

CALLISTO PHARMACEUTICALS INC  
Form 10-K  
March 30, 2012  
[Table of Contents](#)

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

**FORM 10-K**

(Mark one)

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

**FOR THE FISCAL YEAR ENDED: DECEMBER 31, 2011**

**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: 001-32325

**CALLISTO PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**12-3894575**  
(I.R.S. Employer  
Identification No.)

**420 Lexington Avenue, Suite 1609, New York, New York 10170**

(Address of principal executive offices) (Zip Code)

**(212) 297-0010**

(Registrant's telephone number)

(Former Name, Former Address and Former Fiscal Year, if changed since last report)

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

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
None	

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

Title of class: **Common stock, \$0.0001 par value**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

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 o No x

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 (the Exchange Act ) during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

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 x No o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See 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   
(Do not check if a smaller reporting company)

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was \$73,013,614 on June 30, 2011 (based on \$0.60 per share, the closing price on that day).

As of March 29, 2012 the registrant had a total of 158,516,071 shares of Common Stock outstanding.

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Table of Contents

CALLISTO PHARMACEUTICALS, INC.

(A Development Stage Company)

FORM 10-K

TABLE OF CONTENTS

<u>PART I</u>		2
<u>Item 1.</u>	<u>Business</u>	2
<u>Item 1A.</u>	<u>Risk Factors</u>	13
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u>	29
<u>Item 2.</u>	<u>Properties</u>	29
<u>Item 3.</u>	<u>Legal Proceedings</u>	29
<u>Item 4</u>	<u>Mine Safety Disclosure</u>	29
<u>PART II</u>		30
<u>Item 5.</u>	<u>Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	30
<u>Item 6.</u>	<u>Selected Financial Data</u>	31
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	31
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures about Market Risk</u>	37
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>	37
<u>Item 9A</u>	<u>Controls and Procedures</u>	37
<u>Item 9B</u>	<u>Other Information</u>	38
<u>PART III</u>		39
<u>Item 10.</u>	<u>Directors, Executive Officers and Corporate Governance</u>	39
<u>Item 11.</u>	<u>Executive Compensation</u>	41
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	46
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions, and Director Independence</u>	48
<u>Item 14.</u>	<u>Principal Accountant Fees and Services</u>	49
<u>PART IV</u>		
<u>Item 15.</u>	<u>Exhibits and Financial Statement Schedules</u>	49
	<u>Signatures</u>	53

Table of Contents

**PART I**

This Report on Form 10-K for Callisto Pharmaceuticals, Inc. may contain forward-looking statements. Forward-looking statements are characterized by future or conditional verbs such as may, will, expect, intend, anticipate, believe, estimate and continue or similar words. You should read statements that contain these words carefully because they discuss future expectations and plans, which contain projections of future results of operations or financial condition or state other forward-looking information. Such statements are only predictions and our actual results may differ materially from those anticipated in these forward-looking statements. We believe that it is important to communicate future expectations to investors. However, there may be events in the future that we are not able to accurately predict or control. Factors that may cause such differences include, but are not limited to, those discussed elsewhere in this annual report on Form 10-K for the year ended December 31, 2011, as filed with the Securities and Exchange Commission, including the uncertainties associated with product development, the risk that products that appeared promising in early clinical trials do not demonstrate efficacy in larger-scale clinical trials, the risk that we will not obtain approval to market our products, the risks associated with dependence upon key personnel and the need for additional financing. We do not assume any obligation to update forward-looking statements as circumstances change. All drug candidates to treat GI disorders and diseases, currently plecanatide and SP-333, are being developed exclusively by our subsidiary Synergy Pharmaceuticals, Inc., ( Synergy ). Use of the terms we , our or us in connection with GI drug candidates discussed herein refer to research and development activities and plans of Synergy.

**ITEM 1. BUSINESS.**

**GENERAL**

Callisto Pharmaceuticals, Inc. (which may be referred to as Callisto , the Company , we , our or us ) is a development stage biopharmaceutical company focused primarily on the development of drugs to treat gastrointestinal ( GI ) disorders and diseases and was incorporated under the laws of the State of Delaware on June 5, 1996 (inception). Since inception, our efforts have been principally devoted to research and development, securing and protecting patents and raising capital. We operate as a holding company through two controlled subsidiaries: Synergy Pharmaceuticals, Inc. ( Synergy ) (41% owned) and Callisto Research Labs, LLC (100% owned). Synergy owns one inactive subsidiary, IgX, Ltd (Ireland).

All of our drug candidates, currently plecanatide and SP-333 to treat GI disorders and diseases, are being developed exclusively by Synergy. Use of the terms we , our or us in connection with the GI drug candidates discussed herein refer to research and development activities and plans of Synergy.

Synergy s lead drug candidates are as follows:

(1) Plecanatide, a guanylyl cyclase C ( GC-C ) receptor agonist, to treat GI disorders, primarily chronic constipation ( CC ) and constipation-predominant irritable bowel syndrome ( IBS-C ).

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(2) SP-333, a second generation GC-C receptor agonist, SP-333, now in pre-clinical development to treat gastrointestinal inflammatory diseases.

### HISTORY

In March 2002, Callisto Pharmaceuticals, Inc. ( Old Callisto ), a non-public company, purchased 99.7% of the outstanding common shares of Webtronics, Inc., ( Webtronics ) a public company for \$400,000. Webtronics was incorporated in Florida on February 2, 2001 and had limited operations at December 31, 2002.

On April 30, 2003, pursuant to an Agreement and Plan of Merger dated March 10, 2003, as amended April 4, 2003, Synergy Acquisition Corp., a wholly-owned subsidiary of Webtronics merged into Synergy Pharmaceuticals, Inc. ( Synergy-DE ) and Callisto Acquisition Corp., a wholly-owned subsidiary of Webtronics merged into Old Callisto (collectively, the Merger ). As a result of the Merger, Old Callisto and Synergy-DE became wholly-owned subsidiaries of Webtronics. In connection with the Merger, Webtronics issued 17,318,994 shares of its common stock in exchange for outstanding Old Callisto common stock and an additional 4,395,684 shares in exchange for outstanding Synergy-DE common stock. In May 2003, Old Callisto changed its name to Callisto Research Labs, LLC ( Callisto Research ) and Webtronics changed its name to Callisto Pharmaceuticals, Inc. and changed its state of incorporation from Florida to Delaware. Subsequently, 171,818 shares of common stock issued to former Synergy-DE shareholders were returned to us under the terms of certain indemnification agreements.

On July 14, 2008, we entered into an Exchange Agreement dated July 11, 2008 ( Exchange Agreement ), as amended and effective on July 14, 2008, with Pawfect Foods, Inc. ( Pawfect ), Synergy-DE and other holders of Synergy-DE common stock. According to the terms of the Exchange Agreement, Pawfect acquired 100% of the common stock of Synergy-DE, from us and the other holders of

Table of Contents

Synergy-DE, in exchange for 45,464,760 shares of Pawfect's common stock representing approximately 70% of Pawfect's outstanding common stock (the Exchange Transaction). We received 44,590,000 of the 45,464,760 shares of Pawfect's common stock exchanged for our ownership of Synergy-DE, representing 68% of Pawfect's outstanding common stock. The remaining 874,760 shares of Pawfect common stock exchanged for ownership of Synergy-DE were issued to certain executive officers of Synergy-DE who received their shares pursuant to a Repurchase Agreement with Synergy-DE dated July 3, 2008 and assumed by Pawfect.

Pawfect was a development stage company selling pet food products utilizing the internet, with immaterial operations at the date of the Exchange Agreement. On July 14, 2008, Pawfect discontinued its pet food business to focus all resources on continuing the development of drugs to treat GI disorders and diseases acquired in connection with the Exchange Agreement. On July 21, 2008 Pawfect, amended its articles of incorporation, in the state of Florida, to effect the actions necessary to complete the transactions contemplated by the Exchange Agreement and changed its name to Synergy Pharmaceuticals, Inc.

From inception through December 31, 2011, we have sustained net losses attributable to common stockholders of \$142,366,313. Our losses have resulted primarily from expenditures incurred in connection with research and development activities, application and filing for regulatory approval of proposed products, stock-based compensation expense, patent filing and maintenance expenses, purchase of in-process research and development, outside accounting and legal services and regulatory, scientific and financial consulting fees, as well as non-cash accretion of dividends attributable to the beneficial conversion rights of convertible preferred stock and changes in fair value of derivatives. From inception through December 31, 2011 we have not generated any revenue from operations. We expect to incur additional losses to perform further research and development activities and do not currently have any commercial biopharmaceutical products, and do not expect to have such for several years, if at all.

Our product development efforts are in their early stages and we cannot make estimates of the costs or the time they will take to complete. The risk of not completing of any program is high because of the many uncertainties involved in bringing new drugs to market including the long duration of clinical testing, the specific performance of proposed products under stringent clinical trial protocols, the extended regulatory approval and review cycles, the nature and timing of costs and competing technologies being developed by organizations with significantly greater resources.

## **PROPOSED SYNERGY PRODUCTS**

### ***Plecanatide***

Synergy is currently developing plecanatide, a synthetic hexadecapeptide designed to mimic the actions of the GI hormone uroguanylin, for the treatment of CC and IBS-C. Plecanatide is an agonist of GC-C receptor.

Plecanatide is covered by a U.S. patent issued on May 9, 2006 with respect to composition of matter that expires on March 25, 2023, subject to possible patent term extension, and a U.S. patent issued on September 21, 2010 with respect to composition of matter that expires on June 9, 2022, subject to possible patent term extension. Synergy has filed patent applications to broaden our patent estate covering GC-C receptor agonists.

On October 24, 2011, Synergy initiated dosing of patients in a Phase II/III clinical trial of plecanatide to treat CC. This study is being conducted at 110 sites in the United States and is designed to enroll 880 patients with CC to insure 800 evaluable patients at the end of the study. Patients will be treated with one of three doses of plecanatide (0.3, 1.0 or 3.0 mg) or placebo taken once daily over a period of 12 weeks. The study's primary objective is the measure of CSBMs using a responder analysis. The trial will also evaluate SBMs and daily constipation symptoms, as well as the impact of plecanatide on disease-specific quality of life measures.

