

PALATIN TECHNOLOGIES INC  
Form 10-K  
September 19, 2016

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

FORM 10 - K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended June 30, 2016

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number: 001-15543

PALATIN TECHNOLOGIES, INC.  
(Exact name of registrant as specified in its charter)

Delaware 95-4078884  
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

4B Cedar Brook Drive 08512  
Cranbury, New Jersey  
(Address of principal executive offices) (Zip Code)

(609) 495-2200  
(Registrant's telephone number, including area code)  
Securities registered pursuant to Section 12(b) of the Act:

| Title of Each Class                     | Name of Each Exchange on Which Registered |
|---|---|
| Common Stock, par value \$.01 per share | NYSE MKT                                  |

Securities registered pursuant to Section 12(g) of the Act: None  
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes No  
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No  
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No  
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No  
Indicate by check mark 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 the registrant's knowledge, in definitive proxy or information

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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 a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates, computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant’s most recently completed second fiscal quarter (December 31, 2015): \$44,069,665.

Indicate the number of shares outstanding of each of the registrant’s classes of common stock, as of the latest practicable date (September 16, 2016): 85,934,037.



PALATIN TECHNOLOGIES, INC.

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### Forward-Looking Statements

Statements in this Annual Report on Form 10-K (this Annual Report), as well as oral statements that may be made by us or by our officers, directors, or employees acting on our behalf, that are not historical facts constitute “forward-looking statements,” which are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. The forward-looking statements in this Annual Report do not constitute guarantees of future performance. Investors are cautioned that statements that are not strictly historical facts contained in this Annual Report, including, without limitation, those relating to our current or future financial performance, management’s plans and objectives for future operations, ability to raise capital or repay debt, if required, clinical trials and results, uncertainties associated with product research and development, product plans and performance, management’s assessment of market factors, as well as statements regarding our strategy and plans and those of our strategic partners, constitute forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “believe,” “will,” “may,” “estimate,” “continue,” “anticipated,” “intend,” “should,” “plan,” “expect,” “potentially,” or the negative of these terms or other similar expressions. Such forward-looking statements involve substantial risks, uncertainties and other factors that could cause our actual results to be materially different from our historical results or from any results expressed or implied by such forward-looking statements. Our future operating results are subject to risks and uncertainties and are dependent upon many factors, including, without limitation, the risks identified under the caption “Risk Factors” and elsewhere in this Annual Report, and any of those made in our other reports filed with the Securities and Exchange Commission, or the SEC. Except as required by law, we do not intend, and undertake no obligation, to publicly update forward-looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events. In this Annual Report, references to “we,” “our,” “us,” the “Company” or “Palatin” means Palatin Technologies, Inc. and its subsidiary.



## PART I

### Item 1. Business.

#### Overview

We are a biopharmaceutical company developing targeted, receptor-specific peptide therapeutics for the treatment of diseases with significant unmet medical need and commercial potential. Our programs are based on molecules that modulate the activity of the melanocortin and natriuretic peptide receptor systems. Our primary product in clinical development is bremelanotide for the treatment of premenopausal women with hypoactive sexual desire disorder, or HSDD, which is a type of female sexual dysfunction, or FSD, defined as low desire with associated distress. In addition, we have drug candidates or development programs for obesity, erectile dysfunction, cardiovascular diseases, pulmonary diseases, inflammatory diseases and dermatologic diseases.

The following drug development programs are actively under development:

Bremelanotide, an as needed subcutaneous injectable peptide melanocortin receptor agonist, for treatment of HSDD in premenopausal women. Bremelanotide, which is a melanocortin agonist, is a synthetic peptide analog of the naturally occurring hormone alpha-MSH (melanocyte-stimulating hormone). The novel mechanism of action involves activating endogenous melanocortin hormone pathways involved in sexual response. Bremelanotide has completed the efficacy portion of patient studies in the primary Phase 3 clinical studies;

Melanocortin receptor-4, or MC4r, compounds for treatment of obesity and diabetes. Results of our studies involving MC4r peptides suggest that certain of these peptides may have significant commercial potential for treatment of conditions responsive to MC4r activation, including FSD, HSDD, erectile dysfunction or ED, obesity and diabetes;

PL-3994, a natriuretic peptide receptor-A, or NPR-A, agonist, for treatment of cardiovascular and pulmonary indications. PL-3994 is our lead natriuretic peptide receptor product candidate, and is a synthetic mimetic of the neuropeptide hormone atrial natriuretic peptide, or ANP. PL-3994 is in development for treatment of heart failure, acute exacerbations of asthma and refractory hypertension; and

Melanocortin receptor-1, or MC1r, agonist peptides for treatment of inflammatory and dermatologic disease indications. Our MC1r peptide drug candidates are highly specific, with substantially greater binding and efficacy at MC1r than at other melanocortin receptors. We have selected one of our MC1r peptide drug candidates, designated PL-8177, as a clinical trial candidate.

The following chart illustrates the status of our drug development programs.



## Our Strategy

Key elements of our business strategy include:

Using our technology and expertise to develop and commercialize products in our active drug development programs;

Entering into strategic alliances and partnerships with pharmaceutical companies to facilitate the development, manufacture, marketing, sale and distribution of product candidates that we are developing;

Partially funding our product development programs with the cash flow generated from research collaboration and license agreements and any potential future agreements with third parties; and

Completing development and seeking regulatory approval ofbremelanotide for HSDD and our other product candidates.

### Our Melanocortin Receptor-Specific Programs

The melanocortin system is involved in a large and diverse number of physiologic functions. Therapeutic agents modulating this system may have the potential to treat a variety of conditions and diseases, including sexual dysfunction, obesity and related disorders, pigmentation disorders and inflammation-related diseases.

**Bremelanotide for HSDD.** We are developing subcutaneously administered bremelanotide for the treatment of HSDD in premenopausal women. HSDD is characterized by a decrease in sexual desire with significant personal distress or interpersonal difficulty as a result of the lack of desire. Bremelanotide is a melanocortin agonist with a mechanism of action involving activation of endogenous neuronal pathways regulating sexual arousal and desire responses.

We initiated patient screening in our Phase 3 clinical study program of bremelanotide for the treatment of HSDD in premenopausal women, called the RECONNECT STUDY, in the fourth quarter of calendar 2014, completed patient enrollment in the fourth quarter of calendar 2015, and completed the last patient visits in the double blind, or efficacy, portion of the studies in the third quarter of calendar 2016. Topline results are projected early fourth quarter of calendar 2016. The open-label safety extension portion of the RECONNECT STUDY is continuing. We cannot assure you that the Phase 3 efficacy data will support approval of bremelanotide for HSDD or that the U.S. Food and Drug Administration, or FDA, will approve a new drug application, or NDA, for bremelanotide.

**Phase 3 Clinical Program.** Prior to initiating our Phase 3 RECONNECT STUDY clinical program, we reached preliminary agreement with the FDA on key aspects of the bremelanotide efficacy Phase 3 pivotal registration studies, including HSDD patient population, primary and key secondary efficacy endpoints, general study design, dose selection and safety monitoring. In addition, the FDA agreed that the Phase 2 data adequately characterized blood pressure and heart rate signals of bremelanotide. The FDA also agreed that the intranasal Definitive QTc study (an electrocardiographic evaluation), the carcinogenicity studies and the reproductive toxicity studies we conducted were acceptable for NDA submission.

The RECONNECT STUDY is being conducted in premenopausal women diagnosed with HSDD, either with or without arousal difficulties. HSDD is the single largest specific diagnosis in FSD. We enrolled a combined total of approximately 1,250 randomized subjects in the two pivotal efficacy studies, which are double blind placebo-controlled, randomized parallel group studies. Each study had two arms, one a 1.75 mg bremelanotide dose and one a placebo. The double blind or efficacy portion of each study consisted of a 24-week treatment evaluation period, with primary and key secondary endpoints of satisfying sexual events, or SSEs, the Female Sexual Function Index, or FSFI, desire subdomain (a 28 day recall), and question 13 of the Female Sexual Distress Scale-Desire/Arousal/Orgasm, or FSDS-DAO, questionnaire.

The last patient visits for efficacy portion of the RECONNECT STUDY were completed in the third quarter of calendar 2016. Patients in the efficacy portion of the RECONNECT STUDY had the option, after completion of the randomized portion of the study, to continue in an open-label safety extension study, in which all patients receive the 1.75 mg bremelanotide dose. The open-label safety extension study has enrolled approximately 680 patients. The open-label safety extension study will continue through the third quarter of calendar 2017, and the purpose of the extension study is to gather additional data on the safety of long-term and repeated use of bremelanotide.

The analysis of Phase 3 efficacy data is anticipated to be completed in the fourth quarter of calendar 2016. Assuming we believe that the Phase 3 data will support approval of bremelanotide for HSDD by FDA, we will conduct drug interaction and other ancillary studies, and certain chemistry, manufacturing and controls activities, required for FDA approval in the fourth quarter of calendar 2016 and first half of calendar 2017. We anticipate submitting an NDA to FDA for approval of bremelanotide for HSDD in mid-calendar 2017. We cannot assure you that the Phase 3 data will support approval of bremelanotide for HSDD or that the FDA will approve an NDA for bremelanotide.

In the RECONNECT STUDY patients self-administer bremelanotide with a single-use autoinjector pen. The bremelanotide single-use autoinjector pen, intended to be the commercial drug product, does not have a visible needle, is stored at room temperature and is easy to use. Women administer bremelanotide by pressing the autoinjector pen collar against either their thigh or abdomen, and the autoinjector pen automatically introduces the needle, administers the dose of bremelanotide under the skin and audibly signals when the drug has been delivered and the needle is retracted.



Phase 2B Clinical Study Results. The bremelanotide RECONNECT STUDY was predicated on the results of a Phase 2B clinical study of bremelanotide. The Phase 2B clinical study was a multicenter, placebo-controlled, randomized, parallel group, dose-finding trial testing three dose levels, 0.75 mg, 1.25 mg and 1.75 mg, of subcutaneously administered bremelanotide against placebo in premenopausal women diagnosed with hypoactive sexual desire disorder, female sexual arousal disorder or both. The 1.75 mg dose demonstrated clinically meaningful and statistically significant results for all predefined endpoints and was well-tolerated. Full data on the Phase 2B clinical study was presented at the March 2013 annual meeting of the International Society for the Study of Women's Sexual Health, and was published in *Women's Health*, 12:3425-337 (2016).

The Phase 2B clinical study enrolled 395 premenopausal women across 66 sites within the United States and Canada, with patients randomized to one of three bremelanotide treatment arms and a placebo arm for 16 weeks of treatment. The objective of the Phase 2B study was to measure safety and efficacy in premenopausal women with hypoactive sexual desire disorder, female sexual arousal disorder or both of bremelanotide compared to placebo. In the Phase 2B study, subcutaneous doses of bremelanotide and placebo were self-administered by the patient prior to a sexual encounter. The primary efficacy endpoint was change from baseline to end of study in the number of SSEs, with pre-specified analysis of pooled 1.25 and 1.75 mg doses compared to placebo.

In the Phase 2B clinical study, the primary endpoint data analysis of 327 premenopausal women with hypoactive sexual desire disorder, female sexual arousal disorder or both showed statistically significant and clinically meaningful increases in the number of SSEs, and statistically significant and clinically meaningful improvement in secondary endpoint measures of overall sexual functioning and distress related to sexual dysfunction, for women taking bremelanotide compared to placebo. Satisfying sexual events were measured with an event log and overall sexual functioning and distress related to sexual dysfunction were measured using validated patient reported outcome measurement tools. Bremelanotide showed a statistically significant increase from baseline in the number of SSEs compared against placebo at both the 1.75 mg dose and pooled results of the 1.75 and 1.25 mg doses. The mean increase in SSEs at 1.75 mg dose levels was 0.8 SSEs per month, from 1.8 to 2.6, with a p value of 0.021 against placebo. For the pooled doses, the mean increase in SSEs was 0.7 SSEs per month, from 1.6 to 2.4 (a 50% increase), with a p value of 0.018 against placebo. By contrast, with placebo, the mean change from baseline was from 1.7 to 1.9 (a 12% increase) in SSEs. The 0.75 mg dose demonstrated a response that was not significantly different from placebo. The mean change from baseline in a validated measurement tool of overall sexual functioning, the FSFI total score, was 4.4 at the 1.75 mg dose level, compared to 1.88 for placebo, with a p value of 0.0021 against placebo. For the pooled doses, the FSFI total score mean change from baseline was 3.55, compared to 1.88 for placebo, with a p value of 0.0017 against placebo. The FSFI is a 19-item questionnaire measuring improvement in arousal, desire and overall sexual function.

The mean change from baseline in a validated measurement tool of distress related to sexual dysfunction, the FSDS-DAO total score, was -13.1 at the 1.75 mg dose level, compared to -6.8 for placebo, with a p value of 0.0005 against placebo. For the pooled doses, the FSDS-DAO total score mean change from baseline was -11.1, compared to -6.8 for placebo, with a p value of 0.036 against placebo. The FSDS-DAO is a 15-item questionnaire that measures personal distress associated with HSDD.

A significantly higher percentage of women receiving the 1.75 mg bremelanotide dose – 55% – achieved a clinically meaningful change from baseline of at least one satisfying sexual event, compared to 37% of women receiving placebo. In addition, compared against placebo a significantly higher percentage of women also achieved a clinically meaningful improvement in sexual function, as measured by the FSFI (53% vs. 29%), and a clinically meaningful decrease in distress associated with sexual dysfunction as measured by the FSDS-DAO (69% vs. 45%).

Using a validated self-assessment questionnaire of treatment benefit, 79.5% of blinded patients receiving the 1.75 mg dose of bremelanotide reported they benefited from taking the drug, compared to 48.4% of blinded patients receiving placebo.

Bremelanotide was well-tolerated during the Phase 2B clinical study. The most common types of treatment-emergent adverse events reported more frequently in the bremelanotide arms were facial flushing, nausea, emesis and headache, which were mainly mild-to-moderate in severity. Adverse events that most commonly led to discontinuation were nausea and emesis, with less than 3% discontinuation due to an adverse event. Twenty-six patients, evenly distributed among placebo and active arms of the Phase 2B clinical study, met the predefined blood pressure withdrawal criteria.

Drug treated patients had approximately a 2 mm Hg change in blood pressure, predominately during the first four hours following dosing. No serious adverse events were attributable to bremelanotide during the trial.

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**Medical Need — HSDD.** Hypoactive sexual desire disorder, either with or without arousal difficulties, is the largest single category of FSD. Female sexual dysfunction is a multifactorial condition that has anatomical, physiological, medical, psychological and social components, and is defined as persistent or recurring problems during one or more of the stages of sexual response with associated distress. HSDD has a significant impact on a patient's self-image, relationships and general well-being. The 2006 PRESIDE (Prevalence of Female Sexual Problems Associated with Distress and Determinants of Treatment Seeking) study, a cross-sectional, population-based survey of 31,581 female adult respondents in the United States published in 2008 in the journal *Obstetrics & Gynecology*, found that approximately 22% of women reported a sexual problem and 11% were women with HSDD. Based on the number of premenopausal women in the United States according to the U.S. Census, the presenting market size of premenopausal women with primary HSDD is at least 5.1 million women.

**Subcutaneous Bremelanotide.** Bremelanotide, which is believed to act through activation of melanocortin receptors in the central nervous system, is a first-in-class pharmaceutical agent in development as a treatment of HSDD.

Bremelanotide is intended for as needed use and is self-administered by the patient thirty minutes to one hour prior to anticipated sexual activity. We selected a simple and patient-friendly single-use autoinjector pen used in the RECONNECT STUDY and intended for commercialization of the bremelanotide drug product.

**Partnering.** In August 2014, we entered into a license agreement with Gedeon Richter to co-develop and commercialize bremelanotide for FSD in the European Union, other European countries and additional selected countries. We received €7.5 million (\$9.8 million) in total upfront payments from Gedeon Richter, and a milestone payment of €2.5 million (\$3.1 million) upon the initiation of our Phase 3 clinical trial program in the United States. On September 16, 2015, we entered into a termination agreement pursuant to which we and Gedeon Richter agreed to mutually and amicably terminate the license agreement. In connection with this termination, all rights and licenses to co-develop and commercialize bremelanotide for FSD indications held by Gedeon Richter terminated and reverted back to us. Neither we nor Gedeon Richter have any future material obligations under the license agreement.

We have worldwide rights for bremelanotide for FSD, HSDD and all other indications. We are in active discussions with potential partners for U.S. marketing and commercialization rights for bremelanotide for HSDD. We may not be able to enter into suitable agreements with potential partners on acceptable terms, if at all.

**Prior Clinical Trials.** We have completed several Phase 1 clinical studies in which various safety parameters, including blood pressure effects of subcutaneously administered bremelanotide, were studied. Based in part on these studies, our Phase 2B clinical trial assessed the magnitude and duration of blood pressure effect, and determined that subcutaneous administration of selected doses of bremelanotide for treatment of HSDD in premenopausal women provides acceptable control of blood pressure effects. We have also completed clinical studies involving an alternative route of administration. Bremelanotide has been administered in 34 clinical studies involving about 3,000 subjects, including studies of premenopausal and postmenopausal women with HSDD and other forms of FSD and men with ED.

**MC1r Peptide Agonists.** We have conducted preclinical animal studies with MC1r peptide drug candidates for inflammatory disease and autoimmune indications. The MC1r is upregulated in a number of diseases, including inflammatory bowel disease, nephritis, which is inflammation of the kidneys, and rheumatoid arthritis, and ocular indications such as uveitis and dry eye. We believe that MC1r peptides have broad anti-inflammatory effects and appear to utilize mechanisms engaged by the endogenous melanocortin system in regulation of the immune system and resolution of pro-inflammatory responses. MC1r peptides also have potential application in a number of dermatologic indications, including vitiligo and erythropoietic protoporphyria.

Our MC1r peptide drug candidates are highly specific, with substantially greater binding and efficacy at MC1r than at other melanocortin receptors. In vitro safety studies have shown that our MC1r peptide drug candidates have no activity in a wide range of various receptors, ion channels and kinases. We have selected one of our MC1r peptide drug candidates, designated PL-8177, as a clinical trial candidate.

Animal studies that we have conducted with our MC1r peptide drug candidates have shown positive results in experimental models of inflammatory bowel disease, uveitis and nephritis. We are continuing to conduct studies on a number of different indications. We have completed preclinical toxicology testing on PL-8177 and chemistry, controls and manufacturing activities to support Phase 1 studies, and anticipate filing an IND application on PL-8177.

Next Generation MC4r Peptide and Small Molecule Agonists. We have developed a series of highly selective MC4r peptides and are developing orally active small molecules. In developing these compounds, we examined effectiveness in animal models of sexual response, obesity and related metabolic signals, and also determined cardiovascular effects, primarily looking at changes in blood pressure. Results of these studies suggest that certain of these compounds may have significant commercial potential for treatment of conditions responsive to MC4r activation, including HSDD, FSD, ED, obesity and diabetes. We are engaged in preclinical activities with these compounds, and are evaluating potential pharmaceutical applications.

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We have selected an internal lead compound for obesity, designated PL-8905, which has over 100-fold functional selectivity for MC4r over MC1r with minimal effect on blood pressure and limited central nervous system penetration. PL-8905 exhibits significant chemical and metabolic stability.

**Obesity.** Obesity is a multifactorial condition with numerous biochemical components relating to satiety (feeling full), energy utilization and homeostasis. A number of different metabolic and hormonal pathways are being evaluated by companies around the world in efforts to develop better treatments for obesity. Scientific research has established that melanocortin receptors have a role in eating behavior and energy homeostasis, and that melanocortin receptor agonists can decrease food intake and induce weight loss. With a previous partner, we completed clinical proof-of-concept studies for the MC4r mechanism in obesity, which met the primary objectives of significant decrease in food intake and weight loss.

**Other Melanocortin Receptor-Specific Programs.** We are continuing drug discovery efforts in the melanocortin receptor field, primarily developing peptide compounds, including highly selective MC1r agonists and peptides specific for MC4r, including both agonists and antagonists.

**Our Natriuretic Peptide Receptor-Specific Programs**

The natriuretic peptide receptor system has numerous cardiovascular functions, and therapeutic agents modulating this system may be useful in treatment of heart failure, acute asthma, other pulmonary diseases and hypertension. While the therapeutic potential of modulating this system is well appreciated, development of therapeutic agents has been difficult due, in part, to the short biological half-life of native peptide agonists.

We have designed and are developing candidate drugs that are selective for different natriuretic peptide receptors, including NPR-A, natriuretic peptide receptor B, or NPR-B, natriuretic peptide receptor C, or NPRC, and both NPR-A and NPR-B.

We are in active discussions with potential partners for marketing and commercialization rights in the United States and the rest of the world for PL-3994 and our related candidate drugs. We may not be able to enter into suitable agreements on acceptable terms with potential partners, if at all.

**PL-3994.** PL-3994 is our lead natriuretic peptide receptor product candidate, and is a synthetic mimetic of the neuropeptide hormone ANP and an NPR-A agonist. PL-3994 is in development for treatment of heart failure, acute exacerbations of asthma and refractory hypertension. PL-3994 activates NPR-A, a receptor known to play a role in cardiovascular homeostasis. Consistent with being an NPR-A agonist, PL-3994 increases plasma cyclic guanosine monophosphate, or cGMP, levels, a pharmacological response consistent with the effects of endogenous (naturally produced) natriuretic peptides on cardiovascular function and smooth muscle relaxation. PL-3994 also decreases activity of the renin-angiotensin-aldosterone system, or RAAS, a hormone system that regulates blood pressure and fluid balance. The RAAS system is frequently over-activated in heart failure patients, leading to worsening of cardiovascular function.

PL-3994, our lead product development candidate which is ready for Phase 2 safety and efficacy studies, is one of a number of natriuretic peptide receptor agonist compounds we have developed. PL-3994 is a synthetic molecule incorporating a novel and proprietary amino acid mimetic structure, and has an extended circulation half-life and metabolic stability compared to endogenous ANP. Based on the half-life and pharmacokinetics, we believe that PL-3994 is amenable to once daily chronic use subcutaneous administration.

**PL-3994 for Heart Failure.** Heart failure is an illness in which the heart is unable to pump blood efficiently, and includes acutely decompensated heart failure with dyspnea (shortness of breath) at rest or with minimal activity. Endogenous natriuretic peptides have a number of beneficial effects, including vasodilation (relaxation of blood vessels), natriuresis (excretion of sodium) and diuresis (excretion of fluids).

