage	(86,754)	(83,057)
Total stockholders equity	5,992	23,487
Total liabilities and stockholders equity	\$ 6,606	\$ 24,028

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The accompanying notes are an integral part of these consolidated financial statements.

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands except per share amounts)

	<b>For the Year Ended December</b>			<b>From Inception (August 20, 1987) Through</b>
	<b>2004</b>	<b>31, 2003</b>	<b>2002</b>	<b>December 31, 2004 (Unaudited)</b>
<b>REVENUES AND OTHER INCOME</b>				
Licensing fees	\$	\$	\$ 4,228	\$ 28,755
Product royalties				627
Research and development grants	118	595	315	1,215
Interest income	104	318	711	13,126
Gain on disposal of fixed assets		102		102
Other income	35			35
Total revenues and other Income	257	1,015	5,254	43,860
<b>EXPENSES</b>				
Research and development	2,471	2,161	6,420	94,260
General and administrative	1,483	2,183	2,716	26,623
Interest expense and amortization of intangibles				388
Total expenses	3,954	4,344	9,136	121,271
Loss from continuing operations	(3,697)	(3,329)	(3,882)	(77,411)
Loss from discontinued operations				(1,828)
Gain on disposal				939
Net loss before cumulative effect of change in accounting principle	(3,697)	(3,329)	(3,882)	(78,300)
Cumulative effect of change in accounting principle				(8,454)
<b>NET LOSS</b>	<b>\$ (3,697)</b>	<b>\$ (3,329)</b>	<b>\$ (3,882)</b>	<b>\$ (86,754)</b>
<b>NET LOSS PER SHARE BASIC AND DILUTED</b>	<b>\$ (0.72)</b>	<b>\$ (0.29)</b>	<b>\$ (0.34)</b>	
Shares used in net loss per share calculation:				
Basic	5,117	11,487	11,412	
Diluted	5,117	11,487	11,412	

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The accompanying notes are an integral part of these consolidated financial statements.

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

(in thousands except share amounts)

	Preferred Stock Shares	Amount	Common Stock Shares	Amount	Additional Paid-In Capital	Deferred Compensation	Treasury Stock Shares	Amount	Development Stage	Deficit Accumulated During The	Total Stockholders Equity
Exchange of common stock (\$ .004 per share) for technology rights and services from founding stockholders	\$	245,367	\$	\$	1	\$	\$	\$	\$	\$	1
Net Loss									(28)		(28)
BALANCE AT DECEMBER 31, 1987 (unaudited)		245,367			1				(28)		(27)
Net Loss									(327)		(327)
BALANCE AT DECEMBER 31, 1988 (unaudited)		245,367			1				(355)		(354)
Proceeds from issuance of common stock		65,431			3						3
Net Loss									(967)		(967)
BALANCE AT DECEMBER 31, 1989 (unaudited)		310,798			4				(1,322)		(1,318)
Proceeds from issuance of common stock		467									
Net Loss									(1,426)		(1,426)
BALANCE AT DECEMBER 31, 1990 (unaudited)		311,265			4				(2,748)		(2,744)



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Net Loss				(1,820)	(1,820)
BALANCE AT DECEMBER 31, 1991 (unaudited)	311,265		4	(4,568)	(4,564)
Conversion of 391,305 shares of Series C preferred stock into common stock	91,442		360		360
Purchase of retirement of common stock	(23,555)		(1)		(1)
Proceeds from issuance of common stock	16,946		7		7
Net Loss				(1,583)	(1,583)
BALANCE AT DECEMBER 31, 1992 (unaudited)	396,098	1	370	(6,151)	(5,781)
Issuance of common stock for cash, April 1, 1993, and May 12, 1993 (\$5.50 per share), net of offering costs of \$1,403	1,534,996	2	7,037		7,039
Issuance of common stock for cash and license agreement, December 9, 1993 (\$10.42 per share), net of offering costs of \$47	239,933		2,453		2,453
Conversion of Series A preferred stock to common stock	179,936		600		600
Conversion of Series B preferred stock to common stock	96,013		378		378
Conversion of Series C preferred stock to	876,312	1	3,443		3,444

common stock Conversion of Series D preferred stock to common stock	280,248	599		600
Conversion of bridge loan to common stock	64,000	256		256
Net Loss			(2,532)	(2,532)

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY  
(in thousands except share amounts)

	Preferred Stock Shares	Common Stock Amount	Common Stock Shares	Additional Paid-In Capital	Deferred Compensation	Treasury Stock Shares	Treasury Stock Amount	Development Stage	Deficit Accumulated During The	Total Stockholders Equity
BALANCE AT DECEMBER 31, 1993 (unaudited)		\$ 3,667,536	\$ 4	\$ 15,136	\$	\$	\$	\$ (8,683)	\$ 6,457	
Deferred compensation resulting from grant of options				188	(188)					
Amortization of deferred compensation					38				38	
Exercise of warrants to purchase common stock for cash, June 30, 1994 (\$3.94 per share)			39,623	156					156	
Issuance of common stock for purchase of FTI, October 13, 1994			111,111	1,567					1,567	
Net loss								(3,970)	(3,970)	
 BALANCE AT DECEMBER 31, 1994										
Amortization of deferred compensation			3,818,270	4	17,047	(150)		(12,653)	4,248	
Exercise of options to purchase common stock for cash, January and April 1995 (\$.10 to \$6.13 per			4,546	14	37				37	
									14	

share)								
Issuance of common stock for cash and a financing charge, March 9, 1995			16,000		76			76
Issuance of Series A preferred stock for cash, October 4, 1995, and October 19, 1995 (\$10.00 per share), net of offering costs of \$651	598,850	1			5,336			5,337
Conversion of warrants to purchase common stock as a result of offering under antidilution clause, October 19, 1995 (\$3.63 per share)								
Conversion of Series A preferred stock into common stock, November and December 1995	(94,000)		259,308					
Net loss							(4,287)	(4,287)
<b>BALANCE AT DECEMBER 31, 1995</b>	<b>504,850</b>	<b>1</b>	<b>4,098,124</b>	<b>4</b>	<b>22,473</b>	<b>(113)</b>	<b>(16,940)</b>	<b>5,425</b>
Deferred compensation resulting from grant of options					86	(86)		
Amortization of deferred compensation						54		54
Exercise of warrants to purchase common stock for cash, January through December 1996 (\$3.63 per share)			227,776		827			827
Conversion of Series A preferred	(507,563)	(1)	1,396,826	2	(1)			

stock into common stock, January through November 1996					
Issuance of options for services, January 12, 1996			99		99
Exercise of options to purchase common stock for cash, February through November 1996 (\$0.01 to \$5.50 per share)		23,100	75		75
Issuance of common stock for agreement not to compete, April 13, 1996		19,512	200		200
Exercise of warrants to purchase Series A preferred stock under cashless exercise provision, June 5, 1996	2,713				
Issuance of Series B preferred stock for cash, September 30, 1996, and October 11, 1996 (\$10.00 per share), net of offering costs of \$2,557	1,692,500	2	14,366		14,368
Conversion of Series B preferred stock into common stock, November through December 1996	(177,594)	268,058			
Net loss				(9,470)	(9,470)