*14-Day Phase 2a Clinical Trial in CC*

*Summary.* In September, 2010 Synergy completed a Phase 2a randomized, double-blind, placebo-controlled, 14-day repeat, oral, dose-ranging clinical trial of plecanatide in patients with CC. On October 18, 2010, Synergy presented the results of this clinical trial at the American College of Gastroenterology Annual Scientific Meeting in San Antonio, Texas. The trial utilized 78 evaluable patients at 14 sites in the United States. The primary objective of the trial was to evaluate the safety of plecanatide in patients with CC. The secondary objectives of this clinical trial were to assess the pharmacokinetic profile of plecanatide and to assess bowel function, including time to first bowel movement, frequency, completeness of evacuation, stool consistency, straining and abdominal discomfort, after treatment with plecanatide.

*Clinical Trial Design.* In this clinical trial Synergy enrolled patients that met the modified Rome III criteria of CC, a standard patient assessment tool used in the diagnosis of patients with CC. Patients also had to have had a colonoscopy within five years before enrollment with no significant findings, had to be in good health as determined by a physical examination and other standard assessments and had to have reported less than six simultaneous bowel movements, or SBMs, and less than three complete SBMs, or CSBMs, in each



Table of Contents

week during the 14-days before treatment with plecanatide or placebo. SBMs are bowel movements that occur without the use of a laxative, enema or suppository within the preceding 24 hours; and CSBMs are SBMs after which the patient reports a feeling of complete evacuation.

Patients in this clinical trial received placebo or plecanatide once-daily in the morning for 14 consecutive days at oral doses of 0.3 mg, 1.0 mg, 3.0 mg or 9.0 mg, respectively. There were 20 patients per dose level randomized 3:1, with 15 patients in each dose level receiving plecanatide and five patients in each dose level receiving placebo. A safety review was conducted after each dose level before beginning the next higher dose level.

*Clinical Trial Results.* Plecanatide treatment exhibited a favorable safety profile with no severe adverse events observed, and notably no patients receiving plecanatide reported diarrhea. Ten percent (2/20) of patients receiving placebo and 17.2% (10/58) of patients receiving plecanatide, respectively, reported adverse events, or AEs, related to treatment and 10% (2/20) of patients receiving placebo and 8.6% (5/58) of patients receiving plecanatide, respectively, reported GI-related AEs. The majority of AEs were mild to moderate and transient in nature. One patient on placebo discontinued from the clinical trial due to diarrhea. Additionally, no systemic absorption of plecanatide was detected in patients at any of the dose levels studied.

Patients in all but the 0.3 mg plecanatide dose levels reported significant decreases in time to first bowel movement after dosing as compared to patients receiving placebo. Patients receiving plecanatide also reported increases in the number of SBMs and CSBMs per week, improved stool consistency and reduced straining during bowel movements as compared to pre-treatment levels for each of these measures of bowel function. In addition, a greater percentage of patients in each plecanatide dose level reported improvement in abdominal discomfort, constipation severity and overall relief after treatment as compared to patients receiving placebo.

**Development Plan**

Synergy is presently dosing patients in an 800-patient Phase II/III clinical trial of plecanatide to treat CC. Synergy expects to release top-line data from this study in late 2012. Once these data have been evaluated, Synergy plans to have an End-of-Phase 2 meeting with FDA in early 2013 to discuss the clinical plan for further development of plecanatide to treat CC.

Synergy is also preparing to initiate a Phase 2b clinical trial of plecanatide for the treatment of IBS-C in patients during 2012.

**SP-333**

Synergy is also developing a second generation GC-C receptor analog, SP-333, which is currently in pre-clinical development for the treatment of gastrointestinal inflammatory diseases. SP-333 is a synthetic analog of uroguanylin, a natriuretic hormone which is normally produced in the body's intestinal tract. Deficiency of this hormone is predicted to be one of the primary reasons for the formation of polyps that can lead to colon cancer, as well as debilitating and difficult-to-treat GI inflammatory disorders such as UC and Crohn's disease. Synergy plans to submit by mid-2012 an Investigational New Drug application, or IND, to the U.S. Food and Drug Administration, or FDA, to treat UC, and intend to initiate a Phase 1 clinical trial of SP-333 in volunteers during the second half of 2012.

More than 500,000 Americans are afflicted with UC, a type of IBD that causes chronic inflammation of the colon. Along with Crohn's disease, the other major form of IBD, UC is painful and debilitating, and can lead to other serious and life-threatening complications such as increased incidence of colon cancer. There is currently no medical cure for UC. A considerable medical need exists for the control and treatment of UC.

On February 1, 2011 the U.S. Patent and Trademark Office issued U.S. Patent No. 7,879,802, covering our novel drug candidate SP-333 to treat inflammatory bowel disease (IBD). SP-333 is a second-generation guanylate cyclase C (GC-C) agonist with the potential to treat gastro-intestinal diseases such as UC. The patent entitled "Agonists of Guanylate Cyclase Useful for the Treatment of Gastrointestinal Disorders, Inflammation, Cancer and Other Disorders" specifically claims composition of matter of SP-333 and use in the treatment of human diseases.

#### **Manufacturing of Synergy Product Candidates**

Synergy does not have any in-house manufacturing capabilities. Our active pharmaceutical ingredients, or APIs, and the final formulated drug products are manufactured for us by third party contractors. Accordingly, unless or until Synergy develops or acquires sufficient manufacturing capabilities, Synergy will depend on third parties to manufacture plecanatide, SP-333 and any future APIs that we may develop or acquire. Synergy has executed manufacturing supply agreements for API manufacturing of plecanatide with two suppliers, sufficient to meet our foreseeable clinical trial requirements.

Table of Contents

Synergy continues to pursue additional API and drug product supply agreements with other manufacturers. Synergy is in the process of selecting at least one more manufacturer to produce our APIs in accordance with current good manufacturing practices, or cGMP, on a commercial scale to meet our future needs. It is a fundamental part of our commercial strategy to maintain two or more API suppliers to ensure continuity in our supply chain. Synergy believe, based on the ongoing studies to date, that our current formulations of capsules/tablets are both cost effective and meet the stability requirements for pharmaceutical drug products.

**Government Regulation**

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. The FDA has very broad enforcement authority and failure to abide by applicable regulatory requirements can result in administrative or judicial sanctions being imposed on us, including warning letters, refusals of government contracts, clinical holds, civil penalties, injunctions, restitution, disgorgement of profits, recall or seizure of products, total or partial suspension of production or distribution, withdrawal of approval, refusal to approve pending applications, and criminal prosecution.

*FDA Approval Process*

We believe that Synergy's product candidates will be regulated by the FDA as drugs. No manufacturer may market a new drug until it has submitted an NDA to the FDA, and the FDA has approved it. The steps required before the FDA may approve an NDA generally include:

- preclinical laboratory tests and animal tests conducted in compliance with FDA's good laboratory practice requirements;
- development, manufacture and testing of active pharmaceutical product and dosage forms suitable for human use in compliance with current good manufacturing practices, or GMP;
- the submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its specific intended use(s);
- the submission to the FDA of a New Drug Application, or NDA; and

- FDA review and approval of the NDA.

Preclinical tests include laboratory evaluation of the product candidate, as well as animal studies to assess the potential safety and efficacy of the product candidate. The conduct of the pre-clinical tests must comply with federal regulations and requirements including good laboratory practices. We must submit the results of the preclinical tests, together with manufacturing information, analytical data and a proposed clinical trial protocol to the FDA as part of an IND, which must become effective before we may commence human clinical trials. The IND will automatically become effective 30 days after its receipt by the FDA, unless the FDA raises concerns or questions before that time about the conduct of the proposed trials. In such a case, we must work with the FDA to resolve any outstanding concerns before clinical trials can proceed. We cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board for approval. An institutional review board may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the institutional review board's requirements or may impose other conditions.

Clinical trials involve the administration of the product candidate to humans under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are typically conducted in three sequential phases, though the phases may overlap or be combined. In Phase 1, the initial introduction of the drug into healthy human subjects, the drug is usually tested for safety (adverse effects), dosage tolerance and pharmacologic action, as well as to understand how the drug is taken up by and distributed within the body. Phase 2 usually involves studies in a limited patient population (individuals with the disease under study) to:

- evaluate preliminarily the efficacy of the drug for specific, targeted conditions;

Table of Contents

- determine dosage tolerance and appropriate dosage as well as other important information about how to design larger Phase 3 trials; and
- identify possible adverse effects and safety risks.

Phase 3 trials generally further evaluate clinical efficacy and test for safety within an expanded patient population. The conduct of the clinical trials is subject to extensive regulation, including compliance with good clinical practice regulations and guidance.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time or impose other sanctions if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. We may also suspend clinical trials at any time on various grounds.

The results of the preclinical and clinical studies, together with other detailed information, including the manufacture and composition of the product candidate, are submitted to the FDA in the form of an NDA requesting approval to market the drug. FDA approval of the NDA is required before marketing of the product may begin in the U.S. If the NDA contains all pertinent information and data, the FDA will file the application and begin review. The FDA may refuse to file the NDA if it does not contain all pertinent information and data. In that case, the applicant may resubmit the NDA when it contains the missing information and data. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of new drug applications. Most such applications for non-priority drug products are reviewed within 10 months. The review process, however, may be extended by FDA requests for additional information, preclinical or clinical studies, clarification regarding information already provided in the submission, or submission of a risk evaluation and mitigation strategy. The FDA may refer an application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. Before approving an NDA, the FDA will typically inspect the facilities at which the product candidate is manufactured and will not approve the product candidate unless GMP compliance is satisfactory. FDA also typically inspects facilities responsible for performing animal testing, as well as clinical investigators who participate in clinical trials. The FDA may refuse to approve an NDA if applicable regulatory criteria are not satisfied, or may require additional testing or information. The FDA may also limit the indications for use and/or require post-marketing testing and surveillance to monitor the safety or efficacy of a product. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

The testing and approval process requires substantial time, effort and financial resources, and our product candidates may not be approved on a timely basis, if at all. The time and expense required to perform the clinical testing necessary to obtain FDA approval for regulated products can frequently exceed the time and expense of the research and development initially required to create the product. The results of preclinical studies and initial clinical trials of our product candidates are not necessarily predictive of the results from large-scale clinical trials, and clinical trials may be subject to additional costs, delays or modifications due to a number of factors, including difficulty in obtaining enough patients, investigators or product candidate supply. Failure by us to obtain, or any delay in obtaining, regulatory approvals or in complying with requirements could adversely affect the commercialization of product candidates and our ability to receive product or royalty revenues.