Patients who have been admitted to the hospital with an episode of worsening heart failure have an increased risk of either death or hospital readmission in the three months following discharge. Up to 15% of patients die in this period and as many as 30% need to be readmitted to the hospital. We believe that decreasing mortality and hospital readmission in patients discharged following hospitalization for worsening heart failure is a large unmet medical need for which PL-3994 may be effective. PL-3994 could potentially be utilized as an adjunct to existing heart failure medications, and may, if successfully developed, be self-administered by patients as a subcutaneous injection following hospital discharge. We believe that PL-3994, through activation of NPR-A, may, if successful, reduce cardiac hypertrophy (increase in heart size due to disease), which is an independent risk factor for cardiovascular

morbidity and mortality.

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According to a report from the American Heart Association published in 2014 in the journal *Circulation*, an estimated 5.7 million Americans suffer from heart failure, with 870,000 new cases of heart failure diagnosed each year, with disease incidence expected to increase with the aging of the American population. Heart failure has tremendous human and financial costs. The same report estimated that the 2012 total costs in the United States for heart failure were \$30.7 billion, with heart failure constituting the leading cause of hospitalization in people over 65 years of age and with over 1 million hospital discharges for heart failure in 2010. Heart failure is a high mortality disease, with approximately one-half of heart failure patients dying within five years of initial diagnosis.

Patient populations have been identified which have reduced levels of endogenous active natriuretic peptides, including endogenous active ANP. The reduced levels have a variety of causes, including mutations in endogenous natriuretic peptides and in enzymes necessary to convert natriuretic peptide sequences to their active form. Patients with reduced levels of endogenous active natriuretic peptides are reported to have a poor response to current drug therapies and to have increased rates of cardiac remodeling and cardiac events.

We believe that PL-3994 has the potential to treat heart failure with preserved ejection fraction, or HFpEF, which is a high unmet medical need with no approved treatment options, heart failure with reduced ejection fraction, or HFrEF, and patients with reduced levels of endogenous active natriuretic peptides, such as corin deficiencies, which is a high unmet medical need in patients with a poor response to current therapies, with the objective to restore normal natriuretic peptide function.

We have planned a repeat dose Phase 2 clinical trial in patients with HFpEF, HFrEF and corin deficiency to evaluate safety profiles and symptom relief as well as pharmacokinetic (period to metabolize or excrete the drug) and pharmacodynamic (period of action or effect of the drug) endpoints. Analysis will include cardiac imaging and measurement of left ventricular ejection fraction. Contingent on adequate available funds, we intend to initiate this trial in the first half of calendar 2017. Assuming favorable results from this trial, we have planned a repeat dose Phase 2 proof-of-principle clinical trial in patients with heart failure, which would involve treatment for a three- to six-month period, and would evaluate safety, cardiac function, effects on remodeling, symptom improvement and hospitalization admission rates. Contingent on adequate available funds, the proof-of-principle Phase 2 trial will be initiated following completion of the first repeat dose Phase 2 clinical trial.

PL-3994 for Acute Exacerbations of Asthma. Research over the past two decades has demonstrated potent bronchodilator effects with both systemic and inhalation administration of natriuretic peptides. NPR-A agonism is known to relax smooth muscles in airways and works through a pathway independent of the beta-2 adrenergic receptor. Preclinical testing demonstrated potent airway smooth muscle relaxation in guinea pig and human tissues using PL-3994, and animal studies in sensitized guinea pigs have demonstrated a bronchodilator effect with PL-3994 using both subcutaneous and inhalation administration.

Acute exacerbations of asthma, also called acute severe asthma, is an ongoing, unremitting asthma episode in which asthma symptoms do not adequately respond to initial bronchodilator therapy. Inhaled beta-2 adrenergic receptor agonists, such as albuterol, inhaled anticholinergic drugs, such as ipratropium, and systemic corticosteroids are primary treatments for episodes of acute exacerbations of asthma. Some patients with acute exacerbations of asthma become unresponsive to beta-2 adrenergic receptor agonists, significantly limiting treatment options and increasing risk. Patients who do not respond to initial therapy are at risk of severe complications. We intend to initially target PL-3994 as a treatment for those at-risk unresponsive patients.

According to a 2014 report from the National Center for Environmental Health, Asthma Prevalence in the United States, in 2010 there were 1.8 million emergency room visits and 439,000 hospitalizations attributed to asthma. Approximately 25.7 million Americans have asthma.

Endogenous natriuretic peptides have a very short half-life, due primarily to degradation by neutral endopeptidase and clearance through the natriuretic peptide clearance receptor. PL-3994 is resistant to neutral endopeptidase and clears from the body much more slowly than endogenous natriuretic peptides. PL-3994 has a blood-plasma half-life of at least three hours in humans when administered by subcutaneous injection, with biological effects seen for over eight hours post-administration.

Clinical Studies with PL-3994. Human clinical studies of PL-3994 commenced with a Phase 1 trial, which concluded in 2008. This was a randomized, double-blind, placebo-controlled study in 26 healthy volunteers who received either PL-3994 or a placebo subcutaneously. The evaluations included safety, tolerability, pharmacokinetics and several

pharmacodynamic endpoints, including levels of cGMP. Dosing concluded with the successful achievement of the primary endpoint of the study, a pre-specified reduction in systemic blood pressure. No volunteer experienced a serious or severe adverse event. Elevations in plasma cGMP levels, increased diuresis and increased natriuresis were all observed for several hours after single subcutaneous doses.

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Later in 2008, we conducted a Phase 2A trial in volunteers with controlled hypertension who were receiving one or more conventional antihypertensive medications. In this trial, which was a randomized, double-blind, placebo-controlled, single ascending dose study in 21 volunteers, the objective was to demonstrate that PL-3994 can be given safely to patients taking antihypertensive medications commonly used in heart failure and hypertension patients. Dosing concluded with the successful achievement of the primary endpoint of the study, a pre-specified reduction in systemic blood pressure. No volunteer experienced a serious or severe adverse event. Elevations in plasma cGMP levels were observed for several hours after single subcutaneous doses. Based on the studies to date, PL-3994 is ready for Phase 2 safety and efficacy studies.

Administration of PL-3994. For heart failure and refractory hypertension indications we believe that subcutaneous administration of PL-3994 may be preferable. PL-3994 is well absorbed through the subcutaneous route of administration. In human studies, the pharmacokinetic and pharmacodynamic half-lives were on the order of hours, significantly longer than the comparable half-lives of endogenous natriuretic peptides. We believe that subcutaneous PL-3994, if successful, will be appropriate for self-administration by patients, similar to insulin and other self-administered drugs. For asthma indications we believe that inhalation administration of PL-3994 may be preferable to subcutaneous or other systemic administration.

#### Technologies We Use

We used a rational drug design approach to discover and develop proprietary peptide, peptide mimetic and small molecule agonist compounds, focusing on melanocortin and natriuretic peptide receptor systems. Computer-aided drug design models of receptors are optimized based on experimental results obtained with peptides and small molecules that we develop. With our approach, we believe we are developing an advanced understanding of the factors which drive agonism.

We have developed a series of proprietary technologies used in our drug development programs. One technology employs novel amino acid mimetics in place of selected amino acids. These mimetics provide the receptor-binding functions of conventional amino acids while providing structural, functional and physiochemical advantages. The amino acid mimetic technology is employed in PL-3994, our compound in development for treatment of heart failure, acute exacerbations of asthma and refractory hypertension.

Some compound series have been derived using our proprietary and patented platform technology, called MIDAS™, or Metal Ion-induced Distinctive Array of Structures. This technology employs metal ions to fix the three-dimensional configuration of peptides, forming conformationally rigid molecules that remain folded specifically in their active state. These MIDAS molecules are generally simple to synthesize, are chemically and proteolytically stable, and have the potential to be orally bioavailable. In addition, MIDAS molecules are information-rich and provide data on structure-activity relationships that may be used to design small molecule, non-peptide drugs.

#### Amount Spent on Research and Development Activities

Research and development expenses were approximately \$43.1 million for the fiscal year ended June 30, 2016, or fiscal 2016, \$24.6 million for the fiscal year ended June 30, 2015, or fiscal 2015, and \$10.8 million for the fiscal year ended June 30, 2014, or fiscal 2014.

#### Competition

General. Our products under development will compete on the basis of quality, performance, cost effectiveness and application suitability with numerous established products and technologies. We have many competitors, including pharmaceutical, biopharmaceutical and biotechnology companies. Furthermore, there are several well-established products in our target markets that we will have to compete against. Products using new technologies which may be competitive with our proposed products may also be introduced by others. Most of the companies selling or developing competitive products have financial, technological, manufacturing and distribution resources significantly greater than ours and may represent significant competition for us. In addition, if any of our product candidates are approved by FDA, they will eventually face competition from generic versions that will sell at significantly reduced prices, be preferred by managed care and health insurance payers, and be eligible for automatic pharmacy substitution even when a prescriber writes a prescription for our product. The timing and extent of future generic competition is dependent upon both our intellectual property rights and the FDA regulatory process, but cannot be accurately predicted.

The pharmaceutical and biotechnology industries are characterized by extensive research efforts and rapid technological change. Many biopharmaceutical companies have developed or are working to develop products similar to ours or that address the same markets. Such companies may succeed in developing technologies and products that are more effective or less costly than any of those that we may develop. Such companies may be more successful than us in developing, manufacturing and marketing products.

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We cannot guarantee that we will be able to compete successfully in the future or that developments by others will not render our proposed products under development or any future product candidates obsolete or noncompetitive or that our collaborators or customers will not choose to use competing technologies or products.

**Bremelanotide for Treatment of HSDD.** There is competition and financial incentive to develop, market and sell drugs for the treatment of HSDD and other forms of FSD. Flibanserin, sold under the trade name Addyi®, is the only drug currently approved in the United States for treatment of HSDD. Flibanserin, a non-hormonal oral serotonin 5-HT<sub>1A</sub> agonist, 5-HT<sub>2A</sub> antagonist, which requires chronic dosing, was approved by the FDA on August 18, 2015 for treatment of premenopausal women with HSDD. The FDA approval included a risk evaluation and mitigation strategy, or REMS, because of the increased risk of severe hypotension and syncope due to the interaction between flibanserin and alcohol, and a Boxed Warning to highlight the risks of severe hypotension and syncope in patients who drink alcohol during treatment with flibanserin, in those who also use moderate or strong CYP3A4 inhibitors, and in those who have liver impairment. Approval by the FDA followed a positive FDA advisory committee recommendation in June 2015. We are aware of several other drugs at various stages of development, most of which are taken on a chronic, typically once-daily, basis. An oral fixed-dose combination of two antidepressants, bupropion and trazodone, is reported to be entering Phase 2 studies in premenopausal women with HSDD. Another company is developing two different oral fixed-dose combination drugs, one a combination of sildenafil and testosterone and the other a combination of testosterone and buspirone hydrochloride, and has conducted Phase 2 studies. Libigel®, a testosterone gel, completed two Phase 3 efficacy trials for treatment of FSD in surgically post-menopausal women, but did not show statistical separation from placebo in those trials. Intrinsa, a transdermal testosterone patch, successfully completed a Phase 3 clinical program, but was not approved in the United States based on potential long-term use safety risks of cancer and cardiovascular adverse events. There are other companies reported to be developing new drugs for FSD indications, some of which may be in clinical trials in the United States or elsewhere. We are not aware of any company actively developing a melanocortin receptor agonist drug for HSDD.

**PL-3994 for Heart Failure Indications.** Nesiritide (sold under the trade name Natrecor®), a recombinant human B-type natriuretic peptide drug, is marketed in the United States by Scios Inc., a Johnson & Johnson company. Nesiritide is approved for treatment of acutely decompensated congestive heart failure patients who have dyspnea at rest or with minimal activity. Other peptide drugs, including carperitide, a recombinant human atrial natriuretic peptide drug, and ularitide, a synthetic form of urodilatin, a naturally occurring human natriuretic peptide related to atrial natriuretic peptide, have been investigated for treatment of congestive heart failure, but we are not aware of any active development in the United States. We are aware of other companies developing intravenously administered natriuretic peptide drugs, with at least one reported to have completed Phase 2 clinical trials for acute heart failure. A combination drug comprised of sacubitril and valsartan developed by Novartis AG, sold under the trade name Entresto®, inhibits both the angiotensin II receptor and neprilysin (an enzyme which inactivates endogenous active natriuretic peptides). This combination drug, which was approved by the FDA in July 2015, results in increases of endogenous active ANP levels, and thus has a mechanism of action with similarities to PL-3994. In a Phase 3 trial, the combination drug was compared to an angiotensin-converting-enzyme inhibitor, enalapril, in heart failure patients with reduced ejection fraction. It significantly improved the rate of death from cardiovascular causes, significantly reduced hospitalization for heart failure and significantly improved heart failure symptoms. This combination drug demonstrated that upregulation of the natriuretic peptide system in combination with angiotensin-converting-enzyme inhibition is superior to angiotensin-converting-enzyme inhibition alone, and thus provides validation of the natriuretic peptide system as a target for improving outcomes in treating heart failure patients. In addition, there are a number of approved drugs and drugs in development for treatment of heart failure through mechanisms or pathways other than agonism of NPR-A.

**PL-3994 for Acute Exacerbations of Asthma Indications.** The asthma market is intensively competitive, with substantial competition and financial incentive to develop, market and sell drugs for treatment of asthma, with projected costs of prescription drugs of \$5.9 billion in the United States in 2010. We are aware of companies developing drugs for the specific indications of either acute exacerbations of asthma or acute severe asthma, including at least one company with a drug reported to be currently in clinical trials. Certain of these drugs under development work by mechanisms of action different from the mechanisms of action of currently approved products. In addition, a number of clinical trials are conducted by hospitals, research institutes and others exploring various methods and

combinations of drugs to treat acute exacerbations of asthma. There are a number of drugs and therapies currently used to treat acute exacerbations of asthma, including administration of oral or intravenous systemic steroids, use of oxygen or heliox, a mixture of helium and oxygen, nebulized short-acting beta-2 adrenergic receptor agonists, intravenous or nebulized anticholinergic agents and, for patients in or approaching respiratory arrest, intubation and mechanical ventilation. However, each of these drugs or therapies has recognized limitations or liabilities, and we believe that there remains an unmet medical need for a safe and effective treatment for acute exacerbations of asthma. We are not aware of any other company actively developing a drug to treat asthma using a natriuretic peptide receptor pathway.



MC4r Peptides for Erectile Dysfunction. Leading drugs approved for erectile dysfunction, or ED, indications are PDE-5 inhibitors which target the vascular system, such as sildenafil (sold under the trade name Viagra®), vardenafil (sold under the trade name Levitra®) and tadalafil (sold under the trade name Cialis®). Other drugs approved for ED indications include alprostadil for injection (sold under the trade name Caverject Impulse® among others), which is injected directly into the penis, and alprostadil in urethral suppository format (sold under the trade name MUSE®). In addition, a variety of devices, including vacuum devices and surgical penile implants, have been approved for ED indications. We are aware of a number of companies developing new drugs for ED indications, some of which are in clinical trials in the United States and elsewhere. We are not aware of any company actively developing a melanocortin receptor agonist drug for ED.

Obesity. There are a number of FDA-approved drugs and medical devices for the treatment of obesity, and a large number of products in clinical development by other companies, including products which target melanocortin receptors. At least one Phase 2 study has been reported on use of an MC4r agonist for obesity indications.

MC1r Peptides for Dermatologic and Inflammatory Disease-Related Indications. Many dermatologic and inflammatory disease-related indications are treated using systemic steroids or immunosuppressant drugs, both of which have side effects which can be dose limiting. There are a large number of approved biological drugs and biological drugs under development for treatment of dermatologic and inflammatory disease-related indications.

#### Patents and Proprietary Information

Patent Protection. Our success will depend in substantial part on our ability to obtain, defend and enforce patents, maintain trade secrets and operate without infringing upon the proprietary rights of others, both in the United States and abroad. We own a number of issued United States patents and have pending United States patent applications, many with issued or pending counterpart patents in selected foreign countries. We seek patent protection for our technologies and products in the United States and those foreign countries where we believe patent protection is commercially important.

We own two issued United States patents claiming the bremelanotide substance and an issued patent claiming the bremelanotide substance in each of Australia, Austria, Belgium, Brazil, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Monaco, Netherlands, New Zealand, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. The issued United States patents have a term until 2020, which term may be subject to extension for a maximum period of up to five years as compensation for patent term lost during drug development and the FDA regulatory review process, pursuant to the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Amendments. Whether we will be able to obtain patent term extensions under the Hatch-Waxman Amendments and the length of any such extension cannot be determined until the FDA approves for marketing, if ever, a product in which bremelanotide is the active ingredient. In addition, the claims of issued patents covering bremelanotide may not provide meaningful protection. Further, third parties may challenge the validity or scope of any issued patent, and under the Hatch-Waxman Amendments, potentially receive approval of a competing generic version of our product or products even before a court rules on the validity or infringement of our patents.

We own an issued United States patent and pending patent applications in the United States for methods of treating FSD with bremelanotide, and related patent applications are pending in Australia, Brazil, Canada, China, Colombia, Georgia, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, New Zealand, Philippines, Singapore, South Africa, Ukraine, Vietnam and before the European and Eurasian patent offices. The issued United States patent has a term until 2033. Whether we will be able to obtain a patent term extension in the United States under the Hatch-Waxman Amendments, assuming that a relevant patent issues in the United States, and the length of any such extension, cannot be determined until the FDA approves for marketing, if ever, a product utilizing bremelanotide by methods claimed in the patent. Pending applications in the United States and elsewhere in the world have a presumptive term, if a patent is issued, until 2033.

We have patents and patent applications on an alternative class of melanocortin receptor-specific peptides for treatment of sexual dysfunction and other indications, including obesity, consisting of two issued patents in the United States, an issued patent in each of Australia, Canada, China, Israel, Mexico, New Zealand, Japan and Russia, and pending patent applications on the same class in Brazil, India, Korea, and South Africa and before the European patent office. The presumptive term of the issued patents and pending patent applications is until 2029. We also have patents

and pending patent applications for a second class of alternative melanocortin receptor-specific peptides for treatment of sexual dysfunction and other indications, including obesity, consisting of issued patents in the United States, Australia, China, Japan, Mexico, New Zealand, Russia, and South Africa and pending patent applications on the same class in Brazil, Canada, China, India, Israel, Korea, and before the European patent office. The presumptive term of the issued patents and pending patent applications is until 2030. Until one or more product candidates covered by a claim of one of these patents and patent applications are developed for commercialization, which may never occur, we cannot evaluate the duration of any potential patent term extension under the Hatch-Waxman Amendments.



We own issued patents in the United States, Mexico, New Zealand, South Africa and Russia claiming highly selective MC1r agonist peptides for treatment of inflammation-related diseases and disorders and related indications, and pending patent applications on two broad classes of highly selective MC1r agonist peptides in the United States, Australia, Brazil, Canada, China, India, Israel, Japan, Korea, and Mexico and before the European patent office. The presumptive term of the issued patents and pending patent applications is until 2030. Until one or more product candidates covered by a claim of one of these patent applications are developed for commercialization, which may never occur, we cannot evaluate the duration of any potential patent term extension under the Hatch-Waxman Amendments.

We own two issued United States patents claiming the PL-3994 substance and other natriuretic peptide receptor agonist compounds that we have developed and an issued United States patent claiming a precursor molecule to the PL-3994 substance, both of which expire in 2027. Corresponding patents on the PL-3994 substance and other natriuretic peptide receptor agonist compounds were issued in Australia, Austria, Belgium, China, Colombia, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Ireland, Israel, Italy, Japan, Korea, Mexico, Netherlands, Philippines, Russia, South Africa, Spain, Sweden, Switzerland, and the United Kingdom, with terms until 2027. Patent applications on the PL-3994 substance and other natriuretic peptide receptor agonist compounds are pending in Brazil and Canada, with presumptive terms until 2027. Applications claiming precursor molecules for the PL-3994 substance and other compounds have issued in the United States, Australia, China, France, Germany, Hong Kong, India, Ireland, Israel, Japan, Mexico, Netherlands, Philippines, Korea, South Africa, Sweden, Switzerland and the United Kingdom, and expire in 2027. Patent applications on the precursor molecules are pending in Brazil, Canada, and before the Eurasian Patent Office, with presumptive terms until 2027. We also own an issued United States patent claiming use of the PL-3994 substance for treatment of acute asthma and chronic obstructive pulmonary disease, which expires in 2031. We do not know the full scope of patent coverage we will obtain, or whether any patents will issue other than the patents already issued. Until one or more product candidates covered by a claim of the issued patents or one of these patent applications are developed for commercialization, which may never occur, we cannot evaluate the duration of any potential patent term extension under the Hatch-Waxman Amendments.

We additionally have 31 issued United States patents on melanocortin receptor specific peptides and small molecules, and three issued United States patents on natriuretic peptide receptor agonist compounds, but we are not actively developing any product candidate covered by a claim of any of these patents.

In the event that a third party has also filed a patent application relating to an invention we claimed in a patent application, we may be required to participate in an interference proceeding adjudicated by the United States Patent and Trademark Office to determine priority of invention. The possibility of an interference proceeding could result in substantial uncertainties and cost, even if the eventual outcome is favorable to us. An adverse outcome could result in the loss of patent protection for the subject of the interference, subjecting us to significant liabilities to third parties, the need to obtain licenses from third parties at undetermined cost, or requiring us to cease using the technology.

**Future Patent Infringement.** We do not know for certain that our commercial activities will not infringe upon patents or patent applications of third parties, some of which may not even have been issued. Although we are not aware of any valid United States patents which are infringed by bremelanotide or PL-3994, we cannot exclude the possibility that such patents might exist or arise in the future. We may be unable to avoid infringement of any such patents and may have to seek a license, defend an infringement action, or challenge the validity of such patents in court. Patent litigation is costly and time consuming. If such patents are valid and we do not obtain a license under any such patents, or we are found liable for infringement, we may be liable for significant monetary damages, may encounter significant delays in bringing products to market, or may be precluded from participating in the manufacture, use or sale of products or methods of treatment covered by such patents.

**Proprietary Information.** We rely on proprietary information, such as trade secrets and know-how, which is not patented. We have taken steps to protect our unpatented trade secrets and know-how, in part through the use of confidentiality and intellectual property agreements with our employees, consultants and certain contractors. If our employees, scientific consultants, collaborators or licensees develop inventions or processes independently that may be applicable to our product candidates, disputes may arise about the 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.

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If trade secrets are breached, our recourse will be solely against the person who caused the secrecy breach. This might not be an adequate remedy to us because third parties other than the person who causes the breach will be free to use the information without accountability to us. This is an inherent limitation of the law of trade secret protection.