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY  
(in thousands except share amounts)

	Preferred Stock		Common Stock		Additional Paid-In Capital		Treasury Stock		Development Stage		Total Stockholders Equity
	Shares	Amount	Shares	Amount	Capital	Compensation	Shares	Amount	Stage	Equity	
BALANCE AT DECEMBER 31, 1996	1,514,906	\$ 2	6,033,396	\$ 6	\$ 38,125	\$ (145)				\$ (26,410)	\$ 11,578
Deferred compensation resulting from grant of options					2,110	(2,110)					
Amortization of deferred compensation						854					854
Exercise of options to purchase common stock for cash, January through December 1997 (\$0.00 to \$22.25 per share)			90,955		522						522
Exercise of warrants to purchase common stock for cash, January through December 1997 (\$3.63 and \$3.07 per share)			22,368		75						75
Issuance of common stock for a cashless exercise of Series A preferred stock warrants,			81,294								

February through September 1997						
Exercise of Series A preferred stock warrants to purchase common stock for cash, April 1997 (\$11.00 per share)		818		3		3
Issuance of common stock for a cashless exercise of Series B preferred stock warrants, April through November 1997		88,223				
Exercise of Series B preferred stock warrants to purchase common stock for cash, April through July 1997 (\$11.00 per share)		17,169		125		125
Issuance of common stock as final purchase price for acquisition of FTI, January 31, 1997 (\$9.833 per share)		305,095	1			1
Issuance of common stock as final debt payment on FTI acquisition, January 31, 1997 (\$9.833 per share)		19,842		94		94
Conversion of Series B	(1,514,906)	(2)	2,295,263	2	(1)	(1)

preferred stock into common stock, January through October 1997 Issuance of common stock for cash, July 25, 1997 (\$30.00 per share), net of offering costs of \$5,439	2,587,500	3	72,183		72,186
Purchase of treasury stock, December 1997				61,500	(1,287)
Net loss					(13,174)
					(13,174)

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY  
(in thousands except share amounts)

	<b>Preferred Stock Shares</b>	<b>Common Stock Shares</b>	<b>Additional Paid-In Capital</b>	<b>Deferred Compensation</b>	<b>Treasury Stock Shares</b>	<b>Stock Amount</b>	<b>Development Stage</b>	<b>Deficit Accumulated During The</b>	<b>Total Stockholders Equity</b>
BALANCE AT DECEMBER 31, 1997	\$	11,541,923	\$ 12	\$ 113,236	\$ (1,401)	61,500	\$ (1,287)	\$ (39,584)	\$ 70,976
Deferred compensation resulting from grant of options				55					55
Amortization of deferred compensation				422					422
Forfeiture of stock options, December 1998				(21)	21				
Exercise of options to purchase common stock for cash, January through October 1998 (\$0.43 to \$22.25 per share)		63,022		344					344
Issuance of common stock for services, January 15, 1998		5,000		103					103
Issuance of common stock for a cashless exercise of Series B preferred stock warrants, May through July 1998		11,195							

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Purchase of treasury stock, January through September 1998 (\$13.00 to \$20.65 per share)					353,800	(6,197)		(6,197)
Net loss							(12,316)	(12,316)
BALANCE AT DECEMBER 31, 1998	11,621,140	12	113,717	(958)	415,300	(7,484)	(51,900)	53,387
Deferred compensation resulting from grant of options			(229)	229				
Amortization of deferred compensation				239				239
Exercise of options to purchase common stock for cash, February through September 1999 (\$0.04 to \$8.375 per share)	31,866		72					72
Issuance of common stock for a cashless exercise of common stock warrants, February 1999	4,775							
Issuance of common stock for a cashless exercise of Series A preferred stock warrants, April 1999	22,131							
Issuance of common stock for a cashless exercise of Series B preferred stock warrants, March through April 1999	876							

Exercise of Series B preferred stock warrants to purchase common stock for cash, January 1999 (\$11.00 per share)	536		4					4
Net loss							(11,952)	(11,952)
<b>BALANCE AT DECEMBER 31, 1999</b>	11,681,324	12	113,564	(490)	415,300	(7,484)	(63,852)	41,750
Deferred compensation resulting from grant of options			77	(34)				43
Amortization of deferred compensation				283				283
Exercise of options to purchase common stock for cash, March through September 2000 (\$0.43 to \$8.375 per share)	49,416		112					112
Issuance of common stock through employee stock purchase plan for cash, December 2000	9,379		21					21
Issuance of common stock to Board of Director members for services, May through December 2000	2,034		6					6
Net loss							(11,155)	(11,155)

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY  
(in thousands except share amounts)

	Preferred Stock Shares	Common Stock Shares	Additional Paid-In Capital	Deferred Compensation	Treasury Stock Shares	Stock Amount	Development Stage	Deficit Accumulated During The	Total Stockholders Equity
BALANCE AT DECEMBER 31, 2000	\$	11,742,153	\$ 12	\$ 113,780	\$ (241)	415,300	\$ (7,484)	\$ (75,007)	\$ 31,060
Compensation resulting from grant of options				36					36
Compensation resulting from extension of warrants				23					23
Amortization of deferred compensation				230					230
Exercise of options to purchase common stock for cash, February through December 2001 (\$0.64 to \$4.00 per share)		12,242		25					25
Issuance of common stock through employee stock purchase plan for cash, June and December 2001		8,431		25					25
Issuance of common stock to Board of Director members for services, February through		2,690		9					9

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December 2001 Net loss							(839)	(839)		
<b>BALANCE AT DECEMBER 31, 2001</b>	\$	11,765,516	\$ 12	\$ 113,898	\$	(11)	415,300	\$ (7,484)	\$ (75,846)	\$ 30,569
Amortization of deferred compensation						11				11
Exercise of options to purchase common stock for cash, January and February 2002 (\$0.64 to \$2.94 per share)		31,265		21						21
Purchase common stock through employee stock purchase plan for cash, June 2002		4,824		6						6
Issuance of common stock to Employees		105,000		111						111
Issuance of common stock to Board of Director members for services, March through December 2002		11,572		15						15
Net loss								(3,882)		(3,882)
<b>BALANCE AT DECEMBER 31, 2002</b>	\$	11,918,177	\$ 12	\$ 114,051	\$		415,300	\$ (7,484)	\$ (79,728)	\$ 26,851
Issuance of common stock to Board of Director members for services, February through May 2003		10,871		14						14
Purchase of treasury stock April (\$1.37 to \$1.50 per share)						34,100	(49)			(49)
Net loss								(3,329)		(3,329)

BALANCE AT  
DECEMBER 31,  
2003

\$ 11,929,048 \$ 12 \$ 114,065 \$ 449,400 \$ (7,533) \$ (83,057) \$ 23,487

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY  
(in thousands except share amounts)

	Preferred Stock Shares	Common Stock Shares	Additional Paid-In Capital	Deferred Compensation	Treasury Stock Shares	Stock Amount	Development Stage	Deficit Accumulated During The	Total Stockholders Equity
Self tender offer of 6,547,635 shares at \$2.10 January 2004 including 60,888 exercised options		60,888			6,547,635	(13,665)			(13,665)
Cost associated with self tender offer						(289)			(289)
Noncash stock compensation related to stock option bonus program			78						78
Issuance of 354,474 stock options to employees on March 29, 2004 and approved on September 29, 2004 (exercise price of \$2.72, fair value of \$3.60)			312	(312)					
Amortization of deferred compensation				78					78
Net loss							(3,697)		(3,697)
<b>BALANCE AT DECEMBER</b>	<b>\$</b>	<b>11,989,936</b>	<b>\$ 12</b>	<b>\$ 114,455</b>	<b>\$ (234)</b>	<b>6,997,035</b>	<b>(21,487)</b>	<b>\$ (86,754)</b>	<b>\$ 5,992</b>

31, 2004

The accompanying notes are an integral part of these consolidated financial statements.