*Other Regulatory Requirements*

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After approval, drug products are subject to extensive continuing regulation by the FDA, which include company obligations to manufacture products in accordance with Good Manufacturing Practice, or GMP, maintain and provide to the FDA updated safety and efficacy information, report adverse experiences with the product, keep certain records and submit periodic reports, obtain FDA approval of certain manufacturing or labeling changes, and comply with FDA promotion and advertising requirements and restrictions. Failure to meet these obligations can result in various adverse consequences, both voluntary and FDA-imposed, including product recalls, withdrawal of approval, restrictions on marketing, and the imposition of civil fines and criminal penalties against the NDA holder. In addition, later discovery of previously unknown safety or efficacy issues may result in restrictions on the product, manufacturer or NDA holder.

We and any manufacturers of our products are required to comply with applicable FDA manufacturing requirements contained in the FDA's GMP regulations. GMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. The manufacturing facilities for our products must meet GMP requirements to the satisfaction of the FDA pursuant to a pre-approval inspection before we can use them to manufacture our products. We and any third-party manufacturers are also subject to periodic inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of our products to assess our compliance with applicable regulations.

Table of Contents

With respect to post-market product advertising and promotion, the FDA imposes a number of complex regulations on entities that advertise and promote pharmaceuticals, which include, among others, standards for direct-to-consumer advertising, promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as off-label use), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Adverse event reporting and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, risk minimization action plans and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product.

Outside the United States, our ability to market a product is contingent upon receiving marketing authorization from the appropriate regulatory authorities. The requirements governing marketing authorization, pricing and reimbursement vary widely from jurisdiction to jurisdiction. At present, foreign marketing authorizations are applied for at a national level, although within the European Union registration procedures are available to companies wishing to market a product in more than one European Union member state.

**Competition**

The biopharmaceutical industry is characterized by rapidly evolving technology and intense competition. Synergy's competitors include major pharmaceutical and biotechnology companies focusing on GI such as Ironwood Pharmaceuticals, Inc., Forest Laboratories, Inc., Takeda Pharmaceuticals America, Inc., Sucampo Pharmaceuticals, Inc., Salix Pharmaceuticals, Inc. and Shire Plc. Most have financial, technical and marketing resources significantly greater than our resources. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint ventures. We are aware of certain development projects for products to prevent or treat certain diseases targeted by Synergy. The existence of these potential products or other products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect our ability to market the products we develop.

**Research and Development Expenses**

Research and development costs include expenditures for an in-house research and development laboratory, salaries and staff costs, application and filing for regulatory approval of proposed products, purchased in-process research and development, regulatory and scientific consulting fees, as well as contract services, including clinical trial related patient costs, drug formulation and tableting, data collection, monitoring, insurance and FDA consultants. Research and development expenses were \$13,318,455 for the twelve months ended December 31, 2011, as

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compared to \$9,588,543 and \$3,423,515 for the twelve months ended December 31, 2010 and 2009, respectively.

During the twelve months ended December 31, 2010 we were awarded a New York State Qualified Employer Tax Credit totaling \$531,127 and Synergy received a \$244,479 Federal credit for our Qualifying Therapeutic Discovery Project under the Patient Protection and Affordable Care Act of 2010 and earned a \$250,000 New York City Biotechnology refundable 2010 tax credit. The total of these research expenditure based incentives \$1,025,606 have been recorded as tax credits in the statement of operations.

During the year ended December 31, 2011 Synergy recorded refundable tax credit receivable in current assets for its (i) 2010 New York State QETC credit, totaling \$248,486 and (ii) its 2011 New York City Biotechnology Tax Credit for the tax year of 2011 totaling \$118,437. These credits are presented as other income in the statement of operations.

### **Patents and Proprietary Rights**

We are able to protect our technology from unauthorized use by third parties only to the extent that it is covered by valid and enforceable patents or is effectively maintained as a trade secret or is protected by confidentiality agreements. Accordingly, patents or other proprietary rights are an essential element of our business.



Table of Contents

As of March 29, 2012 Synergy had five issued United States patents. Two of these patents cover the composition-of-matter of plecanatide and were issued on May 9, 2006 and September 21, 2010; they will expire in 2023 and 2022, respectively. A third patent covers the composition-of-matter of SP333 issued on February 1, 2011 and expires in 2028. A fourth patent granted October 11, 2011 covers composition-of-matter of analogs related to plecanatide and SP333 and will expire in 2028. A fifth patent granted February 14, 2012 covers a method of treating inflammatory bowel disease using plecanatide and will expire in 2022. In addition, Synergy has three granted foreign patents which cover composition-of-matter of plecanatide and expire in 2022. These foreign patents cover Austria, Belgium, Switzerland, Cyprus, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Portugal, Sweden, Turkey, Hong Kong, Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, and Japan.

Additionally as of March 29, 2012, Synergy had 7 pending United States patent applications and 39 pending foreign patent applications covering plecanatide and SP-333 and various derivatives and analogs. In April 2010, two parties filed an opposition to our granted patent with the European Patent Office. An opposition hearing was held December 14, 2011, which resulted in the European Patent Office issuing the following statement: Account being taken of the amendments made by the patent proprietor during the opposition proceedings, the patent and the invention to which it relates are found to meet the requirements of the European Patent Convention (Art.101(3)(a)EPC). In particular, the composition-of-matter claim covering plecanatide was upheld. In addition, we are aware that another pharmaceutical company has been issued a United States patent for the use of plecanatide for treatment of constipation or constipation predominant irritable bowel syndrome.

Patents extend for varying periods according to the date of patent filing or grant and the legal term of patents in the various countries where patent protection is obtained. The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage and the availability of legal remedies in the country.

While trade secret protection is an essential element of our business and we have taken security measures to protect our proprietary information and trade secrets, we cannot give assurance that our unpatented proprietary technology will afford us significant commercial protection. We seek to protect our trade secrets by entering into confidentiality agreements with third parties, employees and consultants. Our employees and consultants also sign agreements requiring that they assign to us their interests in intellectual property arising from their work for us. All employees sign an agreement not to engage in any conflicting employment or activity during their employment with us and not to disclose or misuse our confidential information. However, it is possible that these agreements may be breached or invalidated, and if so, there may not be an adequate corrective remedy available. Accordingly, we cannot ensure that employees, consultants or third parties will not breach the confidentiality provisions in our contracts, infringe or misappropriate our trade secrets and other proprietary rights or that measures we are taking to protect our proprietary rights will be adequate.

In the future, third parties may file claims asserting that our technologies or products infringe on their intellectual property. We cannot predict whether third parties will assert such claims against us or against the licensors of technology licensed to us, or whether those claims will harm our business. If we are forced to defend ourselves against such claims, whether they are with or without merit and whether they are resolved in favor of, or against, our licensors or us, we may face costly litigation and the diversion of management's attention and resources. As a result of such disputes, we may have to develop costly non-infringing technology or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, or at all.

**ATIPRIMOD**

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On August 28, 2002, and as amended on May 23, 2003, Synergy entered into a worldwide license agreement (the Original License ) with AnorMED Inc. ( AnorMED ) to research, develop, sell and commercially exploit the Atiprimod patent rights. The Original License provided for aggregate milestone payments of up to \$14 million based upon achieving certain regulatory submissions and approvals for an initial indication, and additional payments of up to \$16 million for each additional indication based on achieving certain regulatory submissions and approvals. Commencing on January 1, 2004 and on January 1 of each subsequent year Synergy was obligated to pay AnorMED a maintenance fee of \$200,000 until the first commercial sale of the product. These annual maintenance fee payments under the Original License were made in January 2004, 2005, 2006 and 2007 and recorded as research and development expense.

On December 31, 2007, we and Synergy entered into an Amended and Restated License Agreement with AnorMED Corporation ( AnorMED ), a wholly-owned subsidiary of Genzyme Corporation ( Genzyme ), pursuant to which the parties amended the Original License agreement for Atiprimod to eliminate all future maintenance fees and milestone payments and reduce future royalties. In return for the reduced future payments to Genzyme, we agreed to pay upfront fees which were recorded as a liability and expensed on December 31, 2007. As of December 18, 2008, \$650,000 of these upfront fees remained due and payable.

Table of Contents

On December 19, 2008, we entered into a Technology Assignment Agreement (the "Agreement") with AnorMED pursuant to which AnorMED transferred and assigned to us all of AnorMED's right, title and interest in and to all patents and patent applications with respect to Atiprimod in addition to all trade secrets, technical reports and data concerning Atiprimod and any analogs or derivatives in return for a cash payment of \$650,000, which payment settled the upfront fees owed from December 31, 2007 Amended and Restated License Agreement. In addition the Agreement specified that the Amended and Restated License Agreement between us and AnorMED dated December 31, 2007, with respect to which AnorMED licensed to us certain patent rights and technology related to Atiprimod, was terminated with no additional amounts due.

Since January 27, 2009, we are no longer actively pursuing the in-house development of Atiprimod and out-licensing opportunities for further development of this drug have not materialized as of December 31, 2011.

***L-ANNAMYCIN***

On August 12, 2004 we entered into a worldwide exclusive license agreement with The University of Texas M.D. Anderson Cancer Center to develop and commercially exploit the L-Annamycin patent rights. L-Annamycin, an anthracycline drug for leukemia therapy, has a novel therapeutic profile, including activity against drug resistant tumors and significantly reduced toxicity.

On December 31, 2008 we suspended any further development work on L-Annamycin. On June 13, 2011 we were notified by the University of Texas M.D. Anderson Cancer Center that our August 12, 2004 license agreement had been terminated.

***DEGRASYNS***

On January 10, 2006, we entered into a license agreement with the University of Texas M.D. Anderson Cancer Center whereby we were granted the exclusive right to manufacture, have manufactured, use, import, offer to sell and/or sell anti-cancer compounds called tyrphostins (renamed Degrasyns). Degrasyns are a second-generation class of tyrphostins developed by scientists at the University of Texas M.D. Anderson Cancer Center that have a novel anti-cancer mechanism-of-action that centers on their ability to selectively degrade key proteins that are involved in tumor cell proliferation and survival. The intention was to work with key scientists at the University of Texas M.D. Anderson Cancer Center to bring forward a pre-clinical candidate for development in the clinic. All in-house work on this program was discontinued as of December 31, 2008.