#### U.S. Governmental Regulation of Pharmaceutical Products

##### General

Regulation by governmental authorities in the United States and other countries will continue to significantly impact our research, product development, manufacturing and marketing of any pharmaceutical products. The nature and the extent to which regulations apply to us will vary depending on the nature of any such products. Our potential pharmaceutical products will require regulatory approval by governmental agencies prior to commercialization. The products we are developing are subject to federal regulation in the United States, principally by the FDA under the Federal Food, Drug, and Cosmetic Act, or FDCA, and by state and local governments, as well as regulatory and other authorities in foreign governments that include rigorous preclinical and clinical testing and other approval procedures. Such regulations govern or influence, among other things, the research, development, testing, manufacture, safety and efficacy requirements, labeling, storage, recordkeeping, licensing, advertising, promotion, distribution and export of products, manufacturing and the manufacturing process. In many foreign countries, such regulations also govern the prices charged for products under their respective national social security systems and availability to consumers.

All drugs intended for human use are subject to rigorous regulation by the FDA in the United States and similar regulatory bodies in other countries. The steps ordinarily required by the FDA before an innovative new drug product may be marketed in the United States are similar to steps required in most other countries and include, but are not limited to:

completion of preclinical laboratory tests, preclinical animal testing and formulation studies;

submission to the FDA of an IND, which must be in effect before clinical trials may commence;

submission to the FDA of an NDA that includes preclinical data, clinical trial data and manufacturing information;

payment of substantial user fees for filing the NDA and other recurring user fees;

FDA review of the NDA;

satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities; and

FDA approval of the NDA, including approval of all product labeling.

For combination products deemed to have a “drug” primary mode of action, primary review of the product will be conducted by the appropriate division within the Center for Drug Evaluation and Research, or CDER, but CDER will consult with the Center for Devices and Radiological Health, or CDRH, to ensure that the device components of the product meet all applicable device requirements.

The research, development and approval process requires substantial time, effort and financial resources, and approvals may not be granted on a timely or commercially viable basis, if at all.

Preclinical testing includes laboratory evaluations to characterize the product’s composition, impurities, stability, and mechanism of its pharmacologic effect, as well as animal studies to assess the potential safety and efficacy of each product. Preclinical safety tests must be conducted by laboratories that comply with FDA regulations regarding Good Laboratory Practices, or GLP, and the U.S. Department of Agriculture’s Animal Welfare Act. Violations of these laws and regulations can, in some cases, lead to invalidation of the tests, requiring such tests to be repeated and delaying approval of the NDA. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND and are reviewed by the FDA before the commencement of human clinical trials. Unless the FDA objects to an IND by placing the study on clinical hold, the IND will go into effect 30 days following its receipt by the FDA. The FDA may authorize trials only on specified terms and may suspend ongoing

clinical trials at any time on various grounds, including a finding that patients are being exposed to unacceptable health risks. If the FDA places a study on clinical hold, the sponsor must resolve all of the FDA's concerns before the study may begin or continue. The IND application process may become extremely costly and substantially delay development of products. Similar restrictive requirements also apply in other countries. Additionally, positive results of preclinical tests will not necessarily indicate positive results in clinical trials.

Clinical trials involve the administration of the investigational product to humans under the supervision of qualified principal investigators. Our clinical trials must be conducted in accordance with Good Clinical Practice, or GCP, regulations under protocols submitted to the FDA as part of an IND. In addition, each clinical trial is approved and conducted under the auspices of an institutional review board, or IRB, and requires the patients' informed consent. An IRB considers, among other things, ethical factors, the safety of human subjects, and the possibility of liability of the institutions conducting the trial. The IRB at each institution at which a clinical trial is being performed may suspend a clinical trial at any time for a variety of reasons, including a belief that the test subjects are being exposed to an unacceptable health risk. As the sponsor, we can also suspend or terminate a clinical trial at any time.



Clinical trials are typically conducted in three sequential phases, Phases 1, 2, and 3, involving an increasing number of human subjects. These phases may sometimes overlap or be combined. Phase 1 trials are performed in a small number of healthy human subjects or subjects with the targeted condition, and involve testing for safety, dosage tolerance, absorption, distribution, metabolism and excretion. Phase 2 studies, which may involve up to hundreds of subjects, seek to identify possible adverse effects and safety risks, preliminary information related to the efficacy of the product for specific targeted diseases, dosage tolerance, and optimal dosage. Finally, Phase 3 trials may involve up to thousands of individuals often at geographically dispersed clinical trial sites, and are intended to provide the documentation of effectiveness and important additional safety data required for approval. Prior to commencing Phase 3 clinical trials many sponsors elect to meet with FDA officials to discuss the conduct and design of the proposed trial or trials.

In addition, federal law requires the listing, on a publicly-available website, of detailed information on clinical trials for investigational drugs. Some states have similar or supplemental clinical trial reporting laws.

Success in early-stage animal studies and clinical trials does not necessarily assure success in later-stage clinical trials. Data obtained from animal studies and clinical activities are not always conclusive and may be subject to alternative interpretations that could delay, limit or even prevent regulatory approval.

All data obtained from the preclinical studies and clinical trials, in addition to detailed information on the manufacture and composition of the product, would be submitted in an NDA to the FDA for review and approval for the manufacture, marketing and commercial shipments of any of our products. FDA approval of the NDA is required before commercial marketing or non-investigational interstate shipment may begin in the United States. The FDA may also conduct an audit of the clinical trial data used to support the NDA.

The FDA may deny or delay approval of an NDA that does not meet applicable regulatory criteria. For example the FDA may determine that the preclinical or clinical data or the manufacturing information does not adequately establish the safety and efficacy of the drug. The FDA has substantial discretion in the approval process and may disagree with an applicant's interpretation of the data submitted in its NDA. The FDA can request additional information, seek clarification regarding information already provided in the submission or ask that new additional clinical trials be conducted, all of which can delay approval. Similar types of regulatory processes will be encountered as efforts are made to market any drug internationally. We will be required to assure product performance and manufacturing processes from one country to another.

Even if the FDA approves a product, it may limit the approved uses for the product as described in the product labeling, require that contraindications, warning statements or precautions be included in the product labeling, require that additional studies be conducted following approval as a condition of the approval, impose restrictions and conditions on product distribution, prescribing or dispensing in the form of a REMS, or otherwise limit the scope of any approval or limit labeling. Once it approves an NDA, the FDA may revoke or suspend the product approval if compliance with post-market regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, the FDA may require post-marketing studies to monitor the effect of approved products, and may limit further marketing of the product based on the results of these post-market studies. The FDA and other government agencies have broad post-market regulatory and enforcement powers, including the ability to levy civil and criminal penalties, suspend or delay issuance of approvals, seize or recall products and revoke approvals.

Pharmaceutical manufacturers, distributors and their subcontractors are required to register their facilities with the FDA and state agencies. Manufacturers are required to list their marketed drugs with the FDA, are subject to periodic inspection by the FDA and other authorities, where applicable, and must comply with the FDA's current Good Manufacturing Practices, or GMP, regulations, and the product specifications set forth in the approved NDA. The GMP requirements for pharmaceutical products are extensive and compliance with them requires considerable time, resources and ongoing investment. The regulations require manufacturers and suppliers of raw materials and components to establish validated systems and to employ and train qualified employees to ensure that products meet high standards of safety, efficacy, stability, sterility (where applicable), purity, and potency. The requirements apply to all stages of the manufacturing process, including the synthesis, processing, sterilization, packaging, labeling, storage and shipment of the drug product. For all drug products, the regulations require investigation and correction of any deviations from GMP requirements and impose documentation requirements upon us and any third-party manufacturers that we may decide to use. Manufacturing establishments are subject to mandatory user fees, and to

periodic unannounced inspections by the FDA and state agencies for compliance with all GMP requirements. The FDA is authorized to inspect manufacturing facilities without a warrant at reasonable times and in a reasonable manner.

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We or our present or future suppliers may not be able to comply with GMP and other FDA regulatory requirements. Failure to comply with the statutory and regulatory requirements subjects the manufacturer and/or the NDA sponsor or distributor to possible legal or regulatory action, such as a delay or refusal to approve an NDA, suspension of manufacturing, seizure or recall of a product, or civil or criminal prosecution of the company or individual officers or employees.

#### Post-Marketing Regulation

Any drug products manufactured or distributed by us pursuant to FDA approvals, as well as the materials and components used in our products, are subject to pervasive and continuing regulation by the FDA, including:

recordkeeping requirements;

periodic reporting requirements;

GMP requirements related to all stages of manufacturing, testing, storage, packaging, labeling and distribution of finished dosage forms of the product;

monitoring and reporting of adverse experiences with the product; and

advertising and promotional reporting requirements and restrictions.

Adverse experiences with the product must be reported to the FDA and could result in the imposition of market restriction through labeling changes or product removal. Product approvals may be revoked if compliance with regulatory requirements is not maintained or if problems concerning safety or effectiveness of the product occur following approval. The FDA is developing a national electronic drug safety tracking system known as SENTINEL that may impose additional safety monitoring burdens, and enhanced FDA enforcement authority, beyond the extensive requirements already in effect. As a condition of NDA approval, the FDA may require post-approval testing and surveillance to monitor a product's safety or efficacy. The FDA also may impose other conditions, including labeling restrictions which can materially impact the potential market and profitability of a product.

With respect to post-market product advertising and promotion, the FDA and other government agencies including the Department of Health and Human Services and the Department of Justice, and individual States, impose a number of complex regulations on entities that advertise and promote pharmaceuticals, including, among others, standards and restrictions on direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the Internet. The FDA has very broad enforcement authority under the FDCA, and failure to abide by these regulations can result in administrative and judicial enforcement actions, including the issuance of a Warning Letter directing correction of deviations from FDA standards, a requirement that future advertising and promotional materials be pre-cleared by the FDA, False Claims Act prosecution based on alleged off-label marketing seeking monetary and other penalties, including potential exclusion of the drug and/or the company from participation in government health care programs, and state and federal civil and criminal investigations and prosecutions. Foreign regulatory bodies also strictly enforce these and other regulatory requirements and drug marketing may be prohibited in whole or in part in other countries.

We, our collaborators or our third-party contract manufacturers may not be able to comply with the applicable regulations. After regulatory approvals are obtained, the subsequent discovery of previously unknown problems, or the failure to maintain compliance with existing or new regulatory requirements, may result in:

restrictions on the marketing or manufacturing of a product;

Warning Letters or Untitled Letters from the FDA asking us, our collaborators or third-party contractors to take or refrain from taking certain actions;

withdrawal of the product from the market;

the FDA's refusal to approve pending applications or supplements to approved applications;  
voluntary or mandatory product recall;  
fines or disgorgement of profits or revenue;  
suspension or withdrawal of regulatory approvals;  
refusals to permit the import or export of products;  
product seizure; and



injunctions or the imposition of civil or criminal penalties.

We may also be subject to healthcare laws, regulations and enforcement and our failure to comply with any such laws, regulations or enforcement could adversely affect our business, operations and financial condition. Certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. We are subject to regulation by both the federal government and the states in which we or our partners conduct our business. The laws and regulations that may affect our ability to operate include:

the federal Anti-Kickback Statute, which prohibits, among other things, any person or entity from knowingly and willfully offering, soliciting, receiving or providing any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce either the referral of an individual or in return for the purchase, lease, or order of any good, facility item or service, for which payment may be made, in whole or in part, under federal healthcare programs such as the Medicare and Medicaid programs;

federal civil and criminal false claims laws and civil monetary penalty laws, including, for example, the federal civil False Claims Act, which impose criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payer (e.g., public or private), knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations, which impose obligations on covered entities, including healthcare providers, health plans, and healthcare clearinghouses, as well as their respective business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

the federal physician sunshine requirements under the Patient Protection and Affordable Care Act, or Affordable Care Act, which require manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services information related to payments and other transfers of value provided to physicians and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members; and

state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payer, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government, or otherwise restrict payments that may be provided to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Affordable Care Act, among other things, amended the intent requirement of the federal Anti-Kickback Statute and certain criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. In addition, the Affordable Care Act provided that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.



Achieving and sustaining compliance with these laws may prove costly. In addition, any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the laws described above or any other governmental laws or regulations that apply to us, we may be subject to penalties, including administrative, civil and criminal penalties, damages, fines, disgorgement, the exclusion from participation in federal and state healthcare programs, individual imprisonment or the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results.

#### Generic Competition

**Orange Book Listing.** In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, the applicant identifies all patents that claim the approved product's active ingredient(s), the drug product's approved formulation, or an approved method of use of the drug. Each of the identified patents are then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application, or ANDA. An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing, unless such testing is waived by the FDA, as is the case with some injectable drug products, to be therapeutically equivalent to the listed drug. Other than bioequivalence testing, ANDA applicants are not required to conduct, or submit results of, preclinical or clinical tests to prove the safety or effectiveness of their drug product. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can usually be substituted by pharmacists under prescriptions written for the original listed drug.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify either that: (1) the required patent information has not been filed (a Paragraph I Certification); (2) the listed patent has expired (a Paragraph II Certification); (3) the listed patent has not expired, but will expire on a particular date and the generic approval is being sought only after patent expiration (a Paragraph III Certification); or (4) the listed patent is invalid, unenforceable, or will not be infringed by the proposed generic product (a Paragraph IV Certification). In certain circumstances, the ANDA applicant may also elect to submit a "section (viii)" statement instead of a Paragraph IV Certification, certifying that its proposed ANDA label does not contain (or carves out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent. If the application contains only Paragraph I or Paragraph II Certifications, the ANDA may be approved as soon as FDA completes its review and concludes that all approval requirements have been met. If the ANDA contains one or more Paragraph III Certifications, the ANDA cannot not be approved until each listed patent for which a Paragraph III Certification was filed have expired.

If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA holder and patent owner once the ANDA has been accepted for filing by the FDA. The patent owner or NDA holder may then commence a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months (the "30-month stay"), expiration of the patent, settlement of the lawsuit in which the patent owner admits that the patent is invalid or not infringed by the ANDA product, or a decision in the infringement case that holds the patent to be invalid or not infringed, or an order by the court shortening the 30-month stay due to actions by the patent holder to delay the litigation. In most circumstances, NDA holder is only eligible for one 30-month stay against an ANDA. If a patent infringement action is filed against an ANDA applicant, any settlement of the litigation must be submitted to the Federal Trade Commission, or the FTC. If the FTC believes the terms or effects of the settlement are anticompetitive, FTC may bring an antitrust enforcement action against the parties. Private parties may also bring antitrust lawsuits against drug companies based on such patent litigation settlements.

The ANDA also will not be approved until any applicable non-patent regulatory exclusivity listed in the Orange Book for the referenced product has expired.

**Regulatory Exclusivity.** Upon NDA approval of a new chemical entity or NCE, which is a drug that contains no active moiety that has been approved by the FDA in any other NDA, that drug receives five years of marketing exclusivity

during which the FDA cannot receive for review any ANDA seeking approval of a generic version of that drug. An ANDA containing a Paragraph IV Certification may be received by FDA 4 years after the NCE drug's approval, but any 30-month stay that ensues would be extended so that it expires seven and one half years after the NCE approval date, subject to early termination by reason of a court decision or settlement as described above.



Certain changes to an NDA drug, such as the addition of a new indication to the package insert, for which new clinical trials, conducted or sponsored by the applicant are deemed by FDA to be essential to the approval of the change, can be eligible for a three-year period of exclusivity during which the FDA cannot approve an ANDA for a generic drug that includes the change. An ANDA that contains a section (viii) statement to a method of use patent may be approved with labeling that omits the patented use before the use patent expires. Generic drugs approved with such a labeling carve out may be substituted by pharmacists for the original branded drug before the method of use patent expires. Section 505(b)(2) New Drug Applications. Most drug products obtain FDA marketing approval pursuant to an NDA or an ANDA. A third alternative is a special type of NDA, commonly referred to as a 505(b)(2) NDA, which enables the applicant to rely, in part, on the FDA's previous approval of a similar product, or published literature, in support of its application.

505(b)(2) NDAs often provide an alternate path to FDA approval for new or improved formulations or new uses of previously approved products. A 505(b)(2) NDA may be used where at least some of the information required for approval comes from studies not conducted by, or for, the applicant and for which the applicant has not obtained a right of reference. If the 505(b)(2) applicant can establish that reliance on the FDA's previous approval is scientifically appropriate, it may eliminate the need to conduct certain preclinical or clinical studies of the new product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new product candidate for all, or some, of the label indications for which the referenced product has been approved, as well as for any new indication or conditions of use sought by the Section 505(b)(2) applicant.

To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would. As a result, approval of a 505(b)(2) NDA can be stalled until all the listed patents claiming the referenced product have expired, until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired, and, in the case of a Paragraph IV certification and subsequent patent infringement suit, until the expiration of any 30-month stay, subject to early termination of the stay as described above.

#### Changing Legal and Regulatory Landscape

Periodically, legislation is introduced in the U.S. Congress that could change the statutory and regulatory provisions governing the approval, manufacturing and marketing of our drugs. In addition, the FDCA, FDA regulations and guidance are often revised or reinterpreted by the FDA or the courts in ways that may significantly affect our business and products. We cannot predict whether or when legislation or court decisions impacting our business will be enacted or issued, what FDA regulations, guidance or interpretations may change, or what the impact of such changes, if any, may be in the future.

#### Third-Party Reimbursements

Successful sales of our proposed products in the United States and other countries depend, in large part, on the availability of adequate reimbursement from third-party payers such as governmental entities, managed care organizations, health maintenance organizations, or HMOs, and private insurance plans. Reimbursement by a third-party payer depends on a number of factors, including the payer's determination that the product has been approved by the FDA for the indication for which the claim is being made, that it is neither experimental nor investigational, and that the use of the product is safe and efficacious, medically necessary, appropriate for the specific patient and cost effective.

Since reimbursement by one payer does not guarantee reimbursement by another, we or our licensees may be required to seek approval from each payer individually. Seeking such approvals is a time-consuming and costly process.

Third-party payers routinely limit the products that they will cover and the amount of money that they will pay and, in many instances, are exerting significant pressure on medical suppliers to lower their prices.

Payers frequently employ a tiered system in reimbursing end users for pharmaceutical products, with tier designation affecting copay or deductible amounts. The only approved product for treating HSDD is flibanserin, sold under the trade name Addyi®. There is significant uncertainty concerning the extent and scope of third-party reimbursement for products treating HSDD. Based on third-party reimbursement for approved products treating ED, we believe bremelanotide will be classified as a Tier 3 drug, so that reimbursement will be limited for bremelanotide for

treatment of premenopausal women with HSDD, assuming the product is approved by the FDA. Less than full reimbursement by governmental and other third-party payers may adversely affect the market acceptance of bremelanotide. Further, healthcare reimbursement systems vary from country to country, and third-party reimbursement might not be made available for bremelanotide for HSDD under any other reimbursement system.



### Manufacturing and Marketing

To be successful, our proposed products will need to be manufactured in commercial quantities under GMP prescribed by the FDA and at acceptable costs. We do not have the facilities to manufacture any of our proposed products under GMP. We intend to rely on collaborators, licensees or contract manufacturers for the commercial manufacture of our proposed products.

Our bremelanotide product candidate is a synthetic peptide. While the production process involves well-established technology, there are few manufacturers capable of scaling up to commercial quantities under GMP at acceptable costs. We have identified one third-party manufacturer for the production of bremelanotide, Lonza Ltd., and have validated manufacturing of the bremelanotide drug substance under GMP with that manufacturer. We are in the process of negotiating a long-term supply agreement with Lonza, and may not be able to enter into a supply agreement on acceptable terms, if at all.

Our bremelanotide product candidate will be a combination product, incorporating both the bremelanotide drug substance and a delivery device. We will rely on a third-party manufacturer, Ypsomed AG, to make the delivery device and to ensure its and the device's continued compliance with all FDA medical device regulations. We have selected an autoinjector pen delivery device, and are negotiating a long-term supply and manufacturing agreement, but may not be able to enter into such an agreement on acceptable terms, if at all. A third-party contract manufacturer, Catalent Belgium S.A., performs fill, finish and packaging of our bremelanotide product candidate. We have negotiated a long-term commercial supply agreement with Catalent Belgium S.A.

Our PL-3994 product candidate is a peptide mimetic molecule, incorporating a proprietary amino acid mimetic structure and amino acids. We identified a manufacturer that made the product in quantities sufficient for Phase 1, and are evaluating commercial-scale manufacturers. Scaling up to commercial quantities may involve production, purification, formulation and other problems not present in the scale of manufacturing done to date.

Our MC1r and MC4r agonist product candidates are synthetic peptides, which we have manufactured only at laboratory scale. We have not contracted with a third-party manufacturer to produce these synthetic peptides for either clinical trials or commercial purposes. While the production process involves well-established technology, there are few manufacturers capable of scaling up to commercial quantities under GMP at acceptable costs. Additionally, scaling up to commercial quantities may involve production, purification, formulation and other problems not present in the scale of manufacturing done to date.

The failure of any manufacturer or supplier to comply with FDA regulations, including GMP or medical device quality systems regulations, or QSR, or to supply the device component or drug substance and services as agreed, would force us to seek alternative sources of supply and could interfere with our ability to deliver product on a timely and cost effective basis or at all. Establishing relationships with new manufacturers or suppliers, any of whom must be FDA-approved, is a time-consuming and costly process.

### Product Liability and Insurance

Our business may be affected by potential product liability risks that are inherent in the testing, manufacturing, marketing and use of our proposed products. We have liability insurance providing \$10 million coverage in the aggregate as to certain clinical trial risks.

### Employees

As of September 16, 2016, we employed 22 people full time, of whom 16 are engaged in research and development activities and 6 are engaged in administration and management, and had no part-time employees. While we have been successful in attracting skilled and experienced scientific personnel, competition for personnel in our industry is intense. None of our employees are covered by a collective bargaining agreement. All of our employees have executed confidentiality and intellectual property agreements. We consider relations with our employees to be good.

We rely on contractors and scientific consultants to work on specific research and development programs. We also rely on independent organizations, advisors and consultants to provide services, including aspects of manufacturing, testing, preclinical evaluation, clinical management, regulatory strategy and market research. Our independent advisors, contractors and consultants sign agreements that provide for confidentiality of our proprietary information and that we have the rights to any intellectual property developed while working for us.

### Corporate Information

We were incorporated under the laws of the State of Delaware on November 21, 1986 and commenced operations in the biopharmaceutical area in 1996. Our corporate offices are located at 4B Cedar Brook Drive, Cranbury, New Jersey 08512 and our telephone number is (609) 495-2200. We maintain an Internet site at [www.palatin.com](http://www.palatin.com), where among other things, we make available free of charge on and through this website our Forms 3, 4 and 5, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) and Section 16 of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our website and the information contained in it or connected to it are not incorporated into this prospectus. The reference to our website is an inactive textual reference only.



Item 1A. Risk Factors.