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ZONAGEN, INC. AND SUBSIDIARY  
(A development stage company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	<b>For The Year Ended December</b>			<b>From Inception (August 20, 1987) Through</b>
	<b>2004</b>	<b>31, 2003</b>	<b>2002</b>	<b>December 31, 2004 Unaudited</b>
Cash Flows from Operating Activities				
Net loss	\$ (3,697)	\$ (3,329)	\$ (3,882)	\$ (86,754)
Gain on disposal of discontinued operations				(939)
Gain on disposal of fixed assets		(102)		(102)
Adjustments to reconcile net loss to net cash used in operating activities:				
Noncash financing costs				316
Noncash inventory impairment			4,417	4,417
Noncash patent impairment	308		1,031	1,339
Noncash decrease in accounts payable			(1,308)	(1,308)
Depreciation and amortization	9	78	226	3,773
Noncash expenses related to stock-based transactions	156	14	137	2,728
Common stock issued for agreement not to compete				200
Series B Preferred Stock issued for consulting services				18
Maturities (purchases) of marketable securities	(2,800)	14,455	12,080	23,735
Changes in operating assets and liabilities (net effects of purchase of businesses in 1988 and 1994):				
(Increase) decrease in receivables				(199)
Decrease (increase) in inventory				(4,447)
(Increase) decrease in prepaid expenses and other current assets	201	297	262	265
(Decrease) increase in accounts payable and accrued expenses	73	22	(290)	1,809
Decrease in deferred revenue			(4,228)	
Net cash provided by (used in) operating activities	(5,750)	11,435	8,445	(55,149)
Cash Flows from Investing Activities				
Maturities (purchase) of marketable securities				(28,723)
Capital expenditures	(21)		(49)	(2,289)
Purchase of technology rights and other assets	(169)	(64)	(261)	(2,438)
(Increase) decrease in note receivable		1,000	(1,000)	
Proceeds from sale of fixed assets		225		225

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Cash acquired in purchase of FTI				3
Proceeds from sale of subsidiary, less \$12,345 for operating losses during 1990 phase-out period				138
Proceeds from sale of the assets of FTI				2,250
Increase in net assets held for disposal				(213)
Net cash provided by (used in) investing activities	(190)	1,161	(1,310)	(31,047)
Cash Flows from Financing Activities				
Proceeds from issuance of common stock			27	84,224
Increase in prepaid offering costs	(316)	(284)		(600)
Proceeds from issuance of preferred stock				23,688
Purchase of treasury stock	(13,954)	(49)		(21,487)
Proceeds from issuance of notes payable				2,839
Principal payments on notes payable				(1,732)
Net cash provided by (used in) financing activities	(14,270)	(333)	27	86,932
Net Increase (Decrease) in Cash and Cash Equivalents	(20,210)	12,263	7,162	736
Cash and Cash Equivalents at beginning of Period	20,946	8,683	1,521	
Cash and Cash Equivalents at end of Period	\$ 736	\$ 20,946	\$ 8,683	\$ 736

The accompanying notes are an integral part of these consolidated financial statements.

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**1. ORGANIZATION AND OPERATIONS:**

Zonagen, Inc. ( the Company , Zonagen, or we, us or our ) was organized on August 28, 1987 and is a development stage company. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders. Our lead product candidate, Progenta, is an orally available small molecule compound that we are developing for the treatment of uterine fibroids and endometriosis. Our second product candidate is Androxal, an orally available small molecule compound being developed for the treatment of testosterone deficiency in men.

On February 1, 2005 the Company completed its follow-on public offering of 5,060,000 shares of its common stock at \$4.00 per share (which included the underwriters' exercise of its over allotment option for 660,000 shares). The shares offered by the Company were issued out of its existing treasury stock, and the offering resulted in net proceeds to the Company of approximately \$18.1 million.

Prior to 2004, we focused our resources on the development of VASOMAX<sup>®</sup>, and related phentolamine-based products for the treatment of male erectile dysfunction. Beginning in 1999, the US Food and Drug Administration ( FDA ) placed our phentolamine-based products on clinical hold, which was subsequently lifted to a partial clinical hold the following year. As a result of the setbacks associated with this FDA hold, as well as other setbacks with the European regulatory agency in connection with phentolamine, we undertook two separate efforts in 2002 and 2000 to aggressively locate strategic alternatives, including the use of two investment banks to assist in this search. All of these efforts culminated in a definitive merger agreement being signed in October 2002 with a potential strategic partner, which was subsequently terminated in March 2003 for regulatory and other reasons. During the remainder of 2003, the Board continued to review all of the options available to us.

In January 2004, the Company accepted for purchase 6,547,635 shares (approximately 57% of its outstanding common stock, at that time) at a purchase price of \$2.10 per share in accordance with the terms of the self tender offer, which included 60,888 shares issuable upon exercise of options tendered by directors, for a total aggregate cost of approximately \$14.0 million, inclusive of costs associated with the offer.

Nasdaq has established rules and policies with respect to the continued listing of securities on Nasdaq. Due to the Company's self tender offer which was completed in January 2004, the Company had fallen below the Nasdaq National Market requirement that a listed company have at least \$10 million in stockholders' equity. Due to this shortfall in equity, the Company applied for a Nasdaq SmallCap Market listing which was approved by Nasdaq and the Company's stock began trading on the Nasdaq SmallCap Market on July 8, 2004.

The Company has experienced negative cash flows from operations since inception and has funded its activities to date primarily from equity financings and corporate collaborations. The Company will continue to require substantial funds for research and development, including preclinical studies and clinical trials of our product candidates, and to commence sales and marketing efforts if appropriate, if the FDA or other regulatory approvals are obtained. The Company believes that its existing capital resources under its current operating plan will be sufficient to fund the Company's operations through the first quarter 2006. There can be no assurance that changes in our current strategic plans or other events will not result in accelerated or unexpected expenditures.

Zonagen's results of operations may vary significantly from year to year and quarter to quarter, and depend, among other factors, on the Company's ability to be successful in our clinical trials, the regulatory approval process in the United States and other foreign jurisdictions and the ability to complete new licenses and product development agreements. The timing of our revenues may not match the timing of our associated product development expenses. To date, research and development expenses have generally exceeded revenue in any particular period and/or fiscal year.