**LICENSE AGREEMENTS**

On January 10, 2006, we entered into a Patent and Technology License Agreement with The University of Texas M.D. Anderson Cancer Center. Pursuant to the license agreement, we were granted the exclusive right to manufacture, have manufactured, use, import, offer to sell and/or sell anti-cancer compounds called tyrphostins (renamed Degrasyns). We paid a nonrefundable license fee of \$200,000 upon execution of this agreement and we are obligated to pay annual license maintenance fees to The University of Texas M.D. Anderson Cancer Center. We are also obligated under this agreement to pay for legal fees and expenses associated with establishing and protecting the patent rights worldwide.

We also agreed to pay The University of Texas M.D. Anderson Cancer Center royalties based on net sales from any licensed products, plus aggregate milestone payments of up to \$1,750,000 based upon achieving certain regulatory submissions and approvals. The term of the agreement is from January 10, 2006 until the end of the term for which the patent rights associated with the licensed technology have expired. If the first pending patent is issued, the agreement is projected to expire in 2024. In addition, at any time after January 10, 2008, The University of Texas M.D. Anderson Cancer Center has the right to terminate the license if we fail to provide evidence within 90 days of written notice that we have commercialized or are actively and effectively attempting to commercialize the licensed technology. All in-house work on this program was discontinued as of December 31, 2008, effectively terminating this license.

Table of Contents

On August 12, 2004, we entered into a world-wide license agreement with The University of Texas M.D. Anderson Cancer Center to research, develop, sell and commercially exploit the patent rights for L-Annamycin. Consideration paid for this license amounted to \$31,497 for reimbursement of out-of-pocket costs for filing, enforcing and maintaining the L-Annamycin patent rights and a \$100,000 initial license fee. We also agreed to pay The University of Texas M. D. Anderson Cancer Center royalties based on net sales from any licensed products, plus aggregate milestone payments of up to \$750,000 based upon achieving certain regulatory submissions and approvals. The term of the agreement is from August 12, 2004 until November 2, 2019. Under the terms of the license agreement, we are required to make certain good faith expenditures towards the clinical development of at least one licensed product within the two year period after March 2005. In addition, at any time after August 12, 2009, The University of Texas M.D. Anderson Cancer Center has the right to terminate the license if we fail to provide evidence within 90 days of written notice that we have commercialized or we are actively and effectively attempting to commercialize L-Annamycin. On June 23, 2011, this Patent and Technology License Agreement with The University of MD Anderson Cancer Center was terminated.

On August 28, 2002, and as amended on May 23, 2003, Synergy entered into a worldwide license agreement (the "Original License") with AnorMED Inc. ("AnorMED") to research, develop, sell and commercially exploit the Atiprimod (SKF 106615) patent rights. The Original License provided for aggregate milestone payments of up to \$14 million based upon achieving certain regulatory submissions and approvals for an initial indication, and additional payments of up to \$16 million for each additional indication based on achieving certain regulatory submissions and approvals. Commencing on January 1, 2004 and on January 1 of each subsequent year Synergy was obligated to pay AnorMED a maintenance fee of \$200,000 until the first commercial sale of the product. These annual maintenance fee payments under the Original License were made in January 2004, 2005, 2006 and 2007 and recorded as research and development expense.

On December 31, 2007, we and Synergy entered into an Amended and Restated License Agreement with AnorMED Corporation ("AnorMED"), a wholly-owned subsidiary of Genzyme Corporation ("Genzyme"), pursuant to which the parties amended the Original License agreement for Atiprimod to eliminate all future maintenance fees and milestone payments and reduce future royalties to single digits. In return for the reduced future payments to Genzyme, we agreed to pay upfront fees which were recorded as a liability and expensed on December 31, 2007. As of December 18, 2008 \$650,000 of these upfront fees remained due and payable. On December 19, 2008, we entered into a Technology Assignment Agreement (the "Agreement") with AnorMED pursuant to which AnorMED transferred and assigned to us all of AnorMED's right, title and interest in and to all patents and patent applications with respect to Atiprimod in addition to all trade secrets, technical reports and data concerning Atiprimod and any analogs or derivatives in return for a cash payment of \$650,000, which payment settled the upfront fees owed from the December 31, 2007 Amended and Restated License Agreement. In addition the Agreement specified that the Amended and Restated License Agreement between us and AnorMED dated December 31, 2007, with respect to which AnorMED licensed to us certain patent rights and technology related to Atiprimod, was terminated with no additional payments due.

## **EMPLOYEES**

As of March 29, 2012, we had 11 full-time employees. All employees are employees of Synergy Pharmaceuticals, Inc. We believe our employee relations are satisfactory.

## **CALLISTO WEBSITE**

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Our website address is [www.callistopharma.com](http://www.callistopharma.com). Information found on our website is not incorporated by reference into this report. We make available free of charge through our website our Securities and Exchange Commission, or SEC, filings, including our annual report 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) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Table of Contents

**ITEM 1A. RISK FACTORS**

**Risks Related to Our Business**

*We are at an early stage of development as a company, currently have no source of revenue and may never become profitable.*

We are a development stage biopharmaceutical company. Currently, we have no products approved for commercial sale and, to date, we have not generated any revenue. Our ability to generate revenue depends heavily on:

- demonstration in current and future clinical trials that our product candidate, plecanatide for the treatment of GI disorders, is safe and effective;
- our ability to seek and obtain regulatory approvals, including with respect to the indications we are seeking;
- the successful commercialization of our product candidates; and
- market acceptance of our products.

All of our existing product candidates will require extensive additional clinical evaluation, regulatory review, significant marketing efforts and substantial investment before they could provide us with any revenue. As a result, if we do not successfully develop and commercialize plecanatide, we will be unable to generate any revenue for many years, if at all. We do not anticipate that we will generate revenue for several years, at the earliest, or that we will achieve profitability for at least several years after generating material revenue, if at all. If we are unable to generate revenue, we will not become profitable, and we may be unable to continue our operations.

*We do not have any products that are approved for commercial sale and therefore do not expect to generate any revenues from product sales in the foreseeable future, if ever.*

To date, we have funded our operations primarily from sales of our securities. We have not received, and do not expect to receive for at least the next several years, if at all, any revenues from the commercialization of our product candidates. To obtain revenues from sales of our product candidates, we must succeed, either alone or with third parties, in developing, obtaining regulatory approval for, manufacturing and marketing drugs with commercial potential. We may never succeed in these activities, and we may not generate sufficient revenues to continue our business operations or achieve profitability.

*We have incurred significant losses since inception and anticipate that we will incur continued losses for the foreseeable future. If we are unable to achieve and then maintain profitability, the market value of our common stock will likely decline.*

As of December 31, 2011 we had an accumulated deficit of \$142,366,313. We expect to incur significant and increasing operating losses for the next several years as we expand our research and development, continue our clinical trials of plecanatide for the treatment of GI disorders, acquire or license technologies, advance other product candidates into clinical development, including SP-333, seek regulatory approval and, if we receive FDA approval, commercialize our products. Because of the numerous risks and uncertainties associated with our product development efforts, we are unable to predict the extent of any future losses or when we will become profitable, if at all. If we are unable to achieve and then maintain profitability, the market value of our common stock will likely decline.

*We will need to raise substantial additional capital within the next year to fund our operations, and our failure to obtain funding when needed may force us to delay, reduce or eliminate our product development programs.*

During the twelve months ended December 31, 2011 our operating activities used net cash of \$21,253,344. We expect to continue to spend substantial amounts to:

- continue clinical development of plecanatide to treat GI disorders;
- continue development of other product candidates, including SP-333;
- finance our general and administrative expenses;
- prepare regulatory approval applications for plecanatide and other product candidates, including SP-333;
- license or acquire additional technologies;



Table of Contents

- launch and commercialize our product candidates, if any such product candidates receive regulatory approval; and
- develop and implement sales, marketing and distribution capabilities.

We will be required to raise additional capital within the next year to continue the development and commercialization of our current product candidates and to continue to fund operations at the current cash expenditure levels. Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and cost of our clinical trials and other development activities;
- any future decisions we may make about the scope and prioritization of the programs we pursue;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs and timing of regulatory approval;
- the costs of establishing sales, marketing and distribution capabilities;
- the effect of competing technological and market developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish; and
- general market conditions for offerings from biopharmaceutical companies.

Worldwide economic conditions and the equity and credit markets have recently significantly deteriorated and may remain depressed for the foreseeable future. These developments could make it more difficult for us to obtain additional equity or credit financing, when needed.

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We cannot be certain that funding will be available on acceptable terms, or at all. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact our ability to conduct our business. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development and/or commercialization of one or more of our product candidates. We also may be required to:

- seek collaborators for our product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; and/or
- relinquish license or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves on unfavorable terms.

***We are largely dependent on the success of our lead product candidate, plecanatide, and we cannot be certain that this product candidate will receive regulatory approval or be successfully commercialized.***

We currently have no products for sale, and we cannot guarantee that we will ever have any drug products approved for sale. We and our product candidates are subject to extensive regulation by the FDA and comparable regulatory authorities in other countries governing, among other things, research, testing, clinical trials, manufacturing, labeling, promotion, selling, adverse event reporting and recordkeeping. We are not permitted to market any of our product candidates in the United States until we receive approval of a new drug application, or NDA, for a product candidate from the FDA or the equivalent approval from a foreign regulatory authority. Obtaining FDA approval is a lengthy, expensive and uncertain process. We currently have one lead product candidate, plecanatide for the treatment of GI disorders, and the success of our business currently depends on its successful development, approval and commercialization. This product candidate has not completed the clinical development process; therefore, we have not yet submitted an NDA or foreign equivalent or received marketing approval for this product candidate anywhere in the world.

The clinical development program for plecanatide may not lead to commercial products for a number of reasons, including if we fail to obtain necessary approvals from the FDA or foreign regulatory authorities because our clinical trials fail to demonstrate to their satisfaction that this product candidate is safe and effective. We may also fail to obtain the necessary approvals if we have inadequate financial or other resources to advance our product candidates through the clinical trial process. Any failure or delay in completing clinical trials or obtaining regulatory approval for plecanatide in a timely manner would have a material adverse impact on our business and our stock price.