Risks Related to Our Financial Results and Need for Financing

Our auditors have expressed substantial doubt about our ability to continue as a going concern. If we do not have sufficient funding, we may have to suspend or cease operations within twelve months.

Our audited financial statements for the year ended June 30, 2016 were prepared using the assumption that we will continue our operations as a going concern. As of June 30, 2016, we had an accumulated deficit of \$343,412,252 and stockholders' deficiency of \$17,585,967. As a result, our independent registered public accounting firm, in their audit report, has expressed substantial doubt about our ability to continue as a going concern. Continued operations are dependent on our ability to complete equity or debt financing activities or collaboration arrangements or to generate positive cash flow from operations, neither of which is certain. We believe that if we do not have sufficient funding, we may have to curtail or cease certain programs or operations within twelve months. Therefore, we may be unable to continue operations in the future as a going concern. If we cannot continue as a viable entity, our stockholders may lose some or all of their investment in the Company. Investors in our securities should review carefully the report of our independent registered public accounting firm included in this Annual Report.

We have a history of substantial net losses and expect to continue to incur substantial net losses over the next few years; we may never achieve or maintain profitability.

We have never been profitable and we may never become profitable. As of June 30, 2016, we had an accumulated deficit of \$343,412,252. We expect to incur additional losses as we continue our development of bremelanotide, PL-3994 and other product candidates. These losses, among other things, have had and will continue to have an adverse effect on our stockholders' equity, total assets and working capital.

Since 2005 we have not had any products available for commercial sale and have received no revenues from the sale of our product candidates. For the foreseeable future, we will have to fund all of our operations and capital expenditures from license and contract revenue under collaborative development agreements, existing cash balances and outside sources of financing, which may not be available on acceptable terms, if at all. Unless and until we receive approval from the FDA or other equivalent regulatory authorities outside the United States, we cannot sell our products and will not have product revenues from them. We have devoted substantially all of our efforts to research and development, including preclinical and clinical trials. Because of the numerous risks associated with developing drugs, we are unable to predict the extent of future losses, whether or when any of our product candidates will become commercially available, or when we will become profitable, if at all.

We will need additional financing, including financing to submit required regulatory applications to the FDA for bremelanotide for HSDD and to complete clinical trials for our other product candidates, which may be difficult to obtain.

As of June 30, 2016, we had cash, cash equivalents and investments of \$9,383,224, with current liabilities of \$13,994,439. On August 4, 2016, we closed on an equity private placement, with net proceeds of approximately \$8,500,000. We believe we currently have sufficient existing capital resources to fund our planned operations through the anticipated release date of topline data from the double blind efficacy portion of our Phase 3 trial and through the quarter ending December 31, 2016. We will need additional funding to complete development of our bremelanotide for HSDD program, including completing ancillary studies and clinical trials, completing certain chemistry, manufacturing and controls activities, preparing and submitting regulatory filings for product approval, and launch readiness commercialization efforts. We will also need additional funding to conduct and complete required clinical trials for our other product candidates and, assuming those clinical trials are successful, as to which there can be no assurance, to complete submission of required regulatory applications to the FDA.

We have completed the last patient visits in the double blind portion of our Phase 3 clinical trial of bremelanotide for HSDD, and have adequate funds to analyze the efficacy data and disclose results. However, we do not have adequate funds to complete the open-label safety extension study, all ancillary studies and clinical trials required for submission of an NDA to FDA for approval of bremelanotide for HSDD, or to prepare and submit the NDA to FDA. We may be required to curtail or delay our bremelanotide for HSDD program unless we have adequate funds to complete the program. We estimate that the bremelanotide for HSDD program, including regulatory filings for product approval, will cost at least \$87,000,000, of which approximately \$57,000,000 has been expensed to date. We will seek funds to support the program through collaborative arrangements on bremelanotide, including marketing and distribution

partnering agreements, public or private equity or debt financings, and other sources, but such additional funding may not be available on acceptable terms, or at all.

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We do not have any source of significant recurring revenue and must depend on financing or partnering to sustain our operations. We may raise additional funds through public or private equity or debt financings, collaborative arrangements on our product candidates, or other sources. However, additional funding may not be available on acceptable terms, or at all. To obtain additional funding, we may need to enter into arrangements that require us to develop only certain of our product candidates or relinquish rights to certain technologies, product candidates and/or potential markets.

If we are unable to raise sufficient additional funds when needed, we may be required to curtail operations significantly, cease clinical trials and decrease staffing levels. We may seek to license, sell or otherwise dispose of our product candidates, technologies and contractual rights on the best possible terms available. Even if we are able to license, sell or otherwise dispose of our product candidates, technologies and contractual rights, it is likely to be on unfavorable terms and for less value than if we had the financial resources to develop or otherwise advance our product candidates, technologies and contractual rights ourselves.

Our future capital requirements depend on many factors, including:

the results of our Phase 3 clinical trials for brexelanotide for HSDD;

the timing of, and the costs involved in, obtaining regulatory approvals for brexelanotide for HSDD and our other product candidates;

the number and characteristics of any additional product candidates we develop or acquire;

the scope, progress, results and costs of researching and developing brexelanotide for HSDD, PL-3994 or any future product candidates, and conducting preclinical and clinical trials;

the cost of commercialization activities if brexelanotide for HSDD, PL-3994 or any future product candidates are approved for sale, including marketing, sales and distribution costs;

the cost of manufacturing brexelanotide for HSDD, PL-3994 or any future product candidates and any products we successfully commercialize and maintaining our related facilities;

our ability to establish and maintain strategic collaborations, licensing or other arrangements and the terms and timing of such arrangements;

the degree and rate of market acceptance of any future approved products;

the emergence, approval, availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing products or treatments;

any product liability or other lawsuits related to our products;

the expenses needed to attract and retain skilled personnel;

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and

the timing, receipt and amount of sales of, or royalties on, future approved products, if any.

We have a limited operating history upon which to base an investment decision.

Our operations are primarily focused on acquiring, developing and securing our proprietary technology, conducting preclinical and clinical studies and formulating and manufacturing on a small-scale basis our principal product candidates. These operations provide a limited basis for stockholders to assess our ability to commercialize our

product candidates.

We have not yet demonstrated our ability to perform the functions necessary for the successful commercialization of any of our current product candidates. The successful commercialization of our product candidates will require us to perform a variety of functions, including:

continuing to conduct preclinical development and clinical trials;

participating in regulatory approval processes;

formulating and manufacturing products, or having third parties formulate and manufacture products;

post-approval monitoring and surveillance of our products;

conducting sales and marketing activities, either alone or with a partner; and

obtaining additional capital.

If we are unable to obtain regulatory approval of any of our product candidates, to successfully commercialize any products for which we receive regulatory approval or to obtain additional capital, we may not be able to recover our investment in our development efforts.



The clinical and commercial success of our product candidates will depend on a number of factors, including the following:

the ability to raise additional capital on acceptable terms, or at all;

timely completion of our clinical trials, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the performance of third-party contractors;

whether we are required by the FDA or similar foreign regulatory agencies to conduct additional clinical trials beyond those planned to support the approval and commercialization of our product candidates or any future product candidates;

acceptance of our proposed indications and primary endpoint assessments relating to the proposed indications of our product candidates by the FDA and similar foreign regulatory authorities;

our ability to demonstrate to the satisfaction of the FDA and similar foreign regulatory authorities, the safety and efficacy of our product candidates or any future product candidates;

the prevalence, duration and severity of potential side effects experienced with our product candidates or future approved products, if any;

the timely receipt of necessary marketing approvals from the FDA and similar foreign regulatory authorities;

achieving and maintaining, and, where applicable, ensuring that our third-party contractors achieve and maintain, compliance with our contractual obligations and with all regulatory requirements applicable to our product candidates or any future product candidates or approved products, if any;

the ability of third parties with whom we contract to manufacture clinical trial and commercial supplies of our product candidates or any future product candidates, remain in good standing with regulatory agencies and develop, validate and maintain commercially viable manufacturing processes that are compliant with GMP;

a continued acceptable safety profile and efficacy during clinical development and following approval of our product candidates or any future product candidates;

our ability to successfully commercialize our product candidates or any future product candidates in the United States and internationally, if approved for marketing, sale and distribution in such countries and territories, whether alone or in collaboration with others;

acceptance by physicians and patients of the benefits, safety and efficacy of our product candidates or any future product candidates, if approved, including relative to alternative and competing treatments;

our and our partners' ability to establish and enforce intellectual property rights in and to our product candidates or any future product candidates;

our and our partners' ability to avoid third-party patent interference or intellectual property infringement claims; and

our ability to in-license or acquire additional product candidates or commercial-stage products that we believe can be successfully developed and commercialized.

If we do not achieve one or more of these factors, many of which are beyond our control, in a timely manner or at all, we could experience significant delays or an inability to obtain regulatory approvals or commercialize our product

candidates. Even if regulatory approvals are obtained, we may never be able to successfully commercialize any of our product candidates. Accordingly, we cannot assure you that we will be able to generate sufficient revenue through the sale of our product candidates or any future product candidates to continue our business.

Raising additional capital may cause dilution to existing shareholders, restrict our operations or require us to relinquish rights.

We may seek the additional capital necessary to fund our operations through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing shareholders' ownership interests will be diluted and the terms may include liquidation or other preferences that adversely affect their rights as a shareholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.



### Risks Related to Our Business, Strategy and Industry

We are substantially dependent on the clinical and commercial success of our product candidates, primarily our lead product candidate, bremelanotide for HSDD, which is in Phase 3 clinical development. We cannot be certain that we will be able to obtain regulatory approval for or successfully commercialize any of our product candidates.

To date, we have invested most of our efforts and financial resources in the research and development of bremelanotide for HSDD, which is currently our lead product candidate. We have completed the last patient visit in the double blind efficacy portion of our Phase 3 RECONNECT STUDY for bremelanotide for HSDD. Our near-term prospects, including our ability to finance our company and generate revenue, will depend heavily on the successful development, regulatory approval and commercialization of bremelanotide for HSDD, as well as any future product candidates. The clinical and commercial success of our product candidates will depend on a number of factors, including the following:

timely completion of, or need to conduct additional, clinical trials, including for bremelanotide for HSDD, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the accurate and satisfactory performance of third-party contractors;

our ability to demonstrate to the satisfaction of the FDA the safety and efficacy of bremelanotide for HSDD or any future product candidates through clinical trials;

whether we are required by the FDA or other similar foreign regulatory agencies to conduct additional clinical trials to support the approval of bremelanotide for HSDD or any future product candidates;

the acceptance of parameters for regulatory approval, including our proposed indication, primary endpoint assessment and primary endpoint measurement, relating to our lead indications of bremelanotide for HSDD;

our success in educating physicians and patients about the benefits, administration and use of bremelanotide for HSDD or any future product candidates, if approved;

the prevalence and severity of adverse events experienced with bremelanotide for HSDD or any future product candidates or approved products;

the adequacy and regulatory compliance of the autoinjector device, supplied by an unaffiliated third party, to be used as part of our bremelanotide combination product;

the timely receipt of necessary marketing approvals from the FDA and similar foreign regulatory authorities;

our ability to raise additional capital on acceptable terms to achieve our goals;

achieving and maintaining compliance with all regulatory requirements applicable to bremelanotide for HSDD or any future product candidates or approved products;

the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;

the effectiveness of our own or our future potential strategic collaborators' marketing, sales and distribution strategy and operations;

our ability to manufacture clinical trial supplies of bremelanotide for HSDD or any future product candidates and to develop, validate and maintain a commercially viable manufacturing process that is compliant with current GMP;

our ability to successfully commercialize bremelanotide for HSDD or any future product candidates, if approved for marketing and sale, whether alone or in collaboration with others;

our ability to enforce our intellectual property rights in and to bremelanotide for HSDD or any future product candidates;

our ability to avoid third-party patent interference or intellectual property infringement claims;

acceptance of bremelanotide for HSDD or any future product candidates, if approved, as safe and effective by patients and the medical community; and

a continued acceptable safety profile and efficacy of bremelanotide for HSDD or any future product candidates following approval.

If we do not achieve one or more of these factors, many of which are beyond our control, in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates.

Accordingly, we cannot assure you that we will be able to generate sufficient revenue through the sale of bremelanotide for HSDD or any future product candidate to continue our business. In addition to preventing us from executing our current business plan, any delays in our clinical trials, or inability to successfully commercialize our products could impair our reputation in the industry and the investment community, and could hinder our ability to fulfill our existing contractual commitments. As a result, our share price would likely decline significantly, and we would have difficulty raising necessary capital for future projects.



Most of our product candidates are still in the early stages of development, and all of our product candidates remain subject to clinical testing and regulatory approval. If we are unable to successfully develop and test our product candidates, we will not be successful.

Our product candidates are at various stages of research and development, will require regulatory approval, and may never be successfully developed or commercialized. Our product candidates will require significant further research, development and testing before we can seek regulatory approval to market and sell them. We must demonstrate that our product candidates are safe and effective for use in patients in order to receive regulatory approval for commercial sale. Preclinical studies in animals, using various doses and formulations, must be performed before we can begin human clinical trials. Even if we obtain favorable results in the preclinical studies, the results in humans may be different. Numerous small-scale human clinical trials may be necessary to obtain initial data on a product candidate's safety and efficacy in humans before advancing to large scale human clinical trials. We face the risk that the results of our trials in later phases of clinical trials may be inconsistent with those obtained in earlier phases. Adverse or inconclusive results could delay the progress of our development programs and may prevent us from filing for regulatory approval of our product candidates. Additional factors that could inhibit the successful development of our product candidates include:

lack of effectiveness of any product candidate during clinical trials or the failure of our product candidates to meet specified endpoints;

failure to design appropriate clinical trial protocols;

uncertainty regarding proper dosing;

inability to develop or obtain a supplier for an autoinjector device that meets the FDA's medical device requirements;

insufficient data to support regulatory approval;

inability or unwillingness of medical investigators to follow our clinical protocols;

inability to add a sufficient number of clinical trial sites; or

the availability of sufficient capital to sustain operations and clinical trials.

You should evaluate us in light of these uncertainties, difficulties and expenses commonly experienced by early stage biopharmaceutical companies, as well as unanticipated problems and additional costs relating to:

product approval or clearance;

regulatory compliance;

good manufacturing practices;

intellectual property rights;

product introduction; and

marketing and competition.

If clinical trials for our product candidates are prolonged or delayed, we may be unable to commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any revenue from potential product sales.

We may be unable to commercialize our product candidates on a timely basis due to unexpected delays in our human clinical trials. Potential delaying events include:

- discovery of serious or unexpected toxicities or side effects experienced by study participants or other safety issues;
- slower than expected rates of subject recruitment and enrollment rates in clinical trials resulting from numerous factors, including the prevalence of other companies' clinical trials for their product candidates for the same indication, or clinical trials for indications for which patients do not as commonly seek treatment;
- difficulty in retaining subjects who have initiated a clinical trial but may withdraw at any time due to adverse side effects from the therapy, insufficient efficacy, fatigue with the clinical trial process or for any other reason;
- difficulty in obtaining institutional review board, or IRB, approval for studies to be conducted at each site;
- delays in manufacturing or obtaining, or inability to manufacture or obtain, sufficient quantities of materials for use in clinical trials;
- inadequacy of or changes in our manufacturing process or the product formulation or method of delivery;
- changes in applicable laws, regulations and regulatory policies;



delays or failure in reaching agreement on acceptable terms in clinical trial contracts or protocols with prospective contract research organizations, or CROs, clinical trial sites and other third-party contractors;

failure of our CROs or other third-party contractors to comply with contractual and regulatory requirements or to perform their services in a timely or acceptable manner;

failure by us, our employees, our CROs or their employees or any partner with which we may collaborate or their employees to comply with applicable FDA or other regulatory requirements relating to the conduct of clinical trials or the handling, storage, security and recordkeeping for drug, medical device and biologic products;

delays in the scheduling and performance by the FDA of required inspections of us, our CROs, our suppliers, or our clinical trial sites, and violations of law or regulations by discovered in the course of FDA inspections;

scheduling conflicts with participating clinicians and clinical institutions; or

difficulty in maintaining contact with subjects during or after treatment, which may result in incomplete data. Any of these events or other delaying events, individually or in the aggregate, could delay the commercialization of our product candidates and have a material adverse effect on our business, results of operations and financial condition.

We may not be able to secure and maintain research institutions to conduct our clinical trials.

We rely on research institutions to conduct our clinical trials, and we therefore have limited control over the timing and cost of clinical trials and our ability to recruit subjects. If we are unable to reach agreements with suitable research institutions on acceptable terms, or if any such agreement is terminated, we may be unable to quickly replace the research institution with another qualified institution on acceptable terms. We may not be able to secure and maintain suitable research institutions to conduct our clinical trials.

Even if our product candidates receive regulatory approval, they may never achieve market acceptance, in which case our business, financial condition and results of operation will be materially adversely affected.

Regulatory approval for the marketing and sale of any of our product candidates does not assure the product's commercial success. Any approved product will compete with other products manufactured and marketed by major pharmaceutical and other biotechnology companies. If any of our product candidates are approved by the FDA and do not achieve adequate market acceptance, our business, financial condition and results of operations will be materially adversely affected. The degree of market acceptance of any such product will depend on a number of factors, including:

perceptions by members of the healthcare community, including physicians, about the safety and effectiveness of any such product;

cost-effectiveness relative to competing products and technologies;

availability of reimbursement for our products from third-party payers such as health insurers, health maintenance organizations and government programs such as Medicare and Medicaid; and

advantages over alternative treatment methods.

There is one FDA approved product for treatment of HSDD, flibanserin, which is sold under the trade name Addyi®, and started marketing in October 2015. The actual market size and market dynamics for HSDD are unknown, and there is significant uncertainty concerning the extent and scope of third-party reimbursement for products treating HSDD. While we believe that an on-demand drug for HSDD has competitive advantages compared to chronic or daily use hormones and other drugs, we may not be able to realize this perceived advantage in the market. Bremelanotide is administered by subcutaneous injection. While the single-use, disposable autoinjector pen format is designed to

maximize market acceptability, bremelanotide as a subcutaneous injectable drug for HSDD may never achieve significant market acceptance. In addition, we believe reimbursement of bremelanotide from third-party payers such as health insurers, HMOs or other third-party payers of healthcare costs will be similar to reimbursement for ED drugs, and that the ultimate user may pay a substantial part of the cost of bremelanotide for HSDD. If the market opportunity for bremelanotide is smaller than we anticipate, it may also be difficult for us to find marketing partners and, as a result, we may be unable to generate revenue and business from bremelanotide. If bremelanotide for HSDD does not achieve adequate market acceptance at an acceptable price point, our business, financial condition and results of operations will be materially adversely affected.



Even if our product candidates receive regulatory approval in the United States, we may never receive approval or commercialize our products outside of the United States.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the United States as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setbacks in obtaining such approval would impair our ability to develop foreign markets for our product candidates and may have a material adverse effect on our results of operations and financial condition.

If side effects emerge that can be linked to our product candidates (either while they are in development or after they are approved and on the market), we may be required to perform lengthy additional clinical trials, change the labeling of any such products, or withdraw such products from the market, any of which would hinder or preclude our ability to generate revenues.

If we identify side effects or other problems occur in future clinical trials, we may be required to terminate or delay clinical development of the product candidate. Furthermore, even if any of our product candidates receive marketing approval, as greater numbers of patients use a drug following its approval, if the incidence of side effects increases or if other problems are observed after approval that were not seen or anticipated during pre-approval clinical trials, a number of potentially significant negative consequences could result, including:

regulatory authorities may withdraw their approval of the product;

we may be required to reformulate such products or change the way the product is manufactured;

we may become the target of lawsuits, including class action suits; and

our reputation in the market place may suffer resulting in a significant drop in the sales of such products.

Any of these events could substantially increase the costs and expenses of developing, commercializing and marketing any such product candidates or could harm or prevent sales of any approved products.

The number of subjects in our study pools in our clinical trials may be deemed by regulators to be too small, which could cause unanticipated delays or higher than anticipated costs.

Our clinical trials have been conducted on a pool of subjects that is structured for such research. Nevertheless, there is the possibility that for statistical reasons, the pool of subjects may be determined by the FDA or another regulatory body to be too small to verify statistical significance. In such a case, the conclusions from the previous trials will need to be established with at least another set of clinical trials testing the relevant issue. Due to the need to find new subjects for any additional clinical trials and the limited pool from which such subjects can be selected, any such determination by the FDA could result in a delay in obtaining FDA approval or require additional financial expenditures.

We may not be able to keep up with the rapid technological change in the biotechnology and pharmaceutical industries, which could make any future approved products obsolete and reduce our revenue.

Biotechnology and related pharmaceutical technologies have undergone and continue to be subject to rapid and significant change. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies. In addition, any future products that we develop, including our clinical product candidates, may become obsolete before we recover expenses incurred in developing those products, which may require that we raise additional funds to continue our operations.

Competing products and technologies may make our proposed products noncompetitive.

Flibanserin, a daily-use oral drug sold under the trade name Addyi®, has been approved by the FDA for HSDD in premenopausal women. There are other products being developed for HSDD and other FSD indications, including a number of oral combination drugs, some of which incorporate testosterone, antidepressants or PDE-5 inhibitors. There is competition to develop drugs for treatment of HSDD and FSD in both premenopausal and postmenopausal patients. Our bremelanotide drug product is intended to be administered by subcutaneous injection, and an as needed drug product for the same indication which utilizes another route of administration, such as a conventional oral drug product, may make subcutaneous bremelanotide noncompetitive.



There are three oral FDA-approved PDE-5 inhibitor drugs for the treatment of ED, other approved products and devices for ED, and other products in development for treatment of ED, including products in clinical trials. There is competition to develop drugs for ED in patients non-responsive to PDE-5 inhibitor drugs.

There are several products approved for use in treatment of obesity and related indications, and a number of other products being developed for treatment of obesity, including products in clinical trials. There is intense competition to develop drugs for treatment of obesity and related indications.

There are a number of products approved for use in treating inflammatory diseases and dermatologic indication, and other products being developed, including products in clinical trials.

We are aware of one recombinant natriuretic peptide product for acutely decompensated congestive heart failure approved and marketed in the United States, and another recombinant natriuretic peptide product approved and marketed in Japan. Clinical trials on other natriuretic peptide products are being conducted in the United States. In addition, other products for treatment of heart failure are either currently being marketed or in development, including a combination drug which increases active levels of ANP.

There are numerous products approved for use in treatment of asthma, and a number of other products being developed for treatment of acute exacerbations of asthma, including products in clinical trials. There is intense competition to develop drugs for treatment of acute exacerbations of asthma.