As of December 31, 2004, the Company had an accumulated deficit of \$86.8 million. Losses have resulted principally from costs incurred in conducting clinical trials for VASOMAX<sup>®</sup> and the related female sexual dysfunction product, in research and development activities related to efforts to develop our products and from the associated administrative costs required to support those efforts. Due to various tax regulations, including change in control provisions in the tax code the value of this tax asset to the Company can be substantially diminished. For additional information relating to the Company's net operating loss carryforward see Note 6. Federal Income Taxes of the Notes to Consolidated Financial Statements.

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### **2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: USE OF ESTIMATES**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure 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.

### **CERTAIN RISKS AND UNCERTAINTIES**

Our product candidates under development require approval from the FDA or other international regulatory agencies prior to commercial sales. There can be no assurance our product candidates will receive the necessary clearance. If we are denied clearance or clearance is delayed, it may have a material adverse impact on us.

Our product candidates are concentrated in rapidly changing, highly competitive markets, which are characterized by rapid technological advances, evolving regulatory requirements and industry standards. Any failure by us to anticipate or to respond adequately to technological developments in our industry, changes in regulatory requirements or industry standards, or any significant delays in the development or introduction of products or services, could have a material adverse effect on our business, operating results and future cash flows.

### **CASH AND CASH EQUIVALENTS**

For purposes of the consolidated statements of cash flows, the Company considers all cash accounts and highly liquid investments having original maturities of three months or less to be cash and cash equivalents.

### **MARKETABLE SECURITIES**

Management determines the appropriate classification of investments in debt and equity securities at the time of purchase and re-evaluates such designation as of each subsequent balance sheet date. Securities for which the Company has the ability and intent to hold to maturity are classified as held to maturity. Securities classified as trading securities are recorded at fair value. Gains and losses on trading securities, realized and unrealized, are included in earnings and are calculated using the specific identification method. Any other securities are classified as available for sale. At December 31, 2004 all securities were classified as trading securities. The cost basis including purchased premium for these securities was \$4.8 million and \$2.0 million at December 31, 2004 and 2003, respectively.

Marketable securities as of December 31, 2004 consist of only short term investments totaling \$4.8 million. The Company's investments typically include corporate bonds and notes, Euro-dollar bonds, taxable auction securities and asset-backed securities. The Company's policy is to require minimum credit ratings of A2/A and A1/P1 with maturities of up to three years. The average life of the investment portfolio may not exceed 24 months.

### **PRODUCT INVENTORY**

The Company maintains an inventory of bulk phentolamine which is the active ingredient in VASOMAX<sup>®</sup>, the Company's oral treatment for male erectile dysfunction (MED). Due to the mutual termination of the Schering-Plough Agreements in July 2002, the future uncertainty surrounding the VASOMAX<sup>®</sup> product and the fact that the Company is not presently committing resources toward the approval of VASOMAX<sup>®</sup>, the Company wrote-off its bulk phentolamine inventory previously valued at \$4.4 million in the quarter ended June 30, 2002.

PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets primarily consist of prepaid insurance, prepaid operating expenses and other miscellaneous assets, interest and other receivables.

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### **FIXED ASSETS**

Fixed assets include lab equipment, furniture and leasehold improvements and are recorded at cost, less accumulated depreciation and amortization. Depreciation is computed on the straight-line method over an estimated useful life of three to five years or, in the case of leasehold improvements, amortized over the remaining term of the lease. Maintenance and repairs that do not improve or extend the life of assets are expensed as incurred. When assets are sold or retired, the cost and accumulated depreciation are removed from the accounts and the resulting gain or loss is included in income during the period in which the transaction occurred.

Since the Company was operating primarily as a virtual company utilizing outside consultants to perform limited research and development and clinical development activities and previously intended to redeploy its existing assets, the Company held an auction in June 2003 and sold substantially all of its fixed assets for approximate net proceeds of \$225,000, which was \$102,000 over their book value.

### **OTHER ASSETS**

As of December 31, 2004 other assets consist of both prepaid offering costs in the amount of \$601,000 relating to the Company's public offering which was completed on February 1, 2005, and capitalized patent costs in the amount of \$417,000. Patent costs are being amortized over 20 years, or the lesser of the legal or the estimated economic life of the patent. Amortization of patent costs was \$7,000, \$9,000 and \$35,000 in 2004, 2003 and 2002, respectively.

Of the \$417,000 in capitalized patents \$274,000 related to patents for Progenta which is being developed as an oral treatment for uterine fibroids and endometriosis and \$143,000 related to Androxal, which is being developed as an oral treatment for testosterone deficiency. The Company will no longer maintain its current patent portfolio for its vaccine adjuvants, prostate cancer vaccines, hCG and zona pellucida immuno-contraceptive vaccines. This decision resulted in an impairment charge of approximately \$308,000 during 2004 against capitalized patent costs.

The Company incurred \$284,000 in the three month period ended December 31, 2003 relating to transaction costs associated with its self tender offer. These costs were recorded as other assets and were charged to treasury stock in January 2004 when the self tender offer was completed.

### **REVENUE RECOGNITION**

#### **Licensing Fees**

During 2000, the Company adopted U.S. Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements (SAB 101), as amended, which requires up-front, non-refundable license fees to be deferred and recognized over the performance period. In situations where the Company receives payment in advance of the performance of services, such amounts are deferred and recognized as revenue as the related services are performed. The Company recognized revenue from non-refundable, up-front license and milestone payments, not specifically tied to a separate earnings process, ratably over the performance period of the agreement. When payments are specifically tied to a separate earnings process, revenue is recognized when earned. Prior to January 1, 2000, the Company had recognized revenue from non-refundable fees when the Company had no obligations to refund the fees under any circumstances, and there were no additional contractual services to be provided or costs to be incurred by the Company in connection with the non-refundable fees.

The cumulative effect of adopting SAB 101, as amended, at January 1, 2000 resulted in a one-time, non-cash charge of \$8.5 million, with a corresponding increase to deferred revenue that was recognized in later periods. The \$8.5 million represents portions of 1997 and 1998 payments received from Schering-Plough in consideration for the

exclusive license of the Company's VASOMAX<sup>®</sup> product for the treatment of MED. For the year ended December 31, 2002, the Company recognized \$4.2 million of licensing fees revenue that was included in the cumulative effect adjustment as of January 1, 2000. Due to the mutual termination of the Schering-Plough Agreements in July 2002, the Company recognized the remaining \$3.2 million of deferred revenue in the quarter ended September 30, 2002.



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### **Product Royalties**

Under the terms of the Schering-Plough Agreements, the Company had previously received quarterly royalty payments based on net sales of VASOMAX® in Mexico and Brazil by Schering-Plough. The Company recognized royalty revenue when it was received. Due to the July 2002 mutual termination of the Schering-Plough Agreements the Company does not expect to receive any royalties in the foreseeable future.

### **Research and Development Grants**

The Company applies for research and development grants from the federal government usually in the form of Small Business Innovation Research, or SBIR grants. When the Company is awarded one of these research and development grants it is obligated to spend grant dollars on research activities based on a budget that was submitted with the grant application. The Company typically bills the federal government on a monthly basis after it has expended its funds for the grant activities. At that time the Company recognizes research and development grant revenues. During 2002 the Company was awarded three SBIR grants totaling in excess of \$1 million. The last SBIR grant was essentially depleted during 2004.