Table of Contents

***We will need to obtain FDA approval of any proposed product brand names, and any failure or delay associated with such approval may adversely impact our business.***

Any brand names we intend to use for our product candidates will require approval from the FDA regardless of whether we have secured a formal trademark registration from the U.S. Patent and Trademark Office, or the PTO. The FDA typically conducts a review of proposed product brand names, including an evaluation of potential for confusion with other product names. The FDA may also object to a product brand name if it believes the name inappropriately implies medical claims. If the FDA objects to any of our proposed product brand names, we may be required to adopt an alternative brand name for our product candidates. If we adopt an alternative brand name, we would lose the benefit of our existing trademark applications for such product candidate and may be required to expend significant additional resources in an effort to identify a suitable product brand name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. We may be unable to build a successful brand identity for a new trademark in a timely manner or at all, which would limit our ability to commercialize our product candidates.

***Our independent registered public accounting firm has expressed doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.***

Our consolidated financial statements as of December 31, 2011 were prepared under the assumption that we will continue as a going concern for the next twelve months. Our independent registered public accounting firm has issued a report that included an explanatory paragraph referring to our recurring losses from operations and expressing substantial doubt in our ability to continue as a going concern without additional capital becoming available. Our ability to continue as a going concern is dependent upon our ability to obtain additional equity or debt financing, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

***Our quarterly operating results may fluctuate significantly.***

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expenses related to our development programs;
- addition or termination of clinical trials;
- any intellectual property infringement lawsuit in which we may become involved;

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- regulatory developments affecting our product candidates;
- our execution of any collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements; and
- if plecanatide receives regulatory approval, the level of underlying demand for that product and wholesalers' buying patterns.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our common stock to fluctuate substantially.

***Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.***

In order to receive regulatory approval for the commercialization of our product candidates, we must conduct, at our own expense, extensive clinical trials to demonstrate safety and efficacy of these product candidates for the intended indication of use. Clinical testing is expensive, can take many years to complete, if at all, and its outcome is uncertain. Failure can occur at any time during the clinical trial process.

The results of preclinical studies and early clinical trials of new drugs do not necessarily predict the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show safety and efficacy sufficient to support intended use claims despite having progressed through initial clinical testing. The data collected from clinical trials of our product candidates may not be sufficient to support the filing of an NDA or to obtain regulatory approval in the United States or elsewhere. Because of the uncertainties

Table of Contents

associated with drug development and regulatory approval, we cannot determine if or when we will have an approved product for commercialization or achieve sales or profits.

***Delays in clinical testing could result in increased costs to us and delay our ability to generate revenue.***

We may experience delays in clinical testing of our product candidates. We do not know whether planned clinical trials will begin on time, will need to be redesigned or will be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a clinical trial, in securing clinical trial agreements with prospective sites with acceptable terms, in obtaining institutional review board approval to conduct a clinical trial at a prospective site, in recruiting patients to participate in a clinical trial or in obtaining sufficient supplies of clinical trial materials. Many factors affect patient enrollment, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the clinical trial, competing clinical trials and new drugs approved for the conditions we are investigating. Clinical investigators will need to decide whether to offer their patients enrollment in clinical trials of our product candidates versus treating these patients with commercially available drugs that have established safety and efficacy profiles. Any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and delay our ability to generate revenue.

***We may be required to suspend or discontinue clinical trials due to unexpected side effects or other safety risks that could preclude approval of our product candidates.***

Our clinical trials may be suspended at any time for a number of reasons. For example, we may voluntarily suspend or terminate our clinical trials if at any time we believe that they present an unacceptable risk to the clinical trial patients. In addition, the FDA or other regulatory agencies may order the temporary or permanent discontinuation of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements or that they present an unacceptable safety risk to the clinical trial patients.

Administering any product candidate to humans may produce undesirable side effects. These side effects could interrupt, delay or halt clinical trials of our product candidates and could result in the FDA or other regulatory authorities denying further development or approval of our product candidates for any or all targeted indications. Ultimately, some or all of our product candidates may prove to be unsafe for human use. Moreover, we could be subject to significant liability if any volunteer or patient suffers, or appears to suffer, adverse health effects as a result of participating in our clinical trials.

***If we fail to comply with healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.***

As a developer of pharmaceuticals, even though we do not intend to make referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payers, 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 could be subject to healthcare fraud and abuse laws and patient privacy laws of both the federal government and the states in which we conduct our business. The laws include:

- the federal healthcare program anti-kickback law, which prohibits, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;
- federal false claims 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, and which may apply to entities like us which provide coding and billing information to customers;
- the federal Health Insurance Portability and Accountability Act of 1996, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use and regulates the distribution of drug samples; 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, and state laws governing the privacy and security

Table of Contents

of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by federal laws, thus complicating compliance efforts.

If our operations are found to be in violation of any of the laws described above or any governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. 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. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

*If we are unable to satisfy regulatory requirements, we may not be able to commercialize our product candidates.*

We need FDA approval prior to marketing our product candidates in the United States. If we fail to obtain FDA approval to market our product candidates, we will be unable to sell our product candidates in the United States and we will not generate any revenue.

The FDA's review and approval process, including among other things, evaluation of preclinical studies and clinical trials of a product candidate as well as the manufacturing process and facility, is lengthy, expensive and uncertain. To receive approval, we must, among other things, demonstrate with substantial evidence from well-controlled clinical trials that the product candidate is both safe and effective for each indication for which approval is sought. Satisfaction of these requirements typically takes several years and the time needed to satisfy them may vary substantially, based on the type, complexity and novelty of the pharmaceutical product. We cannot predict if or when we will submit an NDA for approval for any of our product candidates currently under development. Any approvals we may obtain may not cover all of the clinical indications for which we are seeking approval or may contain significant limitations on the conditions of use.

The FDA has substantial discretion in the NDA review process and may either refuse to file our NDA for substantive review or may decide that our data are insufficient to support approval of our product candidates for the claimed intended uses. In addition, even if we obtain approval of an application to market our product candidates, the FDA may subsequently seek to withdraw approval of our NDA if it determines that new data or a reevaluation of existing data show the product is unsafe for use under the conditions of use upon the basis of which the NDA was approved, or based on new evidence of clinical experience, or upon other new information. If the FDA does not file or approve our NDA or withdraws approval of our NDA, it may require that we conduct additional clinical trials, preclinical or manufacturing studies and submit that data before it will reconsider our application. Depending on the extent of these or any other requested studies, approval of any applications that we submit may be delayed by several years, may require us to expend more resources than we have available, or may never be obtained at all.

We will also be subject to a wide variety of foreign regulations governing the development, manufacture and marketing of our products. Whether or not FDA approval has been obtained, approval of a product by the comparable regulatory authorities of foreign countries must still be obtained prior to marketing the product in those countries. The approval process varies and the time needed to secure approval in any region such as the European Union or in a country with an independent review procedure may be longer or shorter than that required for FDA approval. We cannot assure you that clinical trials conducted in one country will be accepted by other countries or that an approval in one country or region will result in approval elsewhere.

*If our product candidates are unable to compete effectively with marketed drugs targeting similar indications as our product candidates, our commercial opportunity will be reduced or eliminated.*

We face competition generally from established pharmaceutical and biotechnology companies, as well as from academic institutions, government agencies and private and public research institutions. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Small or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize GI drugs that are safer, more effective, have fewer side effects or are less expensive than our product candidates. These potential competitors compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business.

If approved and commercialized, plecanatide will compete with at least one currently approved prescription therapy for the treatment of CC and IBS-C, Amitiza. In addition, over-the-counter products are also used to treat certain symptoms of CC and IBS-C. We believe other companies are developing products that could compete with plecanatide should they be approved by the FDA. For example, linaclotide is being developed by Ironwood Pharmaceuticals, Inc. This compound is being co-developed with Forest Laboratories, Inc.



Table of Contents

and has completed Phase 3 clinical trials for CC and IBS-C. Another compound, velusetrag, is being developed by Theravance, Inc. and has completed Phase 2 clinical trials for CC. To our knowledge, other potential competitors are in earlier stages of development. If our potential competitors are successful in completing drug development for their product candidates and obtain approval from the FDA, they could limit the demand for plecanatide.

We expect that our ability to compete effectively will depend upon our ability to:

- successfully and rapidly complete clinical trials and submit for and obtain all requisite regulatory approvals in a cost-effective manner;
- maintain a proprietary position for our products and manufacturing processes and other related product technology;
- attract and retain key personnel;
- develop relationships with physicians prescribing these products; and
- build an adequate sales and marketing infrastructure for our product candidates.

Because we will be competing against significantly larger companies with established track records, we will have to demonstrate to physicians that based on experience, clinical data, side-effect profiles and other factors, our products are preferable to existing GI drugs. If we are unable to compete effectively in the GI drug market and differentiate our products from other marketed GI drugs, we may never generate meaningful revenue.

***We currently have no sales and marketing organization. If we are unable to establish a direct sales force in the United States to promote our products, the commercial opportunity for our products may be diminished.***

We currently have no sales and marketing organization. If any of our product candidates are approved by the FDA, we intend to market that product through our own sales force. We will incur significant additional expenses and commit significant additional management resources to establish this sales force. We may not be able to establish these capabilities despite these additional expenditures. We will also have to compete with other pharmaceutical and biotechnology companies to recruit, hire and train sales and marketing personnel. If we elect to rely on third parties to sell our product candidates in the United States, we may receive less revenue than if we sold our products directly. In addition, although we would intend to use due diligence in monitoring their activities, we may have little or no control over the sales efforts of those third parties. In the event we are unable to develop our own sales force or collaborate with a third party to sell our product candidates, we may not be able to commercialize our product candidates which would negatively impact our ability to generate revenue.

*We may need others to market and commercialize our product candidates in international markets.*

In the future, if appropriate regulatory approvals are obtained, we intend to commercialize our product candidates in international markets. However, we have not decided how to commercialize our product candidates in those markets. We may decide to build our own sales force or sell our products through third parties. Currently, we do not have any plans to enter international markets. If we decide to sell our product candidates in international markets through a third party, we may not be able to enter into any marketing arrangements on favorable terms or at all. In addition, these arrangements could result in lower levels of income to us than if we marketed our product candidates entirely on our own. If we are unable to enter into a marketing arrangement for our product candidates in international markets, we may not be able to develop an effective international sales force to successfully commercialize those products in international markets. If we fail to enter into marketing arrangements for our products and are unable to develop an effective international sales force, our ability to generate revenue would be limited.