As discussed above, the biopharmaceutical industry is highly competitive. We are likely to encounter significant competition with respect to bremelanotide, other melanocortin receptor agonist compounds and PL-3994. Most of our competitors have substantially greater financial and technological resources than we do. Many of them also have significantly greater experience in research and development, marketing, distribution and sales than we do.

Accordingly, our competitors may succeed in developing, marketing, distributing and selling products and underlying technologies more rapidly than we can. These competitive products or technologies may be more effective and useful or less costly than bremelanotide, other melanocortin receptor agonist compounds or PL-3994. In addition, academic institutions, hospitals, governmental agencies and other public and private research organizations are also conducting research and may develop competing products or technologies on their own or through strategic alliances or collaborative arrangements.

We rely on third parties over whom we have no control to conduct preclinical studies, clinical trials and other research for our product candidates and their failure to timely perform their obligations could significantly harm our product development.

We have limited research and development staff and do not have dedicated research or development facilities. We rely on third parties and independent contractors, such as researchers at CROs and universities, in certain areas that are particularly relevant to our research and product development plans. We engage such researchers to conduct our preclinical studies, clinical trials and associated tests. These outside contractors are not our employees and may terminate their engagements with us at any time. In addition, we have limited control over the resources that these contractors devote to our programs and they may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. There is also competition for these relationships, and we may not be able to maintain our relationships with our contractors on acceptable terms. If our third-party contractors do not carry out their duties under their agreements with us, fail to meet expected deadlines or fail to comply with appropriate standards for preclinical or clinical research, our ability to develop our product candidates and obtain regulatory approval on a timely basis, if at all, may be materially adversely affected.

Production and supply of our product candidates depend on contract manufacturers over whom we have no control, with the risk that we may not have adequate supplies of our product candidates or products.

We do not have the facilities to manufacture the bremelanotide active drug ingredient, the autoinjector pen component of our bremelanotide combination product, or to fill, assemble and package our bremelanotide combination product, or to manufacture any of our other potential products such as PL-3994, PL-8177 and other melanocortin receptor agonist compounds. Our contract manufacturers must perform these manufacturing activities in a manner that complies with FDA regulations. Our ability to control third-party compliance with FDA requirements is limited to contractual remedies and rights of inspection. The manufacturers of approved products and their manufacturing facilities will be subject to continual review and periodic inspections by the FDA and other authorities where applicable, and must comply with ongoing regulatory requirements, including FDA regulations concerning GMP.

Failure of third-party manufacturers to comply with GMP, medical device QSR, or other FDA requirements may result in enforcement action by the FDA. Failure to conduct their activities in compliance with FDA regulations could delay our development programs or negatively impact our ability to receive FDA approval of our potential products or continue marketing if they are approved. Establishing relationships with new suppliers, who must be FDA-approved, is a time-consuming and costly process.



Reliance on third-party manufacturers entails risk, to which we would not be subject if we manufactured product candidates or products ourselves, including:

reliance on the third party for regulatory compliance and quality assurance;

the possible breach of the manufacturing agreement by the third party because of factors beyond our control;

the possible termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us; and

drug product supplies not meeting the requisite requirements for clinical trial use.

If we are not able to obtain adequate supplies of our product candidates, it will be more difficult for us to develop our product candidates and compete effectively. Our product candidates and any products that we and/or our potential future collaborators may develop may compete with other product candidates and products for access to manufacturing facilities.

If we are unable to establish sales and marketing capabilities within our organization or enter into and maintain agreements with third parties to market and sell our product candidates, we may be unable to generate product revenue.

We do not currently have any experience in sales, marketing and distribution of pharmaceutical products. We will need to establish sales and marketing capabilities within our organization or establish and maintain agreements with third parties to market and sell our product candidates. We do not have marketing partners for any of our products, including bremelanotide and PL-3994. If any of these products are approved by the FDA or other regulatory authorities, we must either develop marketing, distribution and selling capacity and expertise, which will be costly and time consuming, or enter into agreements with other companies to provide these capabilities. We may not be able to enter into suitable agreements on acceptable terms, if at all. Engaging a third party to perform these services could delay the commercialization of any of our product candidates, if approved for commercial sale. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and our business would suffer. In addition, if we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues are likely to be lower than if we could market and sell any products that we develop ourselves.

We will need to hire additional employees in order to commercialize our product candidates in the future. Any inability to manage future growth could harm our ability to commercialize our product candidates, increase our costs and adversely impact our ability to compete effectively.

In order to commercialize our product candidates, we will need to hire experienced sales and marketing personnel to sell and market those product candidates we decide to commercialize, and we will need to expand the number of our managerial, operational, financial and other employees to support commercialization. Competition exists for qualified personnel in the biopharmaceutical field.

Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively.

Our ability to achieve revenues from the sale of our products in development will depend, in part, on our ability to obtain adequate reimbursement from Medicare, Medicaid, private insurers and other healthcare payers.

Our ability to successfully commercialize our products in development will depend, in significant part, on the extent to which we or our marketing partners can obtain reimbursement for our products and also reimbursement at appropriate levels for the cost of our products. Obtaining reimbursement from governmental payers, insurance companies, HMOs and other third-party payers of healthcare costs is a time-consuming and expensive process. There is no guarantee that our products will ultimately be reimbursed. There is significant uncertainty concerning third-party reimbursement for the use of any pharmaceutical product incorporating new technology and third-party reimbursement might not be available for our proposed products once approved, or if obtained, might not be adequate.

There is significant uncertainty concerning the extent and scope of third-party reimbursement for products treating HSDD and other forms of FSD. Based on third-party reimbursement for approved products treating ED, we believe bremelanotide for HSDD will be classified as a Tier 3 drug, so that reimbursement will be limited for bremelanotide for treatment of premenopausal women with HSDD, assuming the product is approved by the FDA. If we are able to obtain reimbursement, continuing efforts by governmental and third-party payers to contain or reduce costs of healthcare may adversely affect our future revenues and ability to achieve profitability. Third-party payers are increasingly challenging the prices charged for diagnostic and therapeutic products and related services. Reimbursement from governmental payers is subject to statutory and regulatory changes, retroactive rate adjustments, administrative rulings and other policy changes, all of which could materially decrease the range of products for which we are reimbursed or the rates of reimbursement by government payers. In addition, recent legislation reforming the healthcare system may result in lower prices or the actual inability of prospective customers to purchase our products in development. The cost containment measures that healthcare payers and providers are instituting and the effect of any healthcare reform could materially and adversely affect our ability to operate profitably. Furthermore, even if reimbursement is available, it may not be available at price levels sufficient for us to realize a positive return on our investment, which would have a material adverse effect on our business, financial condition and results of operations.



Even if we receive regulatory approval for our products in Europe, we may not be able to secure adequate pricing and reimbursement in Europe for us or any strategic partner to achieve profitability.

Even if one or more of our products are approved in Europe, we may be unable to obtain appropriate pricing and reimbursement for such products. In most European markets, demand levels for healthcare in general and for pharmaceuticals in particular are principally regulated by national governments. Therefore, pricing and reimbursement for our products will have to be negotiated on a “Member State by Member State” basis according to national rules, as there does not exist a centralized European process. As each Member State has its own national rules governing pricing control and reimbursement policy for pharmaceuticals, there are likely to be uncertainties attaching to the review process, and the level of reimbursement that national governments are prepared to accept. In the current economic environment, governments and private payers or insurers are increasingly looking to contain healthcare costs, including costs on drug therapies. If we are unable to obtain adequate pricing and reimbursement for our products in Europe, we or a potential strategic partner or collaborator may not be able to cover the costs necessary to manufacture, market and sell the product, limiting or preventing our ability to achieve profitability.

We may incur substantial liabilities and may be required to limit commercialization of our products in response to product liability lawsuits.

The testing and marketing of medical products entails an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products or cease clinical trials. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. We currently carry \$10 million liability insurance in the aggregate as to certain clinical trial risks, but we do not have and have not obtained quotations for commercial product liability insurance. We, or any corporate collaborators, may not in the future be able to obtain insurance at a reasonable cost or in sufficient amounts, if at all. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Our internal computer systems, or those of our third-party contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. We rely on industry accepted measures and technology to secure confidential and proprietary information maintained on our computer systems. However, these measures and technology may not adequately prevent security breaches. While we do not believe that we have experienced any such system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a loss of clinical trial data for our product candidates which could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology, intellectual property, research and development or product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our product candidates could be delayed.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

If we begin commercializing any of our products in the United States, our operations may be directly, or indirectly through our customers, subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:



the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from soliciting, receiving, offering or providing remuneration, directly or indirectly, in return for or to induce either the referral of an individual for, or the purchase order or recommendation of, any item or services for which payment may be made under a federal health care program such as the Medicare and Medicaid programs;

federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;

the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;

HIPPA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and its implementing regulations, which imposes certain requirements relating to the privacy, security, and transmission of individually identifiable health information;

The federal physician sunshine requirements under the Affordable Care Act, which require manufacturers of drugs, devices, biologics, and medical supplies to report annually to the U.S. Department of Health and Human Services information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and

state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including commercial insurers, state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. Moreover, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in government health care programs, such as Medicare and Medicaid, imprisonment, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations

We are highly dependent on our management team, senior staff professionals and third-party contractors and consultants, and the loss of their services could materially adversely affect our business.

We rely on our relatively small management team and staff as well as various contractors and consultants to provide critical services. Our ability to execute our clinical programs for bremelanotide and PL-3994 and our preclinical programs for MC1r and MC4r peptide drug candidates depends on our continued retention and motivation of our

management and senior staff professionals, including executive officers and senior members of product development and management, including commercialization, who possess significant technical expertise and experience and oversee our development and commercialization programs. If we lose the services of existing key personnel, our development programs could be adversely affected if suitable replacement personnel are not recruited quickly. Our success also depends on our ability to develop and maintain relationships with contractors, consultants and scientific advisors.

There is competition for qualified personnel, contractors and consultants in the pharmaceutical industry, which makes it difficult to attract and retain the qualified personnel, contractors and consultants necessary for the development and growth of our business. Our failure to attract and retain such personnel, contractors and consultants could have a material adverse effect on our business, results of operations and financial condition.



Because we expect bremelanotide for the treatment of HSDD to be classified as a Tier 3 drug with reimbursement by third-party payers similar to approved products for treating ED, demand for this product will be tied to discretionary spending levels of our targeted patient population and particularly affected by unfavorable economic conditions. The market for HSDD may be particularly vulnerable to unfavorable economic conditions. We expect bremelanotide for the treatment of HSDD to have significant copay or deductible requirements and to be only partially reimbursed by third-party payers and, as a result, demand for this product may be tied to discretionary spending levels of our targeted patient population. The recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for bremelanotide for HSDD or any future product candidates, if approved, and our ability to raise additional capital when needed on acceptable terms, if at all. This is particularly true in Europe, which is undergoing a continued severe economic crisis. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which future economic climates and financial market conditions could adversely impact our business.

#### Risks Related to Government Regulation

Both before and after marketing approval, our product candidates are subject to ongoing regulatory requirements and, if we fail to comply with these continuing requirements, we could be subject to a variety of sanctions and the sale of any approved commercial products could be suspended.

Both before and after regulatory approval to market a particular product candidate, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising and promotion and record keeping related to the product candidates are subject to extensive regulatory requirements. If we fail to comply with the regulatory requirements of the FDA and other applicable U.S. and foreign regulatory authorities, we could be subject to administrative or judicially imposed sanctions, including:

restrictions on the products or manufacturing process;

warning letters;

civil or criminal penalties;

finest;

injunctions;

imposition of a Corporate Integrity Agreement requiring heightened monitoring of our compliance functions, overseen by outside monitors, and enhanced reporting requirements to, and oversight by, the FDA and other government agencies;

product seizures or detentions and related publicity requirements;

suspension or withdrawal of regulatory approvals;

regulators or IRBs may not authorize us or any potential future collaborators to commence a clinical trial or conduct a clinical trial at a prospective trial site;

total or partial suspension of production; and

refusal to approve pending applications for marketing approval of new product candidates.

Changes in the regulatory approval policy during the development period, changes in or the enactment of additional regulations or statutes, or changes in the regulatory review for each submitted product application may cause delays in

the approval or rejection of an application. Even if the FDA approves a product candidate, the approval may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, marketing and/or production of such product, and may impose ongoing requirements for post-approval studies, including additional research and development and clinical trials. The approval may also impose risk evaluation mitigation strategies, or REMS, on a product if the FDA believes there is a reason to monitor the safety of the drug in the marketplace. REMS may include requirements for additional training for health care professionals, safety communication efforts and limits on channels of distribution, among other things. The sponsor would be required to evaluate and monitor the various REMS activities and adjust them if need be. The FDA also may impose various civil or criminal sanctions for failure to comply with regulatory requirements, including withdrawal of product approval.

Furthermore, the approval procedure and the time required to obtain approval varies among countries and can involve additional testing beyond that required by the FDA. Approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions. The FDA has substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies.



In addition, varying interpretations of the data obtained for preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Even if we submit an application to the FDA for marketing approval of a product candidate, it may not result in marketing approval from the FDA.

We do not expect to receive regulatory approval for the commercial sale of any of our product candidates that are in development in the near future, if at all. The inability to obtain FDA approval or approval from comparable authorities in other countries for our product candidates would prevent us or any potential future collaborators from commercializing these product candidates in the United States or other countries.

We may not be able to obtain regulatory approval of bremelanotide for HSDD even if the product is effective in treating HSDD.

Clinical drug development programs for our product candidates are very expensive, time-consuming, difficult to design and implement and their outcome is inherently uncertain. Approval of bremelanotide for treatment of HSDD in premenopausal women requires a determination by the FDA that the product is both safe and effective. Our Phase 2B clinical trials for HSDD demonstrated an acceptable safety profile and, at selected doses, statistically significant efficacy. However, the FDA may ultimately disagree with our definition of efficacy in HSDD, our clinical trial designs, or our interpretation of our clinical trial results. Moreover, results obtained in Phase 3 clinical trials may be inconsistent with results obtained in our Phase 2B trials, and may demonstrate either an unacceptable safety profile or insufficient efficacy. It is also possible that safety or efficacy results obtained in Phase 3 clinical trials will be inconclusive. It is not possible to predict, with any assurance, whether the FDA will approve bremelanotide for any indications. The FDA may deny or delay approval of any application for bremelanotide if the FDA determines that the clinical data do not adequately establish the safety of the drug even if efficacy is established. If FDA approves bremelanotide, the approved labeling of the product may be limited or restricted in such ways as to inhibit or prevent the successful market acceptance and profitability of the product. Bremelanotide could take a significantly longer time to obtain approval than we expect and it may never gain approval. If regulatory approval of bremelanotide is delayed, limited or never obtained, our business, financial condition and results of operations would be materially adversely affected.

The regulatory approval process is lengthy, expensive and uncertain, and may prevent us from obtaining the approvals that we require.

Government authorities in the United States and other countries extensively regulate the advertising, labeling, storage, record-keeping, safety, efficacy, research, development, testing, manufacture, promotion, marketing and distribution of drug products. Drugs are subject to rigorous regulation in the United States by the FDA and similar regulatory bodies in other countries. The steps ordinarily required by the FDA before a new drug may be marketed in the United States include:

completion of non-clinical tests including preclinical laboratory and formulation studies and animal testing and toxicology;

submission to the FDA of an investigational new drug, or IND, application, which must become effective before clinical trials may begin, and which may be placed on “clinical hold” by the FDA, meaning the trial may not commence, or must be suspended or terminated prior to completion;

performance of adequate and well-controlled Phase 1, 2 and 3 human clinical trials to establish the safety and efficacy of the drug for each proposed indication, and potentially post-approval or Phase 4 studies to further define the drug’s efficacy and safety, generally or in specific patient populations;

submission to the FDA of a new drug application, or NDA, that must be accompanied by a substantial “user fee” payment;

FDA review and approval of the NDA before any commercial marketing or sale; and

compliance with post-approval commitments and requirements.

Satisfaction of FDA pre-market approval requirements for new drugs typically takes a number of years and the actual time required for approval may vary substantially based upon the type, complexity and novelty of the product or disease to be treated by the drug. The results of product development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA. The NDA also must contain extensive manufacturing information, demonstrating compliance with applicable GMP requirements. Once the submission has been accepted for filing, the FDA generally has twelve months to review the application and respond to the applicant. Such response may be an approval, or may be a “complete response letter” outlining additional data or steps that must be completed prior to further FDA review of the NDA. The review process is often significantly extended by FDA requests for additional information or clarification. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical trials is not always conclusive and may be susceptible to varying interpretations that could delay, limit or prevent regulatory approval. The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved, but the FDA is not bound by the recommendation of the advisory committee. The FDA may deny or delay approval of applications that do not meet applicable regulatory criteria or if the FDA determines that the clinical data do not adequately establish the safety and efficacy of the drug. Therefore, our proposed products could take a significantly longer time than we expect or may never gain approval. If regulatory approval is delayed or never obtained, our business, financial condition and results of operations would be materially adversely affected.



Some of our products or product candidates, including bremelanotide, may be used in combination with a drug delivery device, such as an injector or other delivery system. Medical products containing a combination of new drugs, biological products or medical devices are regulated as “combination products” in the United States. A combination product generally is defined as a product comprised of components from two or more regulatory categories (e.g., drug/device, device/biologic, drug/biologic). Each component of a combination product is subject to the requirements established by the FDA for that type of component, whether a new drug, biologic or device. In order to facilitate pre-market review of combination products, the FDA designates one of its centers to have primary jurisdiction for the pre-market review and regulation of the overall product based upon a determination by the FDA of the primary mode of action of the combination product. The determination whether a product is a combination product or two separate products is made by the FDA on a case-by-case basis. Our product candidates intended for use with such devices, or expanded indications that we may seek for our products used with such devices, may not be approved or may be substantially delayed in receiving approval if the devices do not gain and/or maintain their own regulatory approvals or clearances. Where approval of the drug product and device is sought under a single application, the increased complexity of the review process may delay approval. In addition, because these drug delivery devices are provided by single source unaffiliated third-party companies, we are dependent on the sustained cooperation and effort of those third-party companies both to supply the devices, maintain their own regulatory compliance, and, in some cases, to conduct the studies required for approval or other regulatory clearance of the devices. We are also dependent on those third-party companies continuing to maintain such approvals or clearances once they have been received. Failure of third-party companies to supply the devices, to successfully complete studies on the devices in a timely manner, or to obtain or maintain required approvals or clearances of the devices, and maintain compliance with all regulatory requirements, could result in increased development costs, delays in or failure to obtain regulatory approval and delays in product candidates reaching the market or in gaining approval or clearance for expanded labels for new indications.

Upon approval, a product candidate may be marketed only in those dosage forms and for those indications approved by the FDA. Once approved, the FDA may withdraw the product approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the marketplace. In addition, the FDA may require post-marketing studies, referred to as Phase 4 studies, to monitor the approved products in a specific subset of patients or a larger number of patients than were required for product approval and may limit further marketing of the product based on the results of these post-market studies. The FDA has broad post-market regulatory and enforcement powers, including the ability to seek injunctions, levy fines and civil penalties, criminal prosecution, withdraw approvals and seize products or request recalls.

If regulatory approval of any of our product candidates is granted, it will be limited to certain disease states or conditions, patient populations, duration or frequency of use, and will be subject to other conditions as set forth in the FDA-approved labeling. Adverse experiences with the product must be reported to the FDA and could result in the imposition of market restriction through labeling changes or in product removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

Outside the United States, our ability to market our product candidates will also depend on receiving marketing authorizations from the appropriate regulatory authorities. The foreign regulatory approval process generally includes all of the risks associated with FDA approval described above. The requirements governing the conduct of clinical trials and marketing authorization vary widely from country to country. At present, foreign marketing authorizations are applied for at a national level, although within the European Community, or EC, registration procedures are available to companies wishing to market a product to more than one EC member state. If the regulatory authority is satisfied that adequate evidence of safety, quality and efficiency has been presented, a marketing authorization will be granted. If we do not obtain, or experience difficulties in obtaining, such marketing authorizations, our business, financial condition and results of operations may be materially adversely affected.



Legislative or regulatory healthcare reforms in the United States may make it more difficult and costly for us to obtain regulatory clearance or approval of bremelanotide for HSDD or any future product candidates and to produce, market and distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in Congress, and court decisions are issued, that could significantly change the statutory provisions governing the regulatory clearance or approval, manufacture and marketing of regulated products or the reimbursement thereof. In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of bremelanotide for HSDD or any future product candidates. We cannot determine what effect changes in regulations, statutes, court decisions, legal interpretation or policies, when and if promulgated, enacted, issued or adopted may have on our business in the future. Such changes could, among other things:

require changes to manufacturing methods;

require recall, replacement or discontinuance of one or more of our products;

require additional recordkeeping;

limit or restrict our ability to engage in certain types of marketing or promotional activities;

alter or eliminate the scope or terms of any currently available regulatory exclusivities; and

restrict or eliminate our ability to settle any patent litigation we may bring against potential generic competitors.

Each of these would likely entail substantial time and cost and could materially harm our business and our financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm our business, financial condition and results of operations.

Changes in healthcare policy could adversely affect our business.

U.S. and foreign governments continue to propose and pass legislation designed to reduce the cost of healthcare. For example, the Medicare Prescription Drug Improvement and Modernization Act of 2003, or MMA, expanded Medicare coverage for drugs purchased by Medicare beneficiaries and introduced new reimbursement methodologies. In addition, this law provided authority for limiting the number of drugs that will be covered in any therapeutic class. We do not know what impact the MMA and similar laws will have on the availability of coverage for and the price that we receive for any approved products. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payers often follow Medicare policies in setting their own reimbursement policies, and any reduction in reimbursement that results from the MMA may result in similar reductions by private payers.

In March 2010, the President signed the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, together the ACA. This law has resulted in an increase in the number of people who are covered by both public and private insurance and has changed the way health care is financed by both government health program and private insurers, with significant impacts on the pharmaceutical industry. The ACA contains a number of provisions that may impact our business and operations in ways that may negatively affect our potential revenues in the future. For example, the ACA imposes a non-deductible excise tax on pharmaceutical manufacturers or importers that sell branded prescription drugs to U.S. government programs which we believe will increase the cost of any products that we develop. Moreover, the ACA established a 2.3% medical device excise tax on certain transactions, including many United States sales of medical devices, which currently includes, and we expect will continue to include, United States sales of drug/device combination products. While the 2.3% medical device excise tax has been suspended for two years, until September 2017, unless legislative action is taken it will go back into effect after the suspension period. In addition, as part of the ACA's provisions closing a funding gap that currently exists in the Medicare Part D prescription drug program (commonly known as the "donut hole"), we will be required to provide a 50% discount on any branded prescription drugs that we develop sold to beneficiaries who fall within the donut hole. While it is too early to predict all of the specific effects the ACA or any future healthcare

reform legislation will have on our business, they could have a material adverse effect on our business and financial condition.