### **RESEARCH AND DEVELOPMENT COSTS**

Research and development, or R&D expenses include salaries and related employee expenses, contracted regulatory affairs activities, insurance coverage for clinical trials and product sales, contracted research and consulting fees, facility costs and internal research and development supplies. The Company expenses research and development costs in the period they are incurred. These costs consist of direct and indirect costs associated with specific projects as well as fees paid to various entities that perform research on behalf of the Company.

### **LOSS PER SHARE**

Basic EPS is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the year. Diluted EPS is computed in the same manner as fully diluted EPS, except that, among other changes, the average share price for the period is used in all cases when applying the treasury stock method to potentially dilutive outstanding options. In all applicable years all common stock equivalents were antidilutive and accordingly were not included in the computation.

### **STOCK-BASED COMPENSATION**

The Company has two stock-based compensation plans at December 31, 2004, which are described more fully in note 8.

The Company accounts for its stock option plans under APB No. 25 Accounting for Stock Issued to Employees. Accordingly, deferred compensation is recorded for stock options based on the excess of the market value of the common stock on the measurement date over the exercise price of the options. This deferred compensation is amortized over the vesting period of each option.

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The Company has adopted the disclosure requirements of SFAS No. 123 Accounting for Stock-Based Compensation, as amended, for employee stock-based compensation and has elected not to record related compensation expense in accordance with this statement. Had compensation expense for its stock option plans been determined consistent with SFAS No. 123, the Company's net loss and loss per share would have been increased to the following pro forma amounts (in thousands, except for per share amounts):

	<b>December 31,</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Net loss, as reported	\$ (3,697)	\$ (3,329)	\$ (3,882)
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	156	14	137
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(457)	(1,374)	(2,175)
Pro forma net loss	\$ (3,998)	\$ (4,689)	\$ (5,920)
Loss per share			
Basic and diluted as reported	\$ (0.72)	\$ (0.29)	\$ (0.34)
Basic and diluted pro forma	(0.78)	(0.41)	(0.52)

Under SFAS No. 123, the fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model. The following weighted average assumptions were used for grants in 2004, 2003, and 2002, respectively: risk-free interest rates of 3.5%, 3.8%, and 5.4%; with no expected dividends; expected lives of 6.4, 4.2, and 4.9 years; expected volatility of 88%, 90%, and 88%. The weighted average fair value of options granted at market for 2004, 2003 and 2002 was \$1.99, \$0.39 and \$3.22, respectively.

The Black-Scholes option valuation model and other existing models were developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of and are highly sensitive to subjective assumptions including the expected stock price volatility. The Company's employee stock options have characteristics significantly different from those of traded options and changes in the subjective input assumptions can materially affect the fair value estimate.

**RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2004, the FASB issued SFAS No. 123 (revised 2004), Share-Based Payment. SFAS No. 123(R) will require that the compensation cost relating to share-based payment transactions be recognized in financial statements. That cost will be measured based on the fair value of the equity or liability instruments issued. SFAS No. 123(R) covers a wide range of share-based compensation arrangements including share options, restricted share plans, performance-based awards, share appreciation rights, and employee share purchase plans. SFAS No. 123(R) replaces FASB Statement No. 123, Accounting for Stock-Based Compensation, and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees. SFAS No. 123, as originally issued in 1995, established as preferable a fair value-based method of accounting for share-based payment transactions with employees. However, that Statement permitted entities the option of continuing to apply the guidance in APB Opinion No. 25, as long as the footnotes to financial statements disclosed what net income would have been had the preferable fair value-based method been used. Public entities will be required to apply SFAS No. 123(R) as of the first interim or annual reporting period that begins after June 15, 2005. We are in the process of evaluating the impact the adoption of SFAS No. 123(R) will have on our consolidated financial position, results of operations and cash flows.

## 3. FIXED ASSETS:

Fixed assets are classified as follows (in thousands):

	<b>December 31,</b>	
	<b>2004</b>	<b>2003</b>
Laboratory equipment	\$ 4	\$
Office equipment	10	
Leasehold improvements	7	
	21	
Less Accumulated depreciation and amortization	3	
Total	\$ 18	\$

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The Company held an auction in June 2003 and sold substantially all of its fixed assets for approximate net proceeds of \$225,000, which was \$102,000 over their book value. In addition to purchases in 2004, the Company currently possesses some lab equipment and furniture whose value had previously been fully depreciated.

**4. OPERATING LEASES:**

The Company leases laboratory and office space, and equipment pursuant to leases accounted for as operating leases. The lease for the Company's laboratory and office space expires in June 2010. Rental expense for the years ended December 31, 2004, 2003 and 2002, was approximately \$37,000, \$145,000 and \$255,000, respectively. Future minimum lease payments under non-cancelable leases with original terms in excess of one year as of December 31, 2004, are as follows (in thousands):

2005	\$	38
2006		39
2007		40
2008 & later		102
Total	\$	219

**5. ACCRUED EXPENSES:**

Accrued expenses consist of the following (in thousands):

	<b>December 31,</b>	
	<b>2004</b>	<b>2003</b>
Research and development costs	\$ 7	\$ 39
Legal	48	91
Insurance		75
Offering costs	250	
Other	165	210
Total	\$ 470	\$ 415

**6. FEDERAL INCOME TAXES:**

The Company has had losses since inception and, therefore, has not been subject to federal income taxes. The Company has accumulated approximately \$2.9 million of research and development tax credits. As of December 31, 2004 and 2003, the Company had approximately \$78.5 million and \$75.6 million, respectively, of net operating loss ( NOL ) carry-forwards for federal income tax purposes. Additionally, approximately \$1.3 million of NOLs, and approximately \$52,000 of research and development tax credits will expire in 2005.

The Tax Reform Act of 1986 provided for a limitation on the use of NOL and tax credit carryforwards following certain ownership changes that could limit the Company's ability to utilize these NOLs and tax credits. The sale of preferred stock in 1996, together with previous changes in stock ownership, resulted in an ownership change in 1996 for federal income tax purposes. The Company estimates that the amount of pre-1997 NOL carryforwards and the credits available to offset taxable income is limited to approximately \$5.4 million per year on a cumulative basis. Accordingly, if the Company generates taxable income in any year in excess of its then cumulative limitation, the Company may be required to pay federal income taxes even though it has unexpired NOL carryforwards.

Additionally, because U.S. tax laws limit the time during which NOLs and tax credit carryforwards may be applied against future taxable income and tax liabilities, the Company may not be able to take full advantage of its NOLs and tax credit carryforwards for federal income tax purposes.

The redemption of shares under the Company's tender offer in January 2004 (Note 1) and the Company's follow-on public offering completed on February 1, 2005 (Note 12) may have created a change of ownership for Federal Income tax purposes. The Company has not undertaken a study to determine if this has occurred. A change in ownership for Federal income tax purposes may result in a limitation in the use of net operating loss carryforwards in future periods.