*If the manufacturers upon whom we rely fail to produce plecanatide and our product candidates, including SP-333, in the volumes that we require on a timely basis, or fail to comply with stringent regulations applicable to pharmaceutical drug manufacturers, we may face delays in the development and commercialization of our product candidates.*

We do not currently possess internal manufacturing capacity. We currently utilize the services of contract manufacturers to manufacture our clinical supplies. With respect to the manufacturing of plecanatide, we are currently pursuing long-term commercial supply agreements with multiple manufacturers. Any curtailment in the availability of plecanatide could result in production or other delays with consequent adverse effects on us. In addition, because regulatory authorities must generally approve raw material sources for pharmaceutical products, changes in raw material suppliers may result in production delays or higher raw material costs.

We may be required to agree to minimum volume requirements, exclusivity arrangements or other restrictions with the contract manufacturers. We may not be able to enter into long-term agreements on commercially reasonable terms, or at all. If we change or add

Table of Contents

manufacturers, the FDA and comparable foreign regulators may require approval of the changes. Approval of these changes could require new testing by the manufacturer and compliance inspections to ensure the manufacturer is conforming to all applicable laws and regulations, including good manufacturing practices, or GMP. In addition, the new manufacturers would have to be educated in or independently develop the processes necessary for the production of our product candidates. Peptide manufacturing is a highly specialized manufacturing business. While we believe we will have long term arrangements with a sufficient number of contract manufacturers, if we lose a manufacturer, it would take us a substantial amount of time to identify and develop a relationship, and seek regulatory approval, where necessary, for an alternative manufacturer.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products may encounter difficulties in production, particularly in scaling up production. These problems include difficulties with production costs and yields, quality control, including stability of the product and quality assurance testing, shortages of qualified personnel, as well as compliance with federal, state and foreign regulations. In addition, any delay or interruption in the supply of clinical trial supplies could delay the completion of our clinical trials, increase the costs associated with conducting our clinical trials and, depending upon the period of delay, require us to commence new clinical trials at significant additional expense or to terminate a clinical trial.

We are responsible for ensuring that each of our contract manufacturers comply with the GMP requirements of the FDA and other regulatory authorities from which we seek to obtain product approval. These requirements include, among other things, quality control, quality assurance and the maintenance of records and documentation. The approval process for NDAs includes a review of the manufacturer's compliance with GMP requirements. We are responsible for regularly assessing a contract manufacturer's compliance with GMP requirements through record reviews and periodic audits and for ensuring that the contract manufacturer takes responsibility and corrective action for any identified deviations. Manufacturers of plecanatide and other product candidates, including SP-333, may be unable to comply with these GMP requirements and with other FDA and foreign regulatory requirements, if any. While we will oversee compliance by our contract manufacturers, ultimately we have no control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of plecanatide or other product candidates is compromised due to a manufacturer's failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize plecanatide or other product candidates, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals or commercialization of plecanatide or other product candidates, entail higher costs or result in our being unable to effectively commercialize plecanatide or other product candidates. Furthermore, if our manufacturers fail to deliver the required commercial quantities on a timely basis and at commercially reasonable prices, we may be unable to meet demand for any approved products and would lose potential revenues.

***We may not be able to manufacture our product candidates in commercial quantities, which would prevent us from commercializing our product candidates.***

To date, our product candidates have been manufactured in small quantities for preclinical studies and clinical trials. If any of our product candidates is approved by the FDA or comparable regulatory authorities in other countries for commercial sale, we will need to manufacture such product candidate in larger quantities. We may not be able to increase successfully the manufacturing capacity for any of our product candidates in a timely or economic manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If we are unable to increase successfully the manufacturing capacity for a product candidate, the clinical trials as well as the regulatory approval or commercial launch of that product candidate may be delayed or there may be a shortage in supply. Our product candidates require precise, high quality manufacturing. Our failure to achieve and maintain these high quality manufacturing standards in collaboration with our third-party manufacturers, including the incidence of manufacturing errors, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could harm our business, financial condition and results of operations.

*Materials necessary to manufacture our product candidates may not be available on commercially reasonable terms, or at all, which may delay the development and commercialization of our product candidates.*

We rely on the third-party manufacturers of our product candidates to purchase from third-party suppliers the materials necessary to produce the bulk active pharmaceutical ingredients, or APIs, and product candidates for our clinical trials, and we will rely on such manufacturers to purchase such materials to produce the APIs and finished products for any commercial distribution of our products if we obtain marketing approval. Suppliers may not sell these materials to our manufacturers at the time they need them in order to meet our required delivery schedule or on commercially reasonable terms, if at all. We do not have any control over the process or timing of the acquisition of these materials by our manufacturers. Moreover, we currently do not have any agreements for the production of these materials. If our manufacturers are unable to obtain these materials for our clinical trials, testing of the affected product candidate would be delayed, which may significantly impact our ability to develop the product candidate. If we or our manufacturers are unable to purchase these materials after regulatory approval has been obtained for one of our products, the commercial launch of such product

Table of Contents

would be delayed or there would be a shortage in supply of such product, which would harm our ability to generate revenues from such product and achieve or sustain profitability.

*Our product candidates, if approved for sale, may not gain acceptance among physicians, patients and the medical community, thereby limiting our potential to generate revenues.*

If one of our product candidates is approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product by physicians, healthcare professionals and third-party payors and our profitability and growth will depend on a number of factors, including:

- Demonstration of efficacy;
- Changes in the practice guidelines and the standard of care for the targeted indication;
- Relative convenience and ease of administration;
- The prevalence and severity of any adverse side effects;
- Budget impact of adoption of our product on relevant drug formularies and the availability, cost and potential advantages of alternative treatments, including less expensive generic drugs;
- Pricing and cost effectiveness, which may be subject to regulatory control;
- Effectiveness of our or any of our partners' sales and marketing strategies;
- The product labeling or product insert required by the FDA or regulatory authority in other countries; and
- The availability of adequate third-party insurance coverage or reimbursement.

If any product candidate that we develop does not provide a treatment regimen that is as beneficial as, or is perceived as being as beneficial as, the current standard of care or otherwise does not provide patient benefit, that product candidate, if approved for commercial sale by the FDA or other regulatory authorities, likely will not achieve market acceptance. Our ability to effectively promote and sell any approved products will also depend on pricing and cost-effectiveness, including our ability to produce a product at a competitive price and our ability to obtain sufficient third-party coverage or reimbursement. If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, patients and third-party payors, our ability to generate revenues from that product would be substantially reduced. In addition, our efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources, may be constrained by FDA rules and policies on product promotion, and may never be successful.

***Guidelines and recommendations published by various organizations can impact the use of our products.***

Government agencies promulgate regulations and guidelines directly applicable to us and to our products. In addition, professional societies, practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the health care and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines suggesting the reduced use of our products or the use of competitive or alternative products that are followed by patients and health care providers could result in decreased use of our proposed products.

***If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.***

We face an inherent risk of product liability lawsuits related to the testing of our product candidates, and will face an even greater risk if we sell our product candidates commercially. Currently, we are not aware of any anticipated product liability claims with respect to our product candidates. In the future, an individual may bring a liability claim against us if one of our product candidates causes, or merely appears to have caused, an injury. If we cannot successfully defend ourselves against the product liability claim, we may incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;

Table of Contents

- injury to our reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- initiation of investigations by regulators;
- substantial monetary awards to patients or other claimants;
- distraction of management's attention from our primary business;
- product recalls;
- loss of revenue; and
- the inability to commercialize our product candidates.

We have clinical trial liability insurance with a \$5,000,000 aggregate limit. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for our product candidates. Our current insurance coverage may prove insufficient to cover any liability claims brought against us. In addition, because of the increasing costs of insurance coverage, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy liabilities that may arise.

*Our failure to successfully discover, acquire, develop and market additional product candidates or approved products would impair our ability to grow.*

## Edgar Filing: CALLISTO PHARMACEUTICALS INC - Form 10-K

As part of our growth strategy, we intend to develop and market additional products and product candidates. We are pursuing various therapeutic opportunities through our pipeline. We may spend several years completing our development of any particular current or future internal product candidate, and failure can occur at any stage. The product candidates to which we allocate our resources may not end up being successful. In addition, because our internal research capabilities are limited, we may be dependent upon pharmaceutical and biotechnology and other researchers to sell or license products or technology to us. The success of this strategy depends partly upon our ability to identify, select, discover and acquire promising pharmaceutical product candidates and products. Failure of this strategy would impair our ability to grow.

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

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

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





Table of Contents

Further, any product candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities.

*Even if our product candidates receive regulatory approval, they may still face future development and regulatory difficulties.*

Even if U.S. regulatory approval is obtained, the FDA may still impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies. Plecanatide and other product candidates, including SP-333, would also be subject to ongoing FDA requirements governing the labeling, packaging, storage, advertising, promotion, recordkeeping and submission of safety and other post-market information. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or GMP, regulations. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product or the manufacturer, including requiring withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters;
- impose civil or criminal penalties;
- suspend regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications filed by us;
- impose restrictions on operations, including costly new manufacturing requirements;
- seize or detain products or request us to initiate a product recall; or

- pursue and obtain an injunction.

*Drugs approved to treat IBS have been subject to considerable post-market scrutiny, with consequences up to and including voluntary withdrawal of approved products from the market. This may heighten FDA scrutiny of our product candidates before or following market approval.*

Products approved for the treatment of IBS have been subject to considerable post-market scrutiny. For example, in 2007, Novartis voluntarily discontinued marketing Zelnorm (tegaserod), a product approved for the treatment of women with IBS-C, after the FDA found an increased risk of serious cardiovascular events associated with the use of the drug. Earlier, in 2000, Glaxo Wellcome withdrew Lotronex (alosetron), which was approved for women with severe diarrhea-prominent IBS, after the manufacturer received numerous reports of AEs, including ischemic colitis, severely obstructed or ruptured bowel, or death. In 2002, the FDA approved the manufacturer's application to make Lotronex available again, on the condition that the drug only is made available through a restricted marketing program.