The availability of government reimbursement for prescription drugs will be impacted by the Budget Control Act of 2011, which was signed into law on August 2, 2011. This law is expected to result in federal spending cuts totaling between \$1.2 trillion and \$1.5 trillion over the next decade, over half of which will include cuts in Medicare and other health-related spending.

#### Risks Related to Our Intellectual Property

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights would diminish.

Our success, competitive position and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties. We cannot predict:



the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;

if and when patents will be issued;

whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; and

whether we will need to initiate litigation or administrative proceedings, which may be costly whether we win or lose. If our products, methods, processes and other technologies infringe the proprietary rights of other parties we could incur substantial costs and we may have to:

obtain licenses, which may not be available on commercially reasonable terms, if at all;

redesign our products or processes to avoid infringement;

stop using the subject matter claimed in the patents held by others;

pay damages; or

defend litigation or administrative proceedings, which may be costly whether we win or lose, and which could result in a substantial diversion of our management resources.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property or the patents of our licensors, which could be expensive and time consuming.

Competitors may infringe our intellectual property, including our patents or the patents of our licensors. As a result, we may be required to file infringement claims to stop third-party infringement or unauthorized use. This can be expensive, particularly for a company of our size, and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patent claims do not cover its technology or that the factors necessary to grant an injunction against an infringer are not satisfied.

An adverse determination of any litigation or other proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference, derivation or other proceedings brought at the United States Patent and Trademark Office, or USPTO, may be necessary to determine the priority or patentability of inventions with respect to our patent applications or those of our licensors or collaborators. Litigation or USPTO proceedings brought by us may fail or may be invoked against us by third parties. Even if we are successful, domestic or foreign litigation or USPTO or foreign patent office proceedings may result in substantial costs and distraction to our management. We may not be able, alone or with our licensors or collaborators, to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other proceedings, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or proceedings. In addition, during the course of this kind of litigation or proceedings, there could be public announcements of the results of hearings, motions or other interim proceedings or developments or public access to related documents. If investors perceive these results to be negative, the market price for our common stock could be significantly harmed.

If we infringe or are alleged to infringe intellectual property rights of third parties, our business could be harmed.

Our research, development and commercialization activities may infringe or otherwise violate or be claimed to infringe or otherwise violate patents owned or controlled by other parties. There may also be patent applications that have been filed but not published that, when issued as patents, could be asserted against us. These third parties could

bring claims against us that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

As a result of patent infringement claims, or to avoid potential claims, we may choose or be required to seek licenses from third parties. These licenses may not be available on acceptable terms, or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us might be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms, if at all.



There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical industry. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference, derivation or post-grant proceedings declared or granted by the USPTO and similar proceedings in foreign countries, regarding intellectual property rights with respect to our current or future products. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Patent litigation and other proceedings may also absorb significant management time. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could impair our ability to compete in the marketplace. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition or results of operations. We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States and in some cases may even force us to grant a compulsory license to competitors or other third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

In addition, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in domestic and foreign intellectual property laws.

If we are unable to keep our trade secrets confidential, our technologies and other proprietary information may be used by others to compete against us.

In addition to our reliance on patents, we attempt to protect our proprietary technologies and processes by relying on trade secret laws and agreements with our employees and other persons who have access to our proprietary information. These agreements and arrangements may not provide meaningful protection for our proprietary technologies and processes in the event of unauthorized use or disclosure of such information, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, our competitors may independently develop substantially equivalent technologies and processes or gain access to our trade secrets or technology, either of which could materially and adversely affect our competitive position.

#### Risks Related to Obligations in Our 2012, 2014 and 2015 Private Placements

Under agreements relating to our 2012, 2014 and 2015 private placements, we are required to allow purchasers in the 2012, 2014 and 2015 private placements to participate in certain future equity and debt financings, which may restrict our ability to raise funds on acceptable terms, or at all.

For six years after our 2012 private placement, unless the purchasers own less than 20% of our outstanding common stock calculated as if the warrants were exercised, and for four years after our 2014 and 2015 private placements,

unless the FDA earlier approves bremelanotide for HSDD, the purchasers have the right of first negotiation on any subsequent equity or debt financing. Under our 2012 private placement, if we do not agree to terms of a financing with the purchasers, and negotiate with a third party on a financing, we must offer to sell to the purchasers at least 55% of the financing, and the purchasers may elect to purchase all or a portion of the financing. Under our 2014 and 2015 private placements, if we do not agree to terms of a financing with the purchasers, depending on pricing of the financing, the purchasers have the right to purchase between 83.5% and all of the financing. We will require significant additional resources and capital for our bremelanotide development program, including completing safety and ancillary studies, preparing and submitting an NDA, and implementing commercial scale manufacturing, as well as for our other clinical trial programs. The right of first negotiation and right of participation granted to the purchasers in our 2012, 2014 and 2015 private placements may make it more difficult to raise additional funding through public or private equity or debt financings or other sources. If we are able to obtain additional funding, such funding may not be available on acceptable terms



Under agreements relating to our 2012, 2014 and 2015 private placements, so long as any Series A 2012, Series B 2012, Series C 2014 and Series E 2015 warrants are outstanding, we are required to redeem such warrants at the option of the holders in the event of any takeover, change of control or other fundamental transaction which we permit.

Under the purchase agreements and forms of our Series A, Series B, Series C and Series E warrants for our 2012, 2014 and 2015 private placements, if we permit, make or allow a takeover, change of control or other fundamental transaction, including any transfer of all or substantially all of our properties or assets, then so long as any warrants remain outstanding we are required, as elected by such warrant holders, to pay such holders a warrant early termination price tied to the greater of the then market price of our common stock or the amount per share paid to any other person. The application of these provisions could adversely affect our financial position and have the effect of delaying or preventing a change of control or other fundamental transaction, which could adversely affect the market price of our common stock, and could make any potential acquisition or change of control more costly.

Under agreements relating to our 2012, 2014 and 2015 private placements, so long as any Series A 2012, Series B 2012, Series C 2014 and Series E 2015 warrants are outstanding, we are required to oppose any takeover or change of control that does not provide specified rights to holders of such warrants.

Under the purchase agreements and forms of our Series A, Series B, Series C and Series E warrants for our 2012, 2014 and 2015 private placements, so long as any such warrants remain outstanding we are required to (i) not permit, (ii) take necessary action to prevent both the occurrence or consummation of, and (iii) not be a party to any fundamental transaction, change of control or similar event unless contractually-specified rights are provided with respect to payment of any such warrant early termination price tied to the greater of the then market price of our common stock or the amount per share paid to any other person.

We are also required, subject to the exercise by our board of its fiduciary duties, to take all reasonable efforts to adopt a poison pill or any other anti-takeover provision or method necessary to prevent the fundamental transaction, change of control or similar event. The application of these provisions could have the effect of delaying or preventing a change of control or other fundamental transaction, which could adversely affect the market price of our common stock, and could make any potential acquisition or change of control more costly.

#### Risks Related to the Ownership of Our Common Stock

Our stock price is volatile and may fluctuate in a way that is disproportionate to our operating performance and we expect it to remain volatile, which could limit investors' ability to sell stock at a profit.

The volatile price of our stock makes it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time or to plan purchases and sales in advance. A variety of factors may affect the market price of our common stock. These include, but are not limited to:

publicity regarding actual or potential clinical results relating to products under development by our competitors or us;

delay or failure in initiating, completing or analyzing preclinical or clinical trials or unsatisfactory designs or results of these trials;

interim decisions by regulatory agencies, including the FDA, as to clinical trial designs, acceptable safety profiles and the benefit/risk ratio of products under development;

achievement or rejection of regulatory approvals by our competitors or by us;

announcements of technological innovations or new commercial products by our competitors or by us;

developments concerning proprietary rights, including patents;

developments concerning our collaborations;

regulatory developments in the United States and foreign countries;

economic or other crises and other external factors;

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period-to-period fluctuations in our revenue and other results of operations;

changes in the structure of healthcare payment systems or other actions that affect the effective reimbursement rates for treatment regimens containing our products;

changes in financial estimates and recommendations by securities analysts following our business or our industry;

sales of our common stock (or the perception that such sales could occur); and

the other factors described in this “Risk Factors” section.

We will not be able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance. If our revenues, if any, in any particular period do not meet expectations, we may not be able to adjust our expenditures in that period, which could cause our operating results to suffer further. If our operating results in any future period fall below the expectations of securities analysts or investors, our stock price may fall by a significant amount.

For the 12-month period ended June 30, 2016, the price of our stock has been volatile, ranging from a high of \$1.18 per share to a low of \$0.36 per share. In addition, the stock market in general, and the market for biotechnology companies in particular, has experienced extreme price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance.

As a public company in the United States, we are subject to the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley. We can provide no assurance that we will, at all times, in the future be able to report that our internal controls over financial reporting are effective.

Companies that file reports with the SEC, including us, are subject to the requirements of Section 404 of Sarbanes-Oxley. Section 404 requires management to establish and maintain a system of internal control over financial reporting, and annual reports on Form 10-K filed under the Exchange Act, must contain a report from management assessing the effectiveness of a company’s internal control over financial reporting. Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis will be a costly and time-consuming effort that needs to be re-evaluated frequently. Failure on our part to have effective internal financial and accounting controls would cause our financial reporting to be unreliable, could have a material adverse effect on our business, operating results, and financial condition, and could cause the trading price of our common stock to fall dramatically.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.

As a smaller company, it may be difficult for us to attract or retain the interest of equity research analysts. A lack of research coverage may adversely affect the liquidity of and market price of our common stock. We do not have any control of the equity research analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company, or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Holders of our preferred stock may have interests different from our common stockholders.

We are permitted under our certificate of incorporation to issue up to 10,000,000 shares of preferred stock. We can issue shares of our preferred stock in one or more series and can set the terms of the preferred stock without seeking any further approval from our common stockholders. 4,030 shares of our Series A Preferred Stock remain outstanding as of September 16, 2016. Each share of Series A Preferred Stock is convertible at any time, at the option of the holder, and such conversion could dilute the value of our common stock to current stockholders and could adversely affect the market price of our common stock. The conversion price decreases if we sell common stock (or equivalents) for a price per share less than the conversion price or less than the market price of the common stock and is also

subject to adjustment upon the occurrence of a merger, reorganization, consolidation, reclassification, stock dividend or stock split which results in an increase or decrease in the number of shares of common stock outstanding. Upon (i) liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, (ii) sale or other disposition of all or substantially all of the assets of the Company, or (iii) any consolidation, merger, combination, reorganization or other transaction in which the Company is not the surviving entity or in which the shares of common stock constituting in excess of 50% of the voting power of the Company are exchanged for or changed into other stock or securities, cash and/or any other property, after payment or provision for payment of the debts and other liabilities of the Company, the holders of Series A Preferred Stock will be entitled to receive, pro rata and in preference to the holders of any other capital stock, an amount per share equal to \$100 plus accrued but unpaid dividends, if any. Any preferred stock that we issue may rank ahead of our common stock in terms of dividend priority or liquidation premiums and may have greater voting rights than our common stock.



Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gains.

We do not anticipate paying any cash dividends in the foreseeable future and intend to retain future earnings, if any, for the development and expansion of our business. Our outstanding Series A Preferred Stock, consisting of 4,030 shares on September 16, 2016, provides that we may not pay a dividend or make any distribution to holders of any class of stock unless we first pay a special dividend or distribution of \$100 per share to the holders of the Series A Preferred Stock. In addition, the terms of existing or future agreements may limit our ability to pay dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Anti-takeover provisions of Delaware law and our charter documents may make potential acquisitions more difficult and could result in the entrenchment of management.

We are incorporated in Delaware. Anti-takeover provisions of Delaware law and our charter documents may make a change in control or efforts to remove management more difficult. Also, under Delaware law, our board of directors may adopt additional anti-takeover measures. Under Section 203 of the Delaware General Corporation Law, a corporation may not engage in a business combination with an “interested stockholder” for a period of three years after the date of the transaction in which the person first becomes an “interested stockholder,” unless the business combination is approved in a prescribed manner.

We are authorized to issue up to 300,000,000 shares of common stock. To the extent that we sell or otherwise issue authorized but currently unissued shares, this could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock.

Our charter authorizes us to issue up to 10,000,000 shares of preferred stock and to determine the terms of those shares of stock without any further action by our stockholders. If we exercise this right, it could be more difficult for a third party to acquire a majority of our outstanding voting stock.

In addition, our equity incentive plans generally permit us to accelerate the vesting of options and other stock rights granted under these plans in the event of a change of control. If we accelerate the vesting of options or other stock rights, this action could make an acquisition more costly.

The application of these provisions could have the effect of delaying or preventing a change of control, which could adversely affect the market price of our common stock.

We are a smaller reporting company and the reduced disclosure requirements applicable to smaller reporting companies may make our Common Stock less attractive to investors.

We are currently a “smaller reporting company” as defined in the Exchange Act. Smaller reporting companies are able to provide simplified executive compensation disclosures in their filings, are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that an independent registered public accounting firm provide an attestation report on the effectiveness of internal control over financial reporting, and have certain other decreased disclosure obligations in their SEC filings. We cannot predict whether investors will find our common stock less attractive because of our reliance on any of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. As of September 16, 2016 there were 129,030,427 shares of common stock underlying outstanding convertible preferred stock, options, restricted stock units and warrants. Stockholders may experience dilution from the conversion of preferred stock, exercise of outstanding options and warrants and vesting of restricted stock units. As of September 16, 2016, holders of our outstanding dilutive securities had the right to acquire the following amounts of underlying common stock:

60,592 shares issuable on the conversion of immediately convertible Series A Convertible preferred stock, subject to adjustment, for no further consideration;

6,409,020 shares issuable on the exercise of stock options, at exercise prices ranging from \$0.49 to \$24.90 per share;

3,559,768 shares issuable under restricted stock units which vest on dates between December 8, 2016 and January 11, 2020, subject to the fulfillment of service conditions; and

119,001,047 shares issuable on the exercise of warrants at exercise prices ranging from \$0.01 to \$1.00 per share, of which 84,546,764 are prefunded warrants with an exercise price of \$0.01.

If the holders convert, exercise or receive these securities, or similar dilutive securities we may issue in the future, stockholders may experience dilution in the net book value of their common stock. In addition, the sale or availability for sale of the underlying shares in the marketplace could depress our stock price. We have registered or agreed to register for resale substantially all of the underlying shares listed above. Holders of registered underlying shares could resell the shares immediately upon issuance, which could result in significant downward pressure on our stock price.



Our failure to meet the continued listing requirements of the NYSE MKT could result in a de-listing of our common stock.

Our common shares are listed on the NYSE MKT, a national securities exchange, under the symbol "PTN". Although we currently meet the NYSE MKT's listing standards, which generally mandate that we meet certain requirements relating to stockholders' equity, market capitalization, aggregate market value of publicly held shares and distribution requirements, we cannot assure you that we will be able to continue to meet the NYSE MKT's listing requirements. If we fail to satisfy the continued listing requirements of the NYSE MKT, such as the corporate governance requirements or the minimum closing bid price requirement, the NYSE MKT may take steps to de-list our common stock. If the NYSE MKT delists our securities for trading on its exchange, we could face significant material adverse consequences, including:

a limited availability of market quotations for our securities;

reduced liquidity with respect to our securities;

a determination that our shares of common stock are "penny stock" which will require brokers trading in our shares of common stock to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for our shares of common stock;

a limited amount of news and analyst coverage for our company; and

a decreased ability to issue additional securities or obtain additional financing in the future.

Such a de-listing would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a de-listing, we may take actions to restore our compliance with the NYSE MKT's listing requirements, but we can provide no assurance that any such action taken by us would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the NYSE MKT minimum bid price requirement or prevent future non-compliance with the NYSE MKT's listing requirements.

The National Securities Markets Improvement Act of 1996, which is a federal statute, prevents or preempts the states from regulating the sale of certain securities, which are referred to as "covered securities." Our common shares are considered to be covered securities because they are listed on the NYSE MKT. Although the states are preempted from regulating the sale of our securities, the federal statute does allow the states to investigate companies if there is a suspicion of fraud, and, if there is a finding of fraudulent activity, then the states can regulate or bar the sale of covered securities in a particular case. Further, if we were no longer listed on the NYSE MKT, our common stock would not be covered securities and we would be subject to regulation in each state in which we offer our securities.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate offices are located at 4B Cedar Brook Drive, Cedar Brook Corporate Center, Cranbury, NJ 08512, where we lease approximately 10,000 square feet of office space under a lease that expires in June 2020. We also lease approximately 1,000 square feet of laboratory space in the Township of South Brunswick, NJ, under a lease that expires in July 2017. We believe our present facilities are adequate for our current needs. We do not own any real property.

Item 3. Legal Proceedings

We are involved, from time to time, in various claims and legal proceedings arising in the ordinary course of our business. We are not currently a party to any claim or legal proceeding.

Item 4. Mine Safety Disclosures

Not applicable.





## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The table below provides, for the fiscal quarters indicated, the reported high and low sales prices for our common stock on the NYSE MKT since July 1, 2014.

## FISCAL YEAR ENDED JUNE 30, 2016 HIGH LOW

|                |        |        |
|----------------|--------|--------|
| Fourth Quarter | \$0.74 | \$0.40 |
| Third Quarter  | 0.69   | 0.36   |
| Second Quarter | 0.90   | 0.62   |
| First Quarter  | 1.18   | 0.80   |

## FISCAL YEAR ENDED JUNE 30, 2015 HIGH LOW

|                |        |        |
|----------------|--------|--------|
| Fourth Quarter | \$1.58 | \$0.85 |
| Third Quarter  | 1.34   | 0.65   |
| Second Quarter | 0.93   | 0.59   |
| First Quarter  | 1.28   | 0.82   |

Our common stock has been listed on NYSE MKT under the symbol "PTN" since December 21, 1999. It previously traded on The Nasdaq SmallCap Market under the symbol "PLTN."

On September 16, 2016, we had approximately 105 record holders of common stock and the closing sales price of our common stock as reported on the NYSE MKT was \$0.50 per share.

Issuer purchases of equity securities. We have not and do not currently intend to retire or repurchase any of our capital securities other than providing our employees with the option to withhold shares to satisfy tax withholding amounts due from employees upon the vesting of restricted stock units in connection with our 2011 Stock Incentive Plan. The following 123,127 shares were withheld during the quarter ended June 30, 2016 at the direction of the employees as permitted under the 2011 Stock Incentive Plan in order to pay the minimum amount of tax liability owed by the employee from the vesting of those units:

| Period           | Total Number of Shares Purchased (1) | Weighted Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Maximum Number of Shares that May Yet be Purchased Under Announced Plans or Programs |
|------------------|--------------------------------------|---------------------------------------|--|--|
| April 1-30, 2016 | -                                    | -                                     | -  | -  |
| May 1-31, 2016   | -                                    | -                                     | -  | -  |
| June 1-30, 2016  | 123,127                              | \$0.47                                | -  | -  |
| Total            | 123,127                              | \$0.47                                | -  | -  |

(1) Consists solely of 123,127 shares that were withheld to satisfy tax withholding amounts due from employees upon the vesting of previously issued restricted stock units.

Dividends and dividend policy. We have never declared or paid any dividends. We currently intend to retain earnings, if any, for use in our business. We do not anticipate paying dividends in the foreseeable future.

Dividend restrictions. Our outstanding Series A Preferred Stock, consisting of 4,030 shares on September 16, 2016, provides that we may not pay a dividend or make any distribution to holders of any class of stock unless we first pay a special dividend or distribution of \$100 per share to the holders of the Series A Preferred Stock.

Equity Compensation Plan Information. Reference is made to the information contained in the Equity Compensation Plan table contained in Item 12 of this Annual Report.

Item 6. Selected Financial Data.

Not Applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with the consolidated financial statements and notes to the consolidated financial statements filed as part of this Annual Report.



### Forward-Looking Statements

The following discussion and analysis contains forward-looking statements within the meaning of the federal securities laws. You are urged to carefully review our description and examples of forward-looking statements included earlier in this Annual Report on Form 10-K immediately prior to Part I, under the heading “Forward-Looking Statements.” Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. You are urged to carefully review the disclosures we make concerning risks and other factors that may affect our business and operating results, including those made in Part I, Item 1A of this Annual Report on Form 10-K, and any of those made in our other reports filed with the SEC. You are cautioned not to place undue reliance on the forward-looking statements included herein, which speak only as of the date of this document. We do not intend, and undertake no obligation, to publish revised forward-looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.

### Critical Accounting Policies and Estimates

Our significant accounting policies are described in Note 2 to the consolidated financial statements included in this Annual Report. We believe that our accounting policies and estimates relating to revenue recognition, accrued expenses and stock-based compensation charges are the most critical.

#### Revenue Recognition.

Revenue resulting from license fees is recognized upon delivery of the license for the portion of the license fee payment that is non-contingent and non-refundable, if the license has standalone value. Revenue resulting from the achievement of development milestones is recorded in accordance with the accounting guidance for the milestone method of revenue recognition. Revenue resulting from the achievement of sales milestone events is recognized when the milestone is achieved. Revenue from royalties is recorded when earned.

#### Accrued Expenses.

Third parties perform a significant portion of our development activities. We review the activities performed under significant contracts each quarter and accrue expenses and the amount of any reimbursement to be received from our collaborators based upon the estimated amount of work completed. Estimating the value or stage of completion of certain services requires judgment based on available information. If we do not identify services performed for us but not billed by the service-provider, or if we underestimate or overestimate the value of services performed as of a given date, reported expenses will be understated or overstated.

#### Stock-based Compensation.

The fair value of stock options granted has been calculated using the Black-Scholes option pricing model, which requires us to make estimates of expected volatility and expected option lives. We estimate these factors at the time of grant based on our own prior experience, public sources of information and information for comparable companies. The amount of recorded compensation related to an option grant is not adjusted for subsequent changes in these estimates or for actual experience. The amount of our recorded compensation is also dependent on our estimates of future option forfeitures. If we initially over-estimate future forfeitures, our reported expenses will be understated until such time as we adjust our estimate. Changes in estimated forfeitures will affect our reported expenses in the period of change and future periods. In addition, awards containing a market condition are valued using a multifactor Monte Carlo simulation.

The amount and timing of compensation expense to be recorded in future periods related to grants of restricted stock units may be affected by employment terminations. As a result, stock-based compensation charges may vary significantly from period to period.

### Results of Operations

Year Ended June 30, 2016 Compared to the Year Ended June 30, 2015:

Revenue – For the fiscal year ended June 30, 2016 (fiscal 2016), we did not recognize any revenue. For the fiscal year ended June 30, 2015 (fiscal 2015), we recognized \$12,951,730 in revenue pursuant to our license, co-development and commercialization agreement with Gedeon Richter.