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Under SFAS No. 109, Accounting for Income Taxes, an NOL requires the recognition of a deferred tax asset. As the Company has incurred losses since inception, and there is no certainty of future revenues, a valuation allowance has been provided in full in the accompanying consolidated financial statements.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	<b>December 31,</b>	
	<b>2004</b>	<b>2003</b>
Net operating loss carryforwards	\$ 26,693	\$ 25,704
Research and development tax credits	2,871	2,905
Accruals/expenses not currently deductible	1,510	1510
Total deferred tax assets	31,074	30,119
Less Valuation allowance	(31,074)	(30,119)
Net deferred tax assets	\$	\$

**7. STOCKHOLDERS EQUITY:**  
**TREASURY STOCK**

On January 13, 2004 the Company announced the final results of its self tender offer, which expired on January 7, 2004. Zonagen accepted for purchase 6,547,635 shares at a purchase price of \$2.10 per share in accordance with the terms of the offer, which included 60,888 shares issuable upon exercise of options tendered by directors, for a total aggregate cost of approximately \$14.0 million, which is inclusive of costs associated with the offer.

In April 2003, the Company bought back an additional 34,100 treasury shares at an aggregate purchase price of \$49,000 for an average price of \$1.44 per share.

As of December 31, 2004, the Company had 6,997,035 shares of treasury stock. The Company sold 5,060,000 of these shares in its public offering which was completed on February 1, 2005.

**EARNINGS PER SHARE**

The following table presents information necessary to calculate earnings per share for the three years ended December 31, 2004, 2003 and 2002 (in thousands, except per share amounts):

	<b>2004</b>	<b>2003</b>	<b>2002</b>
Net loss	\$ (3,697)	\$ (3,329)	\$ (3,882)
Weighted average common shares outstanding	5,117	11,487	11,412
Basic earnings per share	\$ (0.72)	\$ (0.29)	\$ (0.34)
Weighted average common and dilutive potential common shares outstanding:			
Weighted average common shares outstanding	5,117	11,487	11,412
Assumed exercise of stock options			

	5,117	11,487	11,412
Diluted earnings per share	\$ (0.72)	\$ (0.29)	\$ (0.34)

#### 8. STOCK OPTIONS AND EMPLOYEE STOCK PURCHASE PLAN:

During 2004 the Company had three stock option plans available which were the 1994 Employee and Consultant Stock Option Plan, or 1994 Plan which expired in June 2004; the 2000 Non-Employee Directors Stock Option Plan, or 2000 Director Plan; and the 2004 Stock Option Plan, or 2004 Plan. Due to the expiration of the Company's Amended and Restated 1993 Employee and Consultant Stock Option Plan, or 1993 Plan, in May 2003, the Company's Board of Directors approved the 2004 Plan on February 24, 2004. The 2004 Plan was approved by shareholders at the 2004 Annual Shareholders Meeting which was held on September 29, 2004.

As of December 31, 2004, there were 298,536 options available under the 2004 Plan and 500,000 available under the 2000 Director Plan. The 2000 Director Plan has an evergreen provision pursuant to which the number of shares available under such plan are automatically increased each year on the day after the Company's annual Shareholders Meeting by the number of shares granted during the prior year under such plan (or by one-half percent of the Company's then outstanding common stock, if greater). There are no significant differences between the provisions of the two remaining plans. In general, options are

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granted with an exercise price per share as determined by the board of directors, which is typically equal to the fair market value per share of common stock on the date of grant. Vesting provisions for each grant are determined by the board of directors and typically vest quarterly over a three year period. All options expire no later than the tenth anniversary of the grant date.

During the 2003 Annual Shareholders Meeting which was concluded on January 14, 2004, four prior Board Members did not stand for re-election and four new Board Members were elected which consisted of 3 outside directors and the Company's Chief Financial Officer. Pursuant to the terms of the Company's 2000 Director Plan, each of the three new non-employee directors were automatically granted options to purchase 40,000 shares of the Company's common stock at an exercise price of \$2.40, which was the closing price on the date of grant. On February 24, 2004, the Board of Directors approved an amendment to these options to provide that such options vest in quarterly installments over a three year period.

Under the general terms of the 2000 Director Plan the four prior Board Members who did not stand for re-election at the Company's 2003 Annual Shareholders Meeting were automatically granted a 2 year extension to January 14, 2006 to exercise their fully vested options. These options consisted of 140,715 shares with exercise prices ranging from \$1.70 to \$5.65. In addition, these same Directors also received an extension to January 14, 2006 for any fully vested options granted under other option plans. These options consisted of 112,500 shares with exercise prices ranging from \$4.00 to \$22.25

On March 29, 2004, the Compensation Committee approved grants to the Company's executive officers of (i) incentive options to purchase 358,763 shares of its common stock that vest quarterly over three years and (ii) incentive options to purchase 79,486 shares of its common stock that vest in the event certain milestones are attained by January 25, 2005. To date, the Compensation Committee has not convened to determine if these milestones were achieved. All of the options were granted at an exercise price of \$2.72, the fair market value of the Company's common stock on the date of grant.

In addition, the following grants were approved on March 29, 2004 to non-executive employees of the Company: (i) incentive options to purchase 123,350 shares that vest quarterly over three years, (ii) incentive options to purchase 17,504 shares that vest upon the achievement of certain milestones and (iii) incentive options to purchase 22,361 shares (granted in lieu of additional increases in cash compensation) that vest in equal increments through December 31, 2004. All of the options were granted at an exercise price of \$2.72, the fair market value of the Company's common stock on the date of grant.

Of all of the options granted to both executive officers and employees, options to purchase 150,000 shares were granted under the Company's 1994 Plan (of which, options to purchase 56,737 shares were granted to Mr. Podolski and 38,245 shares were granted to Mr. Ploth) and the remaining options were granted under the new 2004 Employee and Consultant Stock Option Plan. All of the options granted under the 1994 Plan are immediately valid and all of the options granted under the new 2004 Plan were subject to shareholder approval of the 2004 Plan. The 2004 Plan was approved by shareholders at the September 29, 2004 Annual Shareholders Meeting. Due to the approval of these options, the Company recorded non-cash compensation expense of \$78,000 for the year ended December 31, 2004 and will record additional non-cash compensation expense of \$26,000 per quarter through the quarter ended March 31, 2007. This expense represents the difference between the grant price of \$2.72, which was the closing price of the Company's common stock on the date of grant on March 29, 2004, and \$3.60, the closing price of the Company's common stock on September 29, 2004, the date under which these options were approved by stockholders at the Company's 2004 Annual Meeting of Stockholders.

In June 2004, the Company amended the terms of 96,990 incentive options such that awards would vest based on the occurrence of ten milestones. As a result of this modification, the Company records compensation expense under



variable plan accounting. At December 31, 2004 the Company has met five milestones and as a result recorded approximately \$78,000 in compensation expense which is included in the accompanying Statement of Operations for the year ended December 31, 2004.

During 2000, the Company amended the 2000 Director Plan to allow for issuance of stock awards and options in lieu of cash for fees owed to directors and consultants. In connection with this amendment, no shares of common stock or options to purchase common stock were issued to directors and consultants in 2004. In connection with this amendment, during 2003, the Company granted options to a director, totaling 12,972 shares of common stock at

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exercise prices ranging from \$0.93 to \$1.58, which was the fair market value at the time of issue. In addition, during 2003, the Company issued stock awards to directors, totaling 10,871 shares of common stock in connection with the same amendment at the closing price on the date of grant.