Although plecanatide is being investigated for IBS, plecanatide is from a different pharmacologic class than Zelnorm or Lotronex, and would not be expected to share the same clinical risk profile as those agents. Nevertheless, because these products are in the same or related therapeutic classes, it is possible that the FDA will have heightened scrutiny of plecanatide or any other agent under development for IBS. This could delay product approval, increase the cost of our clinical development program, or increase the cost of post-market study commitments for our IBS product candidates, including plecanatide.

Table of Contents

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

In the future, we may seek to commercialize plecanatide and/or other product candidates, including SP-333, in foreign countries 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 jurisdictions regarding safety and efficacy. Approval procedures vary among jurisdictions and can involve product testing and administrative review periods different from, and greater than, those in the United States. The time required to obtain approval in other jurisdictions might differ from that required to obtain FDA approval. The regulatory approval process in other jurisdictions may include all of the risks detailed above regarding FDA approval in the United States as well as other risks. Regulatory approval in one jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory processes in others. Failure to obtain regulatory approvals in other jurisdictions or any delay or setback in obtaining such approvals could have the same adverse effects detailed above regarding FDA approval in the United States. As described above, such effects include the risks that plecanatide or other product candidates may not be approved for all indications for use included in proposed labeling or for any indications at all, which could limit the uses of plecanatide or other product candidates and have an adverse effect on our products commercial potential or require costly post-marketing studies.

***We rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to seek or obtain regulatory approval for or commercialize our product candidates.***

We have agreements with third-party contract research organizations, or CROs, under which we have delegated to the CROs the responsibility to coordinate and monitor the conduct of our clinical trials and to manage data for our clinical programs. We, our CROs and our clinical sites are required to comply with current Good Clinical Practices, or GCPs, regulations and guidelines issued by the FDA and by similar governmental authorities in other countries where we are conducting clinical trials. We have an ongoing obligation to monitor the activities conducted by our CROs and at our clinical sites to confirm compliance with these requirements. In the future, if we, our CROs or our clinical sites fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with product produced under cGMP regulations, and will require a large number of test subjects. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced, or if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

***If we fail to attract and keep senior management and key scientific personnel, we may be unable to successfully develop our product candidates, conduct our clinical trials and commercialize our product candidates.***

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. We are highly dependent upon our senior management and scientific staff, particularly Gary S. Jacob, Ph.D., our President and Chief Executive Officer and Kunwar Shailubhai, Ph.D., Chief Scientific Officer of Synergy. The loss of services of Dr. Jacob or one or more of our other members of

senior management could delay or prevent the successful completion of our planned clinical trials or the commercialization of our product candidates.

The competition for qualified personnel in the biotechnology and pharmaceuticals field is intense. We will need to hire additional personnel as we expand our clinical development and commercial activities. We may not be able to attract and retain quality personnel on acceptable terms given the competition for such personnel among biotechnology, pharmaceutical and other companies.

*We will need to increase the size of our organization, and we may experience difficulties in managing growth.*

We are a small company with 11 full-time employees as of March 29, 2012. To continue our clinical trials and commercialize our product candidates, we will need to expand our employee base for managerial, operational, financial and other resources. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Over the next 12 months depending on the progress of our planned clinical trials, we plan to add additional employees to assist us with our clinical programs. 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. To that end, we must be able to:

- manage development efforts effectively;

Table of Contents

- manage our clinical trials effectively;
  - integrate additional management, administrative, manufacturing and sales and marketing personnel;
  - maintain sufficient administrative, accounting and management information systems and controls; and
  - hire and train additional qualified personnel.
- We may not be able to accomplish these tasks, and our failure to accomplish any of them could harm our financial results and impact our ability to achieve development milestones.

***Reimbursement may not be available for our product candidates, which would impede sales.***

Market acceptance and sales of our product candidates may depend on reimbursement policies and health care reform measures. Decisions about formulary coverage as well as levels at which government authorities and third-party payors, such as private health insurers and health maintenance organizations, reimburse patients for the price they pay for our products as well as levels at which these payers pay directly for our products, where applicable, could affect whether we are able to commercialize these products. We cannot be sure that reimbursement will be available for any of these products. Also, we cannot be sure that reimbursement amounts will not reduce the demand for, or the price of, our products. We have not commenced efforts to have our product candidates reimbursed by government or third party payers. If reimbursement is not available or is available only to limited levels, we may not be able to commercialize our products.

In recent years, officials have made numerous proposals to change the health care system in the United States. These proposals include measures that would limit or prohibit payments for certain medical treatments or subject the pricing of drugs to government control. In addition, in many foreign countries, particularly the countries of the European Union, the pricing of prescription drugs is subject to government control. If our products are or become subject to government regulation that limits or prohibits payment for our products, or that subject the price of our products to governmental control, we may not be able to generate revenue, attain profitability or commercialize our products.

As a result of legislative proposals and the trend towards managed health care in the United States, third-party payers are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement of new drugs. They may also refuse to provide any coverage of uses of approved products for medical indications other than those for which the FDA has granted market approvals. As a result, significant uncertainty exists as to whether and how much third-party payers will reimburse patients for their use of newly-approved drugs, which in turn will put pressure on the pricing of drugs.

*Healthcare reform measures could hinder or prevent our product candidates' commercial success.*

The U.S. government and other governments have shown significant interest in pursuing healthcare reform. Any government-adopted reform measures could adversely impact the pricing of healthcare products and services in the United States or internationally and the amount of reimbursement available from governmental agencies or other third party payers. The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payers of health care services to contain or reduce health care costs may adversely affect our ability to set prices for our products which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

New laws, regulations and judicial decisions, or new interpretations of existing laws, regulations and decisions, that relate to healthcare availability, methods of delivery or payment for products and services, or sales, marketing or pricing, may limit our potential revenue, and we may need to revise our research and development programs. The pricing and reimbursement environment may change in the future and become more challenging due to several reasons, including policies advanced by the current executive administration in the United States, new healthcare legislation or fiscal challenges faced by government health administration authorities. Specifically, in both the United States and some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably.

For example, in March 2010, President Obama signed the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the PPACA. This law will substantially change the way health care is financed by both government health plans and private insurers, and significantly impact the pharmaceutical industry. The PPACA contains a number of provisions that are expected to impact our business and operations in ways that may negatively affect our potential revenues in the future. For example, the PPACA 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 our products. In addition, as part of the PPACA's provisions closing a funding gap that currently exists in the Medicare Part D prescription drug program (commonly known as

Table of Contents

the donut hole ); we will be required to provide a 50% discount on branded prescription drugs sold to beneficiaries who fall within the donut hole. Similarly PPACA increases the level of Medicaid rebates payable by manufacturers of brand-name drugs from 15.1% to 23.1% and requires collection of rebates for drugs paid by Medicaid managed care organizations. The PPACA also included significant changes to the 340B Drug Pricing Program including expansion of the list of eligible covered entities that may purchase drugs under the program. At the same time, the expansion in eligibility for health insurance benefits created under PPACA is expected to increase the number of patients with insurance coverage who may receive our products. While it is too early to predict all the specific effects the PPACA or any future healthcare reform legislation will have on our business, they could have a material adverse effect on our business and financial condition.

In addition, the Medicare Prescription Drug Improvement and Modernization Act of 2003 reformed the way Medicare covers and reimburses for pharmaceutical products. This legislation could decrease the coverage and price that we may receive for our proposed products. Other third-party payors are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicare and private payors. Our proposed products may not be considered cost-effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our proposed products on a profitable basis. Further federal and state proposals and health care reforms are likely which could limit the prices that can be charged for the product candidates that we develop and may further limit our commercial opportunity. Our results of operations could be materially adversely affected by the proposed healthcare reforms, by the Medicare prescription drug coverage legislation, by the possible effect of such current or future legislation on amounts that private insurers will pay and by other health care reforms that may be enacted or adopted in the future.

In September 2007, the Food and Drug Administration Amendments Act of 2007 was enacted, giving the FDA enhanced post-marketing authority, including the authority to require post-marketing studies and clinical trials, labeling changes based on new safety information, and compliance with risk evaluations and mitigation strategies approved by the FDA. The FDA's exercise of this authority could result in delays or increased costs during product development, clinical trials and regulatory review, increased costs to assure compliance with post-approval regulatory requirements, and potential restrictions on the sale and/or distribution of approved products.

***Our ability to use our net operating loss carryforwards may be subject to limitation.***

Generally, a change of more than 50% in the ownership of a company's stock, by value, over a three-year period constitutes an ownership change for U.S. federal income tax purposes. An ownership change may limit a company's ability to use its net operating loss carryforwards attributable to the period prior to the change. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may become subject to limitations, which could potentially result in increased future tax liability for us. At December 31, 2011, we had consolidated net operating loss carryforwards aggregating approximately \$104 million. We have determined that a Synergy ownership change occurred as of April 30, 2003 pursuant to Section 382 of the Internal Revenue Code of 1986, as amended, or the Code. In addition, the shares of our common stock that we issued from July 14, 2008 through July 8, 2010 have resulted in an additional ownership change. As a result of these events, our ability to utilize our Synergy operating loss carry forwards is limited.

***If we fail to comply with the rules under the Sarbanes-Oxley Act of 2002 related to accounting controls and procedures, or, if we discover additional material weaknesses and other deficiencies in our internal control and accounting procedures, our stock price could decline significantly and raising capital could be more difficult.***

If we fail to comply with the rules under the Sarbanes-Oxley Act of 2002 related to disclosure controls and procedures, or, if we discover additional material weaknesses and other deficiencies in our internal control and accounting procedures, our stock price could decline significantly and raising capital could be more difficult. Section 404 of the Sarbanes-Oxley Act requires annual management assessments of the



effectiveness of our internal control over financial reporting. We have documented and tested our internal control procedures, and during the year ended December 31, 2009, we identified material weaknesses in our internal control over financial reporting and other deficiencies. During the years ended December 31, 2010 and 2011 we implemented and continue to implement remedial measures designed to address these material weaknesses. If these remedial measures are insufficient to address these material weaknesses, if additional material weaknesses or significant deficiencies are discovered or if we otherwise fail to achieve and maintain the adequacy of our internal control, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. Moreover, effective internal controls are necessary for us to produce reliable financial reports and are important to helping prevent financial fraud. If we cannot provide reliable financial reports or prevent fraud, our business and operating results could be harmed, investors could lose confidence in our reported financial information, and the trading price of our common stock could drop significantly. In addition, we cannot be certain that additional material weaknesses or significant deficiencies in our internal controls will not be discovered in the future.