In August 2014, we entered into a license, co-development and commercialization agreement with Gedeon Richter, which provided for \$9,763,347 in upfront payments. The non-refundable portion of the upfront payment, \$4,932,315, was recorded as revenue in the three months ended September 30, 2014 and the remaining balance was recorded as

revenue in the three months ended December 31, 2014, which became non-refundable upon initiation of our Phase 3 clinical trial program in the United States. We also recognized \$3,188,383 in the three months ended December 31, 2014 relating to the milestone payment due upon initiation of our Phase 3 clinical trial program in the United States, which was initiated in December 2014. On September 16, 2015, we entered into a termination agreement pursuant to which we and Gedeon Richter agreed to mutually and amicably terminate the license agreement.

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Research and Development – Research and development expenses were \$43,071,051 for fiscal 2016 compared to \$24,560,233 for fiscal 2015. These costs primarily relate to our bremlanotide Phase 3 clinical trial program.

Research and development expenses related to our bremlanotide, PL-3994, MC1r, MC4r and other preclinical programs were \$39,371,908 and \$21,879,136 in fiscal years 2016 and 2015, respectively. Spending to date has been primarily related to our bremlanotide for the treatment of HSDD program. The increase in research and development expenses is mainly attributable to the continued progress of Phase 3 clinical trial and development of bremlanotide for HSDD. The amount of such spending and the nature of future development activities are dependent on a number of factors, including primarily the availability of funds to support future development activities, success of our clinical trials and preclinical and discovery programs, and our ability to progress compounds in addition to bremlanotide and PL-3994 into human clinical trials.

The amounts of project spending above exclude general research and development spending, which were \$3,699,143 and \$2,681,097 in fiscal years 2016 and 2015, respectively. The increase in general research and development spending is primarily attributable to additional staffing and secondarily to the recognition of stock-based compensation primarily related to the restricted stock units granted in December 2015.

Cumulative spending from inception to June 30, 2016 is approximately \$234,800,000 on our bremlanotide program and approximately \$123,900,000 on all our other programs (which include PL-3994, PL-8177, other melanocortin receptor agonists, obesity, other discovery programs and terminated programs). Due to various risk factors described herein under “Risk Factors,” including the difficulty in currently estimating the costs and timing of future Phase 1 clinical trials and larger-scale Phase 2 and Phase 3 clinical trials for any product under development, we cannot predict with reasonable certainty when, if ever, a program will advance to the next stage of development or be successfully completed, or when, if ever, related net cash inflows will be generated.

General and Administrative – General and administrative expenses, which consist mainly of compensation and related costs, were \$6,179,084 for fiscal 2016 compared to \$5,677,654 for fiscal 2015. The increase in general and administrative expenses is primarily attributable to the recognition of stock-based compensation primarily related to the restricted stock units granted in December 2015.

Other Income (Expense) – Other income (expense) was \$(2,462,801) and \$(910,914) for fiscal 2016 and fiscal 2015, respectively. For fiscal 2016, we recognized \$50,226 of investment income offset by \$(2,513,027) of interest expense primarily related to our venture debt. For fiscal 2015, we recognized \$35,439 of investment income offset by a \$(284,656) foreign exchange transaction loss and \$(661,697) of interest expense primarily related to our venture debt.

Income Tax Benefit – We did not record any income tax benefits in fiscal 2016. For fiscal 2015, income tax benefits recorded of \$531,508 related to the sale of New Jersey state net operating loss carryforwards and tax credits. The amount of such losses and tax credits that we were able to sell depended on annual pools and allocations established by the state of New Jersey. This program enables approved, unprofitable biotechnology businesses to sell their unused Net Operating Loss Carryovers, or NOLs, and unused Research and Development, or R&D, Tax Credits to unaffiliated, profitable corporate taxpayers in the state of New Jersey.

Year Ended June 30, 2015 Compared to the Year Ended June 30, 2014:

Revenue – For the fiscal year ended June 30, 2015 (fiscal 2015), we recognized \$12,951,730 in revenue pursuant to our license, co-development and commercialization agreement with Gedeon Richter. We did not recognize any revenue for the fiscal year ended June 30, 2014 (fiscal 2014).

Research and Development – Research and development expenses were \$24,560,233 for fiscal 2015 compared to \$10,826,921 for fiscal 2014. These costs primarily relate to our bremlanotide Phase 3 clinical trial program.

Research and development expenses related to our bremlanotide, PL-3994, MC1r, MC4r and other preclinical programs were \$21,879,136 and \$7,918,537 in fiscal years 2015 and 2014, respectively. Spending to date has been primarily related our bremlanotide for the treatment of HSDD program. The increase in research and development expenses is mainly attributable to the initiation of Phase 3 clinical studies of bremlanotide for HSDD. The amounts of project spending above exclude general research and development spending, which were \$2,681,097 and \$2,908,384 in fiscal years 2015 and 2014, respectively.



General and Administrative – General and administrative expenses, which consist mainly of compensation and related costs, were \$5,677,654 for fiscal 2015 compared to \$4,960,731 for fiscal 2014. The increase was attributable to the fair value of stock-based compensation related to restricted stock units granted in June 2014 and amortized to expense through fiscal 2015 and increases in accounting and other professional services.

Other Income (Expense) – Other income (expense) was \$(910,914) and \$12,712 for fiscal 2015 and fiscal 2014, respectively. For fiscal 2015, we recognized \$35,439 of investment income offset by a \$(284,656) foreign exchange transaction loss and \$(661,697) of interest expense primarily related to our venture debt. For fiscal 2014, we recognized \$18,923 of investment income offset by \$(6,211) of interest expense.

Income Tax Benefit – Income tax benefits of \$531,508 in fiscal 2015 and \$1,846,646 in fiscal 2014 relate to the sale of New Jersey state net operating loss carryforwards and tax credits.

#### Effects of Inflation

We do not believe that inflation has had a material impact on our business, revenues or operating results during the periods presented.

#### Liquidity and Capital Resources

Since inception, we have incurred net operating losses, primarily related to spending on our research and development programs. We have financed our net operating losses primarily through debt and equity financings and amounts received under collaborative agreements.

Our product candidates are at various stages of development and will require significant further research, development and testing and some may never be successfully developed or commercialized. We may experience uncertainties, delays, difficulties and expenses commonly experienced by early stage biopharmaceutical companies, which may include unanticipated problems and additional costs relating to:

the development and testing of products in animals and humans;

product approval or clearance;

regulatory compliance;

GMP compliance;

intellectual property rights;

product introduction;

marketing, sales and competition; and

obtaining sufficient capital.

Failure to enter into or successfully perform under collaboration agreements and obtain timely regulatory approval for our product candidates and indications would impact our ability to increase revenues and could make it more difficult to attract investment capital for funding our operations. Any of these possibilities could materially and adversely affect our operations and require us to curtail or cease certain programs.

During fiscal 2016, net cash used in operating activities was \$47,363,814, compared to \$13,358,042 in fiscal 2015 and \$12,207,656 in fiscal 2014. Higher net cash outflows from operations in fiscal 2016 compared to fiscal 2015 were primarily the result of spending on our bremelanotide for the treatment of HSDD program. Higher net cash outflows from operation in fiscal 2015 compared to fiscal 2014 were primarily the result of spending on our bremelanotide for the treatment of HSDD program offset by the receipt of the upfront and milestone payments, relating to the license, co-development and commercialization agreement with Gedeon Richter on bremelanotide for the treatment of HSDD in Europe and selected other countries. Our periodic prepaid expenses, accounts payable and accrued expenses balances will continue to be highly dependent on the timing of our operating costs.

During fiscal 2016, net cash used in investing activities was \$1,404,717 consisting primarily of the purchase of investments. We did not engage in any investing activities in fiscal 2015. During fiscal 2014, net cash provided by investing activities was \$5,243,415, which consisted of \$5,249,654 of proceeds from the maturity of short-term investments offset by \$6,239 used for capital expenditures.

During fiscal 2016, net cash provided by financing activities was \$29,471,931, which consisted of a private placement with net proceeds of \$19,834,278, a loan of \$9,853,885, net of related debt issuance costs offset by \$216,232 for the payment of withholding taxes related to restricted stock units and capital lease payments. During fiscal 2015, net cash provided by financing activities was \$28,472,705, which consisted of a private placement with net proceeds of \$18,556,111, a loan of \$9,790,634, net of related issuance costs and \$254,148 of proceeds from the exercise of common stock warrants offset by \$128,188 for the payment of withholding taxes related restricted stock units and capital lease payments. During fiscal 2014, cash used in financing activities of \$18,786 consisted of the payment of withholding taxes related to restricted stock units of \$36,377 and payments on capital lease obligation of \$19,909 offset by \$37,500 of proceeds from the exercise of common stock warrants.

We have incurred cumulative negative cash flows from operations since our inception, and have expended, and expect to continue to expend in the future, substantial funds to complete our planned product development efforts. As a result, there is substantial doubt about our ability to continue as a going concern. Continued operations are dependent upon our ability to complete equity or debt financing activities or collaboration arrangements. We believe that if we do not have sufficient funding, we may have to curtail or cease certain programs or operations within twelve months. As of June 30, 2016, our cash, cash equivalents and investments were \$9,383,224 and our current liabilities were \$13,994,439. On August 4, 2016, we completed an underwritten offering of units, with each unit consisting of a share of common stock and a Series H warrant to purchase 0.75 of a share of common stock. Investors whose purchase of units in the offering would result in them beneficially owning more than 9.99% of our outstanding common stock following the completion of the offering had the opportunity to acquire units with Series I prefunded warrants substituted for any common stock they would have otherwise acquired. Gross proceeds were \$9,225,000, with net proceeds to us, after deducting estimated offering expenses, of approximately \$8,500,000. We issued 11,481,481 shares of common stock and ten year prefunded Series I warrants to purchase 2,218,045 shares of common stock at an exercise price of \$0.01, together with Series H warrants to purchase 10,274,646 shares of common stock at an exercise price of \$0.70 per share.



The Series I warrants are exercisable at an initial exercise price of \$0.01 per share, exercisable immediately upon issuance and expire on the tenth anniversary of the date of issuance. The Series I warrants are subject to limitation on exercise if the holder and its affiliates would beneficially own more than 9.99% of the total number of Palatin's shares of common stock following such exercise. The Series H warrants are exercisable at an initial exercise price of \$0.70 per share, are exercisable commencing six months following the date of issuance and expire on the fifth anniversary of the date of issuance. The Series H warrants are subject to the same beneficial ownership limitation as the Series I warrants.

We intend to utilize existing capital resources, including the proceeds from the financing, for general corporate purposes and working capital, including our bremelanotide clinical development program for HSDD, preclinical and clinical development of our MC1r and MC4r peptide programs and PL-3994 natriuretic peptide, and development of other portfolio products. Based on our current plan, we believe that the Phase 3 clinical trial program with bremelanotide, including submission of an NDA to the FDA, will cost at least \$87,000,000. We intend to seek additional capital to support the Phase 3 program through collaborative arrangements on bremelanotide, public or private equity or debt financings, or other sources.

We believe that our existing capital resources, together with approximately \$8,500,000 received from the August 2016 financing, will be adequate to fund our planned operations through the quarter ending December 31, 2016. Assuming the double blind efficacy portion of the Phase 3 clinical trial of bremelanotide for HSDD is successful, as to which there can be no assurance, we will need additional funding to complete required ancillary studies and clinical trials, prepare and submit regulatory filings for product approval, and establish commercial scale manufacturing capability. We will also need additional funding to complete required clinical trials for our other product candidates and, assuming those clinical trials are successful, as to which there can be no assurance, to complete submission of required regulatory applications to the FDA.

We anticipate incurring additional losses over at least the next few years. To achieve profitability, if ever, we, alone or with others, must successfully develop and commercialize our technologies and proposed products, conduct preclinical studies and clinical trials, obtain required regulatory approvals and successfully manufacture and market such technologies and proposed products. The time required to reach profitability is highly uncertain, and we do not know whether we will be able to achieve profitability on a sustained basis, if at all.

#### Off-Balance Sheet Arrangements

None.

#### Contractual Obligations

We have entered into various contractual obligations and commercial commitments. The following table summarizes our most significant contractual obligations as of June 30, 2016:

|                               | Payments due by Period |                  |              |             |                   |
|-------------------------------|------------------------|------------------|--------------|-------------|-------------------|
|                               | Total                  | Less than 1 Year | 1 - 3 Years  | 3 - 5 Years | More than 5 Years |
| Facility operating leases     | \$923,166              | \$255,985        | \$445,837    | \$221,344   | \$-               |
| Capital lease obligations     | 43,707                 | 29,138           | 14,569       | -           | -                 |
| Notes payable                 | 23,893,001             | 7,299,750        | 15,757,334   | 835,917     | -                 |
| Other Agreements              | 2,524,033              | 2,524,033        | -            | -           | -                 |
| Total contractual obligations | \$27,383,907           | \$10,108,906     | \$16,217,740 | \$1,057,261 | \$-               |

#### Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.





Item 8. Financial Statements and Supplementary Data.

Table of Contents

Consolidated Financial Statements

The following consolidated financial statements are filed as part of this annual report:

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders  
Palatin Technologies, Inc.:

We have audited the accompanying consolidated balance sheets of Palatin Technologies, Inc. and subsidiary as of June 30, 2016 and 2015, and the related consolidated statements of operations, stockholders' (deficiency) equity, comprehensive loss, and cash flows for each of the years in the three-year period ended June 30, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Palatin Technologies, Inc. and subsidiary as of June 30, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended June 30, 2016, in conformity with U.S. generally accepted accounting principles.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has incurred recurring net losses and negative cash flows from operations and will require substantial additional financing to continue to fund its planned developmental activities. These conditions raise substantial doubt about its ability to continue as a going concern. Management's plans regarding those matters also are discussed in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ KPMG LLP

Philadelphia, Pennsylvania

September 19, 2016



PALATIN TECHNOLOGIES, INC.  
and Subsidiary  
Consolidated Balance Sheets

|  | June 30, 2016 | June 30, 2015 |
|--|---------------|---------------|
| <b>ASSETS</b>  |               |               |
| Current assets:  |               |               |
| Cash and cash equivalents  | \$8,002,668   | \$27,299,268  |
| Available-for-sale investments   | 1,380,556     | -             |
| Prepaid expenses and other current assets  | 1,424,282     | 1,896,747     |
| Total current assets   | 10,807,506    | 29,196,015    |
| Property and equipment, net  | 97,801        | 123,158       |
| Other assets   | 146,428       | 155,279       |
| Total assets   | \$11,051,735  | \$29,474,452  |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>  |               |               |
| Current liabilities:   |               |               |
| Accounts payable   | \$713,890     | \$1,106,484   |
| Accrued expenses   | 7,767,733     | 6,223,483     |
| Notes payable, net of discount   | 5,485,392     | -             |
| Capital lease obligations  | 27,424        | 25,871        |
| Total current liabilities  | 13,994,439    | 7,355,838     |
| Notes payable, net of discount   | 14,189,809    | 9,781,086     |
| Capital lease obligations  | 14,324        | 41,749        |
| Other non-current liabilities  | 439,130       | 91,304        |
| Total liabilities  | 28,637,702    | 17,269,977    |
| Commitments and contingencies (Note 11)  |               |               |
| Stockholders' (deficiency) equity:   |               |               |
| Preferred stock of \$0.01 par value – authorized 10,000,000 shares;<br>Series A Convertible; issued and outstanding 4,030 shares as of June 30, 2016 and<br>4,697 shares as of June 30, 2015, respectively | 40            | 47            |
| Common stock of \$0.01 par value – authorized 300,000,000 shares;<br>issued and outstanding 68,568,055 shares as of June 30, 2016 and 57,128,433 as of<br>June 30, 2015, respectively                      | 685,680       | 571,284       |
| Additional paid-in capital   | 325,142,509   | 303,332,460   |
| Accumulated other comprehensive loss   | (1,944)       | -             |
| Accumulated deficit  | (343,412,252) | (291,699,316) |
| Total stockholders' (deficiency) equity  | (17,585,967)  | 12,204,475    |
| Total liabilities and stockholders' equity   | \$11,051,735  | \$29,474,452  |

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



PALATIN TECHNOLOGIES, INC.  
and Subsidiary  
Consolidated Statements of Operations

|  | Year Ended June 30,   |                       |                       |
|--|-----------------------|-----------------------|-----------------------|
|  | 2016                  | 2015                  | 2014                  |
| <b>REVENUES:</b>   |                       |                       |                       |
| License and contract   | \$-                   | \$12,951,730          | \$-                   |
| <b>OPERATING EXPENSES:</b>   |                       |                       |                       |
| Research and development   | 43,071,051            | 24,560,233            | 10,826,921            |
| General and administrative   | 6,179,084             | 5,677,654             | 4,960,731             |
| Total operating expenses   | 49,250,135            | 30,237,887            | 15,787,652            |
| Loss from operations   | (49,250,135)          | (17,286,157)          | (15,787,652)          |
| <b>OTHER INCOME (EXPENSE):</b>   |                       |                       |                       |
| Investment income  | 50,226                | 35,439                | 18,923                |
| Interest expense   | (2,513,027)           | (661,697)             | (6,211)               |
| Foreign exchange transaction loss  | -                     | (284,656)             | -                     |
| Total other income (expense), net  | (2,462,801)           | (910,914)             | 12,712                |
| Loss before income taxes   | (51,712,936)          | (18,197,071)          | (15,774,940)          |
| Income tax benefit   | -                     | 531,508               | 1,846,646             |
| <b>NET LOSS</b>  | <b>\$(51,712,936)</b> | <b>\$(17,665,563)</b> | <b>\$(13,928,294)</b> |
| Basic and diluted net loss per common share  | \$(0.33)              | \$(0.15)              | \$(0.13)              |
| Weighted average number of common shares outstanding used in computing basic and diluted net loss per common share | 156,553,534           | 121,014,506           | 106,679,476           |

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



PALATIN TECHNOLOGIES, INC.  
 and Subsidiary  
 Consolidated Statements of Comprehensive Loss

Year Ended June 30,

2016                      2015                      2014

|   |                |                |                |
|---|----------------|----------------|----------------|
| Net loss  | \$(51,712,936) | \$(17,665,563) | \$(13,928,294) |
| Other comprehensive loss:                         |                |                |                |
| Unrealized loss on available-for-sale investments | (1,944)        | -              | -              |
| Total comprehensive loss                          | \$(51,714,880) | \$(17,665,563) | \$(13,928,294) |

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



PALATIN TECHNOLOGIES, INC.  
and Subsidiary  
Consolidated Statements of Stockholders' (Deficiency) Equity

|   | Preferred Stock |        | Common Stock |         | Additional  | Accumulated | Comprehensive | Accumulated  | Total |
|---|-----------------|--------|--------------|---------|-------------|-------------|---------------|--------------|-------|
|   | Shares          | Amount | Shares       | Amount  | Paid-in     | Other       |               |              |       |
|   |                 |        |              |         | Capital     | Loss        |               |              |       |
| Balance, July 1, 2013                               | 4,697           | 47     | 39,116,948   | 391,169 | 282,692,520 | -           | (260,105,459) | 22,978,277   |       |
| Stock-based compensation                            | -               | -      | 378,750      | 3,788   | 817,552     | -           | -             | 821,340      |       |
| Withholding taxes related to restricted stock units | -               | -      | (129,103)    | (1,291) | (118,716)   | -           | -             | (120,007)    |       |
| Warrant exercises                                   | -               | -      | 50,000       | 500     | 37,000      | -           | -             | 37,500       |       |
| Net loss  | -               | -      | -            | -       | -           | -           | (13,928,294)  | (13,928,294) |       |
| Balance, June 30, 2014                              | 4,697           | 47     | 39,416,595   | 394,166 | 283,428,356 | -           | (274,033,753) | 9,788,816    |       |
| Stock-based compensation                            | -               | -      | 705,833      | 7,058   | 1,160,221   | -           | -             | 1,167,279    |       |
| Sale of common stock units, net of costs            | -               | -      | 2,050,000    | 20,500  | 18,535,611  | -           | -             | 18,556,111   |       |
| Issuance of warrants on debt                        | -               | -      | -            | -       | 267,820     | -           | -             | 267,820      |       |
| Withholding taxes related to restricted stock units | -               | -      | (174,568)    | (1,746) | (162,390)   | -           | -             | (164,136)    |       |
| Warrant exercises                                   | -               | -      | 15,130,573   | 151,306 | 102,842     | -           | -             | 254,148      |       |
| Net loss  | -               | -      | -            | -       | -           | -           | (17,665,563)  | (17,665,563) |       |
| Balance, June 30, 2015                              | 4,697           | 47     | 57,128,433   | 571,284 | 303,332,460 | -           | (291,699,316) | 12,204,475   |       |
| Stock-based compensation                            | -               | -      | 662,186      | 6,622   | 1,836,743   | -           | -             | 1,843,365    |       |
| Sale of common stock units, net of                  | -               | -      | -            | -       | 19,834,278  | -           | -             | 19,834,278   |       |

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|   |       |      |            |           |               |           |                 |                |
|---|-------|------|------------|-----------|---------------|-----------|-----------------|----------------|
| costs   |       |      |            |           |               |           |                 |                |
| Issuance of warrants on debt                        | -     | -    | -          | -         | 305,196       | -         | -               | 305,196        |
| Withholding taxes related to restricted stock units | -     | -    | (123,483)  | (1,235)   | (57,166)      | -         | -               | (58,401)       |
| Warrant exercises                                   |       |      | 10,890,889 | 108,909   | (108,909)     | -         | -               | -              |
| Series A Conversion                                 | (667) | (7)  | 10,030     | 100       | (93)          | -         | -               | -              |
| Unrealized loss on investments                      | -     | -    | -          | -         | -             | (1,944)   | -               | (1,944)        |
| Net loss  | -     | -    | -          | -         | -             | -         | (51,712,936)    | (51,712,936)   |
| Balance, June 30, 2016                              | 4,030 | \$40 | 68,568,055 | \$685,680 | \$325,142,509 | \$(1,944) | \$(343,412,252) | \$(17,585,967) |