A summary of the status of the Company's option plans at December 31, 2004, 2003, and 2002 and changes during the years then ended is presented in the tables below:

	2004		2003		2002	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	1,225,470	\$ 5.98	1,531,710	\$ 6.76	1,295,429	\$ 7.63
Granted	816,464	2.78	12,972	1.23	330,360	3.89
Exercised	(60,888)	1.39			(31,265)	.67
Forfeited	(194,200)	5.24	(319,212)	9.52	(62,814)	12.67
Outstanding at end of year	1,786,846	4.77	1,225,470	5.98	1,531,710	6.76
Exercisable at end of year	858,930	6.44	810,370	6.97	981,710	8.32

The following table summarizes information about stock options outstanding at December 31, 2004:

Range Of Exercise Prices	Number Outstanding	Weighted Average Remaining Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$ .00 to \$ 5.00	1,498,792	7.2	\$ 3.18	570,876	\$ 3.10
5.01 to 10.00	207,554	1.7	8.36	207,554	8.36
10.01 to 15.00	7,500	1.0	13.44	7,500	13.44
15.01 to 20.00	5,400	2.5	18.56	5,400	18.56
20.01 to 25.00	25,600	1.3	20.92	25,600	20.92
25.01 to 30.00	30,000	3.3	29.67	30,000	29.67
30.01 to 35.00	12,000	2.4	33.25	12,000	33.25
	1,786,846			858,930	

On May 23, 2000, the shareholders also approved the Company's 2000 Employee Stock Purchase Plan (the Purchase Plan). The Purchase Plan provides all eligible full-time employees with an opportunity to purchase common stock through accumulated payroll deductions. Purchases of common stock are made at the lower of 85% of the fair market value at the beginning or end of each six-month offering period. A total of 150,000 shares of common stock have been reserved for issuance under the Purchase Plan through December 2000. In addition, the Purchase Plan provides for annual increases in the number of shares available for issuance under the Purchase Plan on the first day of each year, beginning January 1, 2001, in an amount equal to 50,000 shares. In 2004, the Company did not issue any common stock and there was no participation under the Purchase Plan in 2004.

9. LICENSE, RESEARCH AND DEVELOPMENT AGREEMENTS:  
NATIONAL INSTITUTES OF HEALTH (NIH)

In 1999, we licensed rights to Progenta from the NIH under an exclusive, worldwide license in the field of treatment of human endocrinologic pathologies or conditions in steroid sensitive tissues which expires upon the expiration of the last licensed patent. Under the terms of the agreement, we are obligated to meet developmental milestones as outlined in a commercial development plan. This development plan outlines a preclinical and clinical program leading to the stated objective of submitting an NDA for regulatory approval of Progenta for the treatment of uterine fibroids in 2008. We provide annual updates to the NIH on the progress of our development of Progenta. Based on our interaction with the NIH to date, we believe our license and relationship with NIH are in good standing. The NIH has the ability to terminate the agreement for lack of payment or if we are not meeting milestones as outlined in the commercial development plan and for other reasons as outlined in the agreement. The NIH retains, on behalf of the government, a nonexclusive, nontransferable, worldwide license to practice the inventions licensed under the licensed patents by or on behalf of the government. For the purpose of encouraging basic research, the NIH retains the right to grant nonexclusive research licenses to third parties. Due to the work that was done on Progenta at the NIH prior to our license agreement, the government also has certain rights to use the product in the event of a national emergency pursuant to the Patent and Trademark Laws Amendments Act of 1980, as amended. During the period when we were considering redeployment of our assets, we were not in compliance with all of the

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original requirements stated in the commercial development plan. In July 2002, we and the NIH amended the license agreement to include a revision of the original commercial development plan relating to the targeted dates for certain objectives. Additional updates of the original commercial development plan have been reached with the NIH thereafter in order to expedite development. Although we believe that we have a good working relationship with the NIH, there can be no assurance that all of the objectives and conditions in the commercial development plan will be met on a timely basis or at all, or that, if we fail to meet any of such objectives, the NIH will again agree to amend this agreement to our satisfaction. Failure to comply with the material terms contained in the license agreement could result in termination of such agreement, which would prohibit us from further development of Progenta and severely harm our business prospects.

**SCHERING-PLOUGH CORPORATION TERMINATION AGREEMENT**

On July 15, 2002, the Company and Schering-Plough announced that they had mutually agreed to terminate the worldwide licensing agreements dated as of November 14, 1997 that covered Zonagen's phentolamine-based technologies for sexual dysfunction which include VASOMAX<sup>®</sup>. In exchange for the termination, the Company paid to Schering-Plough a nominal cash fee upon execution of the termination agreement and agreed to make a milestone payment to Schering-Plough in the event that worldwide annual sales of VASOMAX<sup>®</sup> exceed a certain amount, which payment may be paid in several installments. In addition, the Company agreed to make royalty payments to Schering-Plough based on a percentage of future sales of VASOMAX<sup>®</sup> in Brazil and other countries in which there existed certain patent rights at the time of the termination. The Company's obligation to make royalty payments terminates after aggregate royalties paid under this termination agreement reach a certain maximum amount. Also, the Company agreed to make royalty payments to Schering-Plough based on future sales of certain combination products covered by combination patents controlled by Schering-Plough. These royalty payments are not subject to the cap on royalty payments for VASOMAX<sup>®</sup> sales described above. Included in the rights returned to Zonagen were all licenses, options and other rights with respect to Zonagen's phentolamine-based products, Zonagen's combination products, patent rights, know-how and trademarks for the treatment of sexual dysfunction for both men and women. Schering-Plough has transferred and assigned to Zonagen rights, title and interest in and to any and all New Drug Applications or similar foreign submissions or approvals. Zonagen is solely responsible for all obligations in the relevant countries with respect to such submissions and approvals. At this time, the Company does not intend to commit any additional resources toward the clinical development of its phentolamine-based products.

**10. COMMITMENTS AND CONTINGENCIES:**

We are not currently a party to any other material legal proceedings.

As of December 31, 2004, in addition to general operating obligations, the Company also had non-cancelable purchase orders relating to the clinical development of both Progenta and Androxal in the amounts of \$739,700 and \$185,300, respectively. As of December 31, 2003, the Company had non-cancelable purchase orders relating to the clinical development of Androxal in the amount of \$11,600.

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## 11. QUARTERLY FINANCIAL INFORMATION (UNAUDITED):

	<b>First Quarter Ended March 31, 2004</b>	<b>Second Quarter Ended June 30, 2004</b>	<b>Third Quarter Ended September 30, 2004</b>	<b>Fourth Quarter Ended December 31, 2004</b>
(In thousands except per share amounts)				
Revenues and other income:				
Licensing fees	\$	\$	\$	\$
Research and development grants	64	53	2	
Interest income	26	22	27	28
Gain on disposal of fixed assets				
Other Income	35			
Total revenues	125	75	29	28
Expenses:				
Research and development	477	508	929	557
General and administrative	434	294	540	215
Total expenses	911	802	1,469	772
Net loss before cumulative effect of change in accounting principle	(786)	(727)	(1,440)	(744)
Cumulative effect of change in accounting principle				
Net loss	\$ (786)	\$ (727)	\$ (1,440)	\$ (744)
Loss per share basic and diluted:				
Net loss before cumulative effect of change in accounting principle	\$ (0.14)	\$ (0.15)	\$ (0.29)	\$ (0.15)
Cumulative effect of change in accounting principle				
Net loss per share(1)	\$ (0.14)	\$ (0.15)	\$ (0.29)	\$ (0.15)
Shares used in loss per share calculation	5,492	4,993	4,993	4,993

	<b>First Quarter Ended March 31, 2003</b>	<b>Second Quarter Ended June 30, 2003</b>	<b>Third Quarter Ended September 30, 2003</b>	<b>Fourth Quarter Ended December 31, 2003</b>
(In thousands except per share amounts)				

Revenues and other income:				
Licensing fees	\$	\$	\$	\$
Research and development grants	121	217	122	135

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Interest income	112	74	67	65
Gain on disposal of fixed assets		102		
Total revenues	233	393	189	200
Expenses:				
Research and development	564	579	439	579
General and administrative	613	490	606	474
Total expenses	1,177	1,069	1,045	1,053
Net loss before cumulative effect of change in accounting principle	(944)	(676)	(856)	(853)
Cumulative effect of change in accounting principle				
Net loss	\$ (944)	\$ (676)	\$ (856)	\$ (853)
Loss per share basic and diluted:				
Net loss before cumulative effect of change in accounting principle	\$ (0.08)	\$ (0.06)	\$ (0.07)	\$ (0.07)
Cumulative effect of change in accounting principle				
Net loss per share(1)	\$ (0.08)	\$ (0.06)	\$ (0.07)	\$ (0.07)
Shares used in loss per share calculation	11,504	11,484	11,480	11,480
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The Company continued to incur costs associated with the redeployment of its assets for the full year of 2003 which have been captured under the heading General & Administrative Expense .

In the second quarter ended June 30, 2003, the Company held an auction and sold substantially all of its fixed assets for approximate net proceeds of \$225,000, which was \$102,000 over their book value.

**12. SUBSEQUENT EVENT:**

On February 1, 2005, the Company completed its follow-on public offering of 5,060,000 shares of its common stock at \$4.00 per share (which included the underwriters' exercise of its over allotment option for 660,000 shares). The shares offered by the Company were issued out of our existing treasury stock, and the offering resulted in net proceeds to the Company of approximately \$18.1 million.

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**INDEX TO EXHIBITS**

<b>Exhibit Number</b>	<b>Identification Of Exhibit</b>
3.1(a)	Restated Certificate of Incorporation. Exhibit 3.3 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended (Registration Statement), is incorporated herein by reference.
3.1(b)	Certificate of Designation of Series One Junior Participating Preferred Stock dated September 2, 1999. Exhibit A to Exhibit 4.1 to the Company's Registration Statement on Form 8-A as filed with the Commission on September 3, 1999 (the Rights Plan Registration Statement), is incorporated herein by reference.
3.2	Restated Bylaws of the Company. Exhibit 3.4 to the Registration Statement is incorporated herein by reference.
4.1	Specimen Certificate of Common Stock, \$.001 par value, of the Company. Exhibit 4.1 to the Registration Statement is incorporated herein by reference.
4.2	Rights Agreement dated September 1, 1999 between the Company and Computershare Investor Services LLC (as successor in interest to Harris Trust & Savings Bank), as Rights Agent. Exhibit 4.1 to the Rights Plan Registration Statement is incorporated herein by reference.
4.3	First Amendment to Rights Agreement, dated as of September 6, 2002, between the Company, Harris Trust & Savings Bank and Computershare Investor Services LLC. Exhibit 4.3 to Amendment No. 1 to the Rights Plan Registration Statement on Form 8-A/A as filed with the Commission on September 11, 2002 is incorporated herein by reference.
4.4	Second Amendment to Rights Agreement, dated as of October 30, 2002, between the Company and Computershare Investor Services LLC. Exhibit 4.4 to Amendment No. 2 to the Rights Plan Registration Statement on Form 8-A/A as filed with the Commission on October 31, 2002 is incorporated herein by reference.
4.5	Form of Rights Certificate. Exhibit B to Exhibit 4.1 to the Rights Plan Registration Statement is incorporated herein by reference.
10.1+	Amended and Restated 1993 Employee and Consultant Stock Option Plan. Exhibit 10.3 to the Registration Statement is incorporated herein by reference.
10.2+	First Amendment to the Zonagen, Inc. Amended and Restated 1993 Stock Option Plan. Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999 (the 1999 Form 10-K) is incorporated herein by reference.
10.3+	1996 Non-Employee Directors' Stock Option Plan. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1997 is incorporated herein by reference.
10.4+	



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2000 Non-Employee Directors' Stock Option Plan. Appendix B to the Company's Definitive Proxy Statement filed on April 26, 2000 is incorporated herein by reference.

10.5+ First Amendment to the Zonagen, Inc. 2000 Non-Employee Directors' Stock Option Plan. Exhibit 10.21 to the 2000 Form 10-K is incorporated herein by reference.

10.6+ Second Amendment to 2000 Non-Employee Directors' Stock Option Plan. Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (the 2002 Form 10-K ) is incorporated herein by reference.

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<b>Exhibit Number</b>	<b>Identification Of Exhibit</b>
10.7+	Zonagen, Inc. 2004 Stock Option Plan. Exhibit 10.17 to the Company's Registration Statement on Form S-1 (No. 333-119861), as amended, is incorporated herein by reference.
10.8+	Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.5 to the Registration Statement is incorporated herein by reference.
10.9+	First Amendment to Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2001 is incorporated herein by reference.
10.10+	Second Amendment to Employment Agreement between the Company and Joseph S. Podolski. Exhibit 10.17 to the 2002 Form 10-K is incorporated herein by reference.
10.11+	Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.5 to the 1999 Form 10-K is incorporated herein by reference.
10.12+	First Amendment to Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.7 to the 2000 Form 10-K is incorporated herein by reference.
10.13+	Second Amendment to Employment Agreement between the Company and Louis Ploth, Jr. Exhibit 10.18 to the 2002 Form 10-K is incorporated herein by reference.
10.14*	Lease Agreement dated May 11, 2004, between the Company and Sealy Woodlands, L.P.
10.15++	Letter Agreement dated July 15, 2002 between the Company, Schering Plough Ltd. and Schering-Plough Corporation. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2002 is incorporated herein by reference.
10.16++	PHS Patent License Agreement dated April 16, 1999 between the Company and certain agencies of the United States Public Health Service within the Department of Health and Human Services, with amendments. Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2003 is incorporated herein by reference.
23.1*	Consent of PricewaterhouseCoopers LLP
31.1*	Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer)
31.2*	Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer)
32.1*	Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer)
32.2*	Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer)

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- \* Filed herewith.
  - + Management contract or compensatory plan.
  - ++ Portions of this exhibit have been omitted based on a request for confidential treatment pursuant to Rule 24b-2 of the Exchange Act. Such omitted portions have been filed separately with the Commission.