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



PALATIN TECHNOLOGIES, INC.  
and Subsidiary  
Consolidated Statements of Cash Flows

|   | Year Ended June 30, |                   |                    |
|---|---------------------|-------------------|--------------------|
|   | 2016                | 2015              | 2014               |
| <b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>                                |                     |                   |                    |
| Net loss  | \$(51,712,936)      | \$(17,665,563)    | \$(13,928,294)     |
| Adjustments to reconcile net loss to net cash used in operating activities: |                     |                   |                    |
| Depreciation and amortization   | 43,052              | 117,590           | 111,906            |
| Non-cash interest expense   | 327,479             | 87,087            | -                  |
| Stock-based compensation  | 1,843,365           | 1,167,279         | 821,340            |
| Changes in operating assets and liabilities:                                |                     |                   |                    |
| Prepaid expenses and other assets   | 503,785             | (1,667,139)       | 176,697            |
| Accounts payable  | (392,594)           | 845,204           | (77,446)           |
| Accrued expenses  | 1,676,209           | 4,666,196         | (311,859)          |
| Unearned revenue  | -                   | (1,000,000)       | 1,000,000          |
| Other non-current liabilities   | 347,826             | 91,304            | -                  |
| Net cash used in operating activities                                       | (47,363,814)        | (13,358,042)      | (12,207,656)       |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>                                |                     |                   |                    |
| Proceeds from sale/maturity of investments                                  | -                   | -                 | 5,249,654          |
| Purchases of investments  | (1,387,022)         | -                 | -                  |
| Purchases of property and equipment   | (17,695)            | -                 | (6,239)            |
| Net cash (used in) provided by investing activities                         | (1,404,717)         | -                 | 5,243,415          |
| <b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>                                |                     |                   |                    |
| Payments on capital lease obligations                                       | (25,872)            | (12,380)          | (19,909)           |
| Payment of withholding taxes related to restricted stock units              | (190,360)           | (115,808)         | (36,377)           |
| Proceeds from exercise of common stock warrants                             | -                   | 254,148           | 37,500             |
| Proceeds from the sale of common stock and warrants, net of costs           | 19,834,278          | 18,556,111        | -                  |
| Proceeds from the issuance of notes payable and warrants                    | 10,000,000          | 10,000,000        | -                  |
| Payment of debt issuance costs  | (146,115)           | (209,366)         | -                  |
| Net cash provided by (used in) financing activities                         | 29,471,931          | 28,472,705        | (18,786)           |
| <b>NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS</b>                 | <b>(19,296,600)</b> | <b>15,114,663</b> | <b>(6,983,027)</b> |
| <b>CASH AND CASH EQUIVALENTS, beginning of year</b>                         | <b>27,299,268</b>   | <b>12,184,605</b> | <b>19,167,632</b>  |

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|  |             |              |              |
|--|-------------|--------------|--------------|
| CASH AND CASH EQUIVALENTS, end of year                 | \$8,002,668 | \$27,299,268 | \$12,184,605 |
| SUPPLEMENTAL CASH FLOW INFORMATION:                    |             |              |              |
| Cash paid for interest                                 | \$1,836,743 | \$483,306    | \$6,211      |
| Equipment acquired under capital lease                 | -           | 80,000       | -            |
| Issuance of warrants in connection with debt financing | 305,196     | 267,820      | -            |

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



PALATIN TECHNOLOGIES, INC.

and Subsidiary

Notes to Consolidated Financial Statements

(1) ORGANIZATION

Nature of Business – Palatin Technologies, Inc. (Palatin or the Company) is a biopharmaceutical company developing targeted, receptor-specific peptide therapeutics for the treatment of diseases with significant unmet medical need and commercial potential. Palatin's programs are based on molecules that modulate the activity of the melanocortin and natriuretic peptide receptor systems. The melanocortin system is involved in a large and diverse number of physiologic functions, and therapeutic agents modulating this system may have the potential to treat a variety of conditions and diseases, including sexual dysfunction, obesity and related disorders, cachexia (wasting syndrome) and inflammation-related diseases. The natriuretic peptide receptor system has numerous cardiovascular functions, and therapeutic agents modulating this system may be useful in treatment of acute asthma, heart failure, hypertension and other cardiovascular diseases.

The Company's primary product in development is bremelanotide for the treatment of hypoactive sexual desire disorder (HSDD), which is a type of female sexual dysfunction (FSD). The Company also has drug candidates or development programs for obesity, erectile dysfunction, cardiovascular diseases, pulmonary diseases, inflammatory diseases and dermatologic diseases.

Key elements of the Company's business strategy include using its technology and expertise to develop and commercialize therapeutic products; entering into alliances and partnerships with pharmaceutical companies to facilitate the development, manufacture, marketing, sale and distribution of product candidates that the Company is developing; and partially funding its product candidate development programs with the cash flow generated from third parties.

Going Concern – There is substantial doubt about the Company's ability to continue as a going concern. Since inception, the Company has incurred negative cash flows from operations, and has expended, and expects to continue to expend in the future, substantial funds to complete its planned product development efforts. As shown in the accompanying consolidated financial statements, the Company had an accumulated deficit as of June 30, 2016 of \$343,412,252 and incurred a net loss for fiscal 2016 of \$51,712,936. The Company anticipates incurring additional losses in the future as a result of spending on its development programs and will require substantial additional financing to continue to fund its planned developmental activities. To achieve profitability, if ever, the Company, alone or with others, must successfully develop and commercialize its technologies and proposed products, conduct successful preclinical studies and clinical trials, obtain required regulatory approvals and successfully manufacture and market such technologies and proposed products. The time required to reach profitability is highly uncertain, and there can be no assurance that the Company will be able to achieve profitability on a sustained basis, if at all. The accompanying consolidated financial statements have been prepared assuming that the Company continues as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amount or classification of liabilities that might result from the outcome of this uncertainty.

As discussed in Note 15, on August 4, 2016, the Company closed on an underwritten offering of units resulting in gross proceeds of \$9,225,000, with net proceeds, after deducting estimated offering expenses, of approximately \$8,500,000.

As of June 30, 2016, the Company's cash, cash equivalents and investments were \$9,383,224 and current liabilities were \$13,994,439. The Company intends to utilize existing capital resources, including the proceeds from the financing for general corporate purposes and working capital, including the Phase 3 clinical trial program with bremelanotide for HSDD and preclinical and clinical development of our other product candidates and programs, including PL-3994 and melanocortin receptor-1 and melanocortin receptor-4 programs. Management believes that the Phase 3 clinical trial program with bremelanotide, including regulatory filings for product approval, will cost at least \$87,000,000.

Management believes that the Company's existing capital resources, together with approximately \$8,500,000 received from the August 2016 financing, will be adequate to fund its planned operations through the quarter ending December 31, 2016. Assuming the double blind efficacy portion of the Phase 3 clinical trial of bremelanotide for HSDD is successful, as to which there can be no assurance, we will need additional funding to complete required ancillary studies and clinical trials, prepare and submit regulatory filings for product approval, and establish commercial scale manufacturing capability.



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The Company will need to raise additional capital to complete required ancillary studies and clinical trials, prepare and submit regulatory filings for product approval, and establish commercial scale manufacturing capability. The Company will also need additional funding to complete required clinical trials for its other product candidates and, assuming those clinical trials are successful, as to which there can be no assurance, to complete submission of required applications to the FDA. If the Company is unable to obtain approval or otherwise advance in the FDA approval process, the Company's ability to sustain its operations would be materially adversely affected.

The Company may seek the additional capital necessary to fund its operations through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements. Additional capital that is required by the Company may not be available on reasonable terms, or at all.

Concentrations – Concentrations in the Company's assets and operations subject it to certain related risks. Financial instruments that subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents and available-for-sale investments. The Company's cash and cash equivalents are primarily invested in one money market account sponsored by a large financial institution. For the years ended June 30, 2016 and 2014, the Company had no revenues reported. For the year ended June 30, 2015, 100% of revenues were from Gedeon Richter.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation – The consolidated financial statements include the accounts of Palatin and its wholly-owned inactive subsidiary. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates – The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) 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 consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents – Cash and cash equivalents include cash on hand, cash in banks and all highly liquid investments with a purchased maturity of less than three months. Cash equivalents consist of \$7,782,243 and \$26,946,378 in a money market account at June 30, 2016 and 2015, respectively.

Investments – The Company determines the appropriate classification of its investments in debt and equity securities at the time of purchase and reevaluates such determinations at each balance sheet date. Debt securities are classified as held-to-maturity when the Company has the intent and ability to hold the securities to maturity. Debt securities for which the Company does not have the intent or ability to hold to maturity are classified as available-for-sale.

Held-to-maturity securities are recorded as either short-term or long-term on the balance sheet, based on the contractual maturity date and are stated at amortized cost. Marketable securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and are reported at fair value, with unrealized gains and losses recognized in earnings. Debt and marketable equity securities not classified as held-to-maturity or as trading are classified as available-for-sale and are carried at fair market value, with the unrealized gains and losses, net of tax, included in the determination of other comprehensive (loss) income. The fair value of substantially all securities is determined by quoted market prices. The estimated fair value of securities for which there are no quoted market prices is based on similar types of securities that are traded in the market.

Fair Value of Financial Instruments – The Company's financial instruments consist primarily of cash equivalents, accounts payable and notes payable. Management believes that the carrying values of cash equivalents, available-for-sale investments and accounts payable are representative of their respective fair values based on the short-term nature of these instruments. Management believes that the carrying amount of its notes payable approximates fair value based on terms of the notes.

Credit Risk – Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents. Total cash and cash equivalent balances have exceeded insured balances by the Federal Depository Insurance Company (FDIC).





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**Property and Equipment** – Property and equipment consists of office and laboratory equipment, office furniture and leasehold improvements and includes assets acquired under capital leases. Property and equipment are recorded at cost. Depreciation is recognized using the straight-line method over the estimated useful lives of the related assets, generally five years for laboratory and computer equipment, seven years for office furniture and equipment and the lesser of the term of the lease or the useful life for leasehold improvements. Amortization of assets acquired under capital leases is included in depreciation expense. Maintenance and repairs are expensed as incurred while expenditures that extend the useful life of an asset are capitalized.

**Impairment of Long-Lived Assets** – The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable. To determine recoverability of a long-lived asset, management evaluates whether the estimated future undiscounted net cash flows from the asset are less than its carrying amount. If impairment is indicated, the long-lived asset would be written down to fair value. Fair value is determined by an evaluation of available price information at which assets could be bought or sold, including quoted market prices, if available, or the present value of the estimated future cash flows based on reasonable and supportable assumptions.

**Revenue Recognition** – Under our license, co-development and commercialization agreement with Gedeon Richter (Note 4), we received consideration in the form of a license fee and development milestone payment.

Revenue resulting from license fees is recognized upon delivery of the license for the portion of the license fee payment that is non-contingent and non-refundable, if the license has standalone value. Revenue resulting from the achievement of development milestones is recorded in accordance with the accounting guidance for the milestone method of revenue recognition.

**Research and Development Costs** – The costs of research and development activities are charged to expense as incurred, including the cost of equipment for which there is no alternative future use.

**Accrued Expenses** – Third parties perform a significant portion of our development activities. We review the activities performed under significant contracts each quarter and accrue expenses and the amount of any reimbursement to be received from our collaborators based upon the estimated amount of work completed. Estimating the value or stage of completion of certain services requires judgment based on available information. If we do not identify services performed for us but not billed by the service-provider, or if we underestimate or overestimate the value of services performed as of a given date, reported expenses will be understated or overstated.

**Stock-Based Compensation** – The Company charges to expense the fair value of stock options and other equity awards granted. The Company determines the value of stock options utilizing the Black-Scholes option pricing model. Compensation costs for share-based awards with pro-rata vesting are determined using the quoted market price of the Company's common stock on the date of grant and allocated to periods on a straight-line basis, while awards containing a market condition are valued using multifactor Monte Carlo simulations.

**Income Taxes** – The Company and its subsidiary file consolidated federal and separate-company state income tax returns. Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences or operating loss and tax credit carryforwards are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. The Company has recorded a valuation allowance against its deferred tax assets based on the history of losses incurred.

The Company did not have a sale of New Jersey state net operating loss (NJ NOL) carryforwards during the year ended June 30, 2016 and therefore did not record a tax benefit. During the years ended June 30, 2015 and 2014, the Company sold New Jersey state net operating loss carryforwards, which resulted in the recognition of \$531,508 and \$1,846,646, respectively, in tax benefits.

Net Loss per Common Share – Basic and diluted earnings per common share (EPS) are calculated in accordance with the provisions of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 260, “Earnings per Share,” which includes guidance pertaining to the warrants, issued in connection with the July 3, 2012, December 23, 2014, and July 2, 2015 private placement offerings, that are exercisable for nominal consideration and, therefore, are to be considered in the computation of basic and diluted net loss per common share. The Series A 2012 warrants issued on July 3, 2012 to purchase up to 31,988,151 shares of common stock are included in the weighted average number of common shares outstanding used in computing basic and diluted net loss per common share for all periods presented in the consolidated statements of operations.



PALATIN TECHNOLOGIES, INC.  
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The Series B 2012 warrants issued on July 3, 2012 to purchase up to 35,488,380 shares of common stock are included in the weighted average number of common shares outstanding used in computing basic and diluted net loss per common share for all periods presented in the consolidated statements of operations.

The Series C 2014 warrants to purchase up to 24,949,325 shares of common stock were exercisable starting at December 23, 2014 and, therefore are included in the weighted average number of common shares outstanding used in computing basic and diluted net loss per common share starting on December 23, 2014.

The Series E 2015 warrants to purchase up to 21,917,808 shares of common stock were exercisable starting at July 2, 2015 and, therefore are included in the weighted average number of common shares outstanding used in computing basic and diluted net loss per common share starting on July 2, 2015.

As of June 30, 2016, 2015 and 2014, there were 32,167,737, 30,212,446, and 29,358,926 common shares issuable upon conversion of Series A Convertible Preferred Stock, the exercise of outstanding options and warrants (excluding the Series A 2012, Series B 2012, Series C 2014, and Series E 2015 warrants issued in connection with the July 3, 2012, December 23, 2014, and July 2, 2015 private placement offerings), and the vesting of restricted stock units, respectively. These share amounts have been excluded from the calculation of net loss per share as the impact would be anti-dilutive.

(3) NEW AND RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments which requires measurement and recognition of expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This is different from the current guidance as this will require immediate recognition of estimated credit losses expected to occur over the remaining life of many financial assets. The new guidance will be effective for the Company on July 1, 2020. Early adoption will be available on July 1, 2019. The Company is currently evaluating the effect that the updated standard will have on its consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, Compensation – Improvement to Employee Share-Based Payment Accounting, which amends the current guidance related to stock compensation. The updated guidance changes how companies account for certain aspects of share-based payment awards to employees, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The update to the standard is effective for the Company on July 1, 2017, with early application permitted. We are evaluating the effect that the new guidance will have on its consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, Leases, related to the recognition of lease assets and lease liabilities. The new guidance requires lessees to recognize almost all leases on their balance sheet as a right-of-use asset and a lease liability, other than leases that meet the definition of a short- term lease, and requires expanded disclosures about leasing arrangements. The recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee have not significantly changed from the current guidance. Lessor accounting is similar to the current guidance, but updated to align with certain changes to the lessee model and the new revenue recognition standard. The new guidance is effective for the Company on July 1, 2019, with early adoption permitted. The Company is evaluating the impact that the new guidance will have on its consolidated financial statements and related disclosures.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments: Recognition and Measurement of Financial Assets and Financial Liabilities. The new guidance relates to the recognition and measurement of financial assets and liabilities. The new guidance makes targeted improvements to GAAP impacting equity investments (other than those accounted for under the equity method or consolidated), financial liabilities accounted for under the fair value election, and presentation and disclosure requirements for financial instruments, among other changes. The new guidance is effective for the Company on July 1, 2018, with early adoption prohibited other than for certain provisions. The Company is evaluating the impact that the new guidance will have on its consolidated financial

statements and related disclosures.

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In November 2015, the FASB issued ASU No. 2015-17, Income Taxes: Balance Sheet Classification of Deferred Taxes which simplifies the balance sheet classification of deferred taxes. The new guidance requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The current requirement that deferred tax liabilities and assets of a tax-paying component of an entity be offset and presented as a single amount is not affected by the new guidance. The new guidance is effective for the Company on July 1, 2017, with early adoption permitted as of the beginning of an interim or annual reporting period. The new guidance may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The Company is evaluating the impact that the new guidance will have on its consolidated financial statements and related disclosures; however, at the present time the Company has recorded a valuation allowance against its deferred tax assets based on the history of losses incurred.

In April 2015, the FASB issued ASU No. 2015-03, Simplifying the Presentation of Debt Issuance Costs, which requires debt issuance costs related to a recognized debt liability to be presented on the balance sheet as a direct deduction from the debt liability, similar to the presentation of debt discounts. In August 2015, the FASB issued a clarification that debt issuance costs related to line-of-credit arrangements were not within the scope of the new guidance and therefore should continue to be accounted for as deferred assets in the balance sheet, consistent with existing GAAP. The new standard is effective for the Company for its fiscal year ending June 30, 2017. The Company is evaluating the effect of the standard on its consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements-Going Concern: Disclosures of Uncertainties about an Entity's Ability to Continue as a Going Concern. The amendments in this update provide guidance in U.S. GAAP about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. In doing so, the amendments should reduce diversity in the timing and content of footnote disclosures. The new standard is effective for the Company for its fiscal year ending June 30, 2017. Early adoption is permitted. The Company is evaluating the effect of the standard, if any, on its consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. In July 2015, the FASB voted to defer the effective date of the new standard until fiscal years beginning after December 15, 2017 with early application permitted for fiscal years beginning after December 15, 2016. With the deferral, the new standard is effective for the Company on July 1, 2018, with early adoption permitted one year prior. The standard permits the use of either the retrospective or cumulative effect transition method. The Company is evaluating the effect that ASU 2014-09 will have on its consolidated financial statements and related disclosures. The Company has not yet selected a transition method nor has it determined the effect of the standard on its ongoing financial reporting.

(4) AGREEMENT WITH GEDEON RICHTER

In August 2014, the Company entered into a license, co-development and commercialization agreement with Gedeon Richter on bremelanotide for FSD in Europe and selected countries. On September 16, 2015, the Company and Gedeon Richter mutually and amicably agreed to terminate the license, co-development and commercialization agreement. In connection with the termination of the license agreement, all rights and licenses to co-develop and commercialize bremelanotide for FSD indications granted by the Company under the license agreement to Gedeon Richter terminated and reverted to the Company, and neither party has any future material obligations under the license agreement. Neither the Company nor Gedeon Richter incurred any early termination penalties or other payment or reimbursement obligations as a result of the termination of the license agreement.

The Company viewed the delivery of the license for bremelanotide as a revenue generating activity that is part of its ongoing and central operations. The other elements of the agreement with Gedeon Richter were considered non-revenue activities associated with the collaborative arrangement. The Company believes the license had

standalone value from the other elements of the collaborative arrangement because it conveyed all of the rights necessary to develop and commercialize bremelanotide in the licensed territory.



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In August 2013, the Company received an initial payment of \$1,000,000 from Gedeon Richter as a non-refundable option fee on the license, co-development and commercialization agreement, and in September 2014, the Company received €6,700,000 (\$8,763,347) on execution of the definitive agreement. During the year ended June 30, 2015, the upfront payment of €7,500,000 (\$9,763,347) was recorded as license revenue in the consolidated statements of operations. During the year ended June 30, 2015, the Company recorded revenue related to a milestone payment of €2,500,000 (\$3,188,383) upon the initiation of the Company's Phase 3 clinical trial program in the United States. As a result of fluctuations in the conversion rates between the Euro and the U.S. Dollar between the transaction dates and the settlement dates, the Company recorded a foreign exchange loss of \$284,656 for the year ended June 30, 2015.

(5) PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consist of the following:

|                      | June 30,<br>2016 | June 30,<br>2015 |
|----------------------|------------------|------------------|
| Clinical study costs | \$1,146,975      | \$1,641,605      |
| Insurance premiums   | 23,010           | 30,039           |
| Other                | 254,297          | 225,103          |
|                      | \$1,424,282      | \$1,896,747      |

(6) INVESTMENTS

The following summarizes the carrying value of our available-for-sale investments at June 30, 2016, which consist of corporate debt securities:

|                         | June 30,<br><br>2016 |
|-------------------------|----------------------|
| Cost                    | \$1,387,022          |
| Amortization of premium | (4,522)              |
| Gross unrealized loss   | (1,944)              |
| Fair value              | \$1,380,556          |

There were no available-for-sale investments at June 30, 2015.

(7) FAIR VALUE MEASUREMENTS

The fair value of cash equivalents is classified using a hierarchy prioritized based on inputs. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on management's own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.



PALATIN TECHNOLOGIES, INC.  
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Notes to Consolidated Financial Statements

The following table provides the assets carried at fair value:

|                         | Carrying Value | Quoted prices in<br>active markets<br>(Level 1) | Other quoted/observable inputs<br>(Level 2) | Significant unobservable<br>inputs<br>(Level 3) |
|-------------------------|----------------|---|---|---|
| June 30, 2016:          |                |   |   |   |
| Money Market<br>Account | \$7,782,243    | \$7,782,243                                     | \$-   | \$-   |
| June 30, 2015:          |                |   |   |   |
| Money Market<br>Account | \$26,946,378   | \$26,946,378                                    | \$-   | \$-   |

(8) PROPERTY AND EQUIPMENT, NET

Property and equipment, net, consists of the following:

|   | June 30,<br>2016 | June 30,<br>2015 |
|---|------------------|------------------|
| Office equipment                                | \$1,180,210      | \$1,180,210      |
| Laboratory equipment                            | 415,303          | 397,608          |
| Leasehold improvements                          | 751,226          | 751,226          |
|   | 2,346,739        | 2,329,044        |
| Less: Accumulated depreciation and amortization | (2,248,938)      | (2,205,886)      |
|   | \$97,801         | \$123,158        |

The aggregate cost of assets acquired under capital leases was \$146,115 as of June 30, 2016 and June 30, 2015. Accumulated amortization associated with assets acquired under capital leases was \$90,115 as of June 30, 2016 and \$61,994 as of June 30, 2015.

(9) ACCRUED EXPENSES

Accrued expenses consist of the following:

|                                 | June 30,<br>2016 | June 30,<br>2015 |
|---------------------------------|------------------|------------------|
| Clinical study costs            | \$6,983,581      | \$5,594,839      |
| Other research related expenses | 69,609           | 176,105          |
| Professional services           | 231,482          | 201,831          |
| Other                           | 483,061          | 250,708          |
|                                 | \$7,767,733      | \$6,223,483      |





PALATIN TECHNOLOGIES, INC.

and Subsidiary

Notes to Consolidated Financial Statements

(10) NOTES PAYABLE:

Notes payable consist of the following:

|  | June 30, | June 30, |
|--|----------|----------|
|  | 2016     | 2015     |

|                                  |              |    |
|----------------------------------|--------------|----|
| Notes payable under venture loan | \$20,000,000 | \$ |
|----------------------------------|--------------|----|