Table of Contents

**Risks Related to Our Intellectual Property**

*It is difficult and costly to protect our proprietary rights, and we may not be able to ensure their protection.*

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our product candidates, and the methods used to manufacture them, as well as successfully defending these patents against third-party challenges. We will only be able to protect our product candidates from unauthorized making, using, selling and offering to sell or importation by third parties to the extent that we have rights under valid and enforceable patents or trade secrets that cover these activities. We seek patent protection of inventions originating from our ongoing research and development activities that are commercially important to our business.

As of March 29, 2012, we are had 6 issued United States patents and 1 pending patent application related to Atiprimod. The U.S. patent covering the composition of matter of Atiprimod and the U.S. patent coving the formulation of Atiprimod dimaleate salt both expire in 2016. In addition, we currently have approximately 15 issued or pending foreign patent applications related to Atiprimod. These foreign patents cover Switzerland, United Kingdom, Ireland (2), Turkey, South Africa, Japan (2), Taiwan, Hong Kong, Thailand, Chile, Mexico and Canada. One PCT (World International Patent Organization) application is pending and has the potential to be nationalized by many countries should we elect to do so.

As of March 29, 2012, Synergy has five issued United States patents. Two of these patents cover the composition-of-matter of plecanatide and were issued on May 9, 2006 and September 21, 2010; they will expire in 2023 and 2022, respectively. A third patent covers the composition-of-matter of SP333 issued on February 1, 2011 and expires in 2028. A fourth patent granted October 11, 2011 covers composition-of-matter of analogs related to plecanatide and SP333 and will expire in 2028. A fifth patent granted February 14, 2012 covers a method of treating inflammatory bowel disease using plecanatide and will expire in 2022. In addition, Synergy has three granted foreign patents which cover composition-of-matter of plecanatide and expire in 2022. These foreign patents cover Austria, Belgium, Switzerland, Cyprus, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Portugal, Sweden, Turkey, Hong Kong, Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, and Japan.

Additionally as of March 29, 2012, Synergy has 7 pending United States patent applications and 39 pending foreign patent applications covering plecanatide and SP-333 and various derivatives and analogs. In April 2010, two parties filed an opposition to Synergy s granted patent with the European Patent Office. An opposition hearing was held December 14, 2011, which resulted in the European Patent Office issuing the following statement: Account being taken of the amendments made by the patent proprietor during the opposition proceedings, the patent and the invention to which it relates are found to meet the requirements of the European Patent Convention (Art.101(3)(a)EPC). In particular, the composition-of-matter claim covering plecanatide was upheld. In addition, we are aware that another pharmaceutical company has been issued a patent for the use of plecanatide for treatment of constipation or constipation predominant irritable bowel syndrome.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date in the United States. The biotechnology patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our issued patents or in third-party patents.

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The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to make compounds that are competitive with our product candidates but that are not covered by the claims of our patents;
- we might not have been the first to make the inventions covered by our pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies
- it is possible that our pending patent applications will not result in issued patents;
- we may not develop additional proprietary technologies that are patentable; or
- the patents of others may have an adverse effect on our business.

We also may rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our employees,

Table of Contents

consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

***We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights and we may be unable to protect our rights to, or use, our technology.***

If we choose to go to court to stop someone else from using the inventions claimed in our patents, that individual or company has the right to ask the court to rule that these patents are invalid and/or should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of these patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe our rights to these patents.

Furthermore, a third party may claim that we are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our product candidates. These lawsuits are costly and could affect our results of operations and divert the attention of managerial and technical personnel. There is a risk that a court would decide that we are infringing the third party's patents and would order us to stop the activities covered by the patents. In addition, there is a risk that a court will order us to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our issued patents or our pending applications or that we were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours. Any such patent application may have priority over our patent applications and could further require us to obtain rights to issued patents covering such technologies. If another party has filed a United States patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the PTO, to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our United States patent position with respect to such inventions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

***Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance***

*with these requirements.*

The PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.

***We have not yet registered trademarks for plecanatide in our potential markets, and failure to secure those registrations could adversely affect our ability to market our product candidate and our business.***

We have not yet registered trademarks for plecanatide in any jurisdiction. Our trademark applications in the United States, when filed and any other jurisdictions where we may file may not be allowed for registration, and our registered trademarks may not be maintained or enforced. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the PTO and in comparable agencies in many foreign jurisdictions,

Table of Contents

third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Failure to secure such trademark registrations in the United States and in foreign jurisdictions could adversely affect our ability to market our product candidates and our business.

***Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.***

Because we operate in the highly technical field of research and development of small molecule drugs, we rely in part on trade secret protection in order to protect our proprietary trade secrets and unpatented know-how. However, trade secrets are difficult to protect, and we cannot be certain that others will not develop the same or similar technologies on their own. We have taken steps, including entering into confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors, to protect our trade secrets and unpatented know-how. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. We also typically obtain agreements from these parties which provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets or know-how is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets or know-how. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

***We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.***

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at other potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

**Risks Related to Our Stock**

***The market price of the common stock may be volatile and adversely affected by several factors.***

The market price of our common stock could fluctuate significantly in response to various factors and events, including:

- our ability to integrate operations, technology, products and services;

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- our ability to execute our business plan;
- announcements concerning product development results, including clinical trial results, or intellectual property rights of others;
- litigation or public concern about the safety of our potential products;
- our issuance of additional securities, including debt or equity or a combination thereof, which will be necessary to fund our operating expenses;
- announcements of technological innovations or new products by us or our competitors;
- loss of any strategic relationship;
- industry developments, including, without limitation, changes in healthcare policies or practices or third-party reimbursement policies;
- economic and other external factors;
- period-to-period fluctuations in our financial results; and
- whether an active trading market in our common stock develops and is maintained.

Table of Contents

In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock.

*We have not paid cash dividends in the past and do not expect to pay cash dividends in the foreseeable future. Any return on investment may be limited to the value of our common stock.*

We have never paid cash dividends on our capital stock and do not anticipate paying cash dividends on our capital stock in the foreseeable future. The payment of dividends on our capital stock will depend on our earnings, financial condition and other business and economic factors affecting us at such time as the board of directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if the common stock price appreciates.

*A sale of a substantial number of shares of the common stock may cause the price of our common stock to decline.*

If our stockholders sell, or the market perceives that our stockholders intend to sell for various reasons, including shares issued upon the exercise of outstanding options or warrants the market price of our common stock could fall. Sales of a substantial number of shares of our common stock may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate. We may become involved in securities class action litigation that could divert management's attention and harm our business.

The stock markets have from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of biotechnology and biopharmaceutical companies. These broad market fluctuations may cause the market price of our common stock to decline. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies have experienced significant stock price volatility in recent years.

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None

**ITEM 2. PROPERTIES.**

Our corporate headquarters totals approximately 4,300 rentable square feet located at 420 Lexington Avenue, New York, and is subject to a lease which has a monthly rate of \$16,414 and expires on March 31, 2012. We expect to extend this lease through March 31, 2014 at a small increase in our monthly rate in the near future. Synergy also occupies a small laboratory and several offices, totaling approximately 700 square



feet, in the Bucks County Biotechnology Center in Doylestown, Pennsylvania, and is subject to a lease which has a monthly rate of \$2,254 and expires on December 31, 2013. Rent expense for the twelve months ended December 31, 2011 and 2010 totaled \$ 267,542 and \$313,451, respectively.

**ITEM 3. LEGAL PROCEEDINGS.**

On December 22, 2009, Synergy Advanced Pharmaceuticals, Inc., a wholly-owned subsidiary of Synergy, filed a complaint in the Supreme Court of the State of New York against CapeBio, LLC, CombiMab Inc. and Per Lindell alleging that defendants intentionally breached certain provisions of agreements previously entered into with us. We are requesting that the defendants be permanently restrained and enjoined from breaching such agreements and disgorging all compensation and any and all profits derived from their claimed misappropriation of plaintiff's intellectual property.

We are not a party to any other pending legal proceedings.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable

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

Our common stock currently trades on the Over the Counter Bulletin Board under the symbol **CLSP.OB**.

The following table shows the reported high and low closing prices per share for our common stock as reported on the Over the Counter Bulletin Board.

	2011		2010	
	High	Low	High	Low
First Quarter	\$ 0.70	\$ 0.54	\$ 0.49	\$ 0.18
Second Quarter	\$ 0.70	\$ 0.49	\$ 0.43	\$ 0.30
Third Quarter	\$ 0.63	\$ 0.41	\$ 0.41	\$ 0.22
Fourth Quarter	\$ 0.48	\$ 0.25	\$ 0.86	\$ 0.30

**HOLDERS OF COMMON STOCK**

As of March 29, 2012 we had 125 holders of record of our common stock.

**DIVIDENDS**

Historically, we have not declared or paid any cash dividends to the holders of our common stock and we do not expect to pay any such dividends in the foreseeable future as we expect to retain our future earnings for use in the operation and expansion of our business.

**EQUITY COMPENSATION INFORMATION**

The following table summarizes information about our equity compensation plans as of December 31, 2011.

<b>Plan Category</b>	<b>Number of Shares of Common Stock to be Issued upon Exercise of Outstanding Options and Warrants (a)</b>	<b>Weighted-Average Exercise Price of Outstanding Options and Warrants</b>	<b>Number of Options Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))</b>
Equity Compensation Plans Approved by Stockholders	5,510,817	\$ 1.37	3,603,000
Equity Compensation Plans Not Approved by Stockholders(1)	3,286,629	1.41	
<b>Total</b>	<b>8,797,446</b>		<b>3,603,000</b>

(1) Consists of 1,924,555 stock options not subject to any of our stock option plans and 1,362,074 warrants. These non-plan stock options and warrants have been primarily issued in conjunction with our private placements of common stock and consulting services agreements.

Table of Contents

**ITEM 6. SELECTED FINANCIAL DATA**

Not Applicable

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

**The following discussion should be read in conjunction with our consolidated financial statements and other financial information appearing elsewhere in this Annual Report on Form 10-K. In addition to historical information, the following discussion and other parts of this Annual Report contain forward-looking information that involves risks and uncertainties.**

**BUSINESS OVERVIEW**

Callisto Pharmaceuticals, Inc. (which may be referred to as Callisto, the Company, we, our or us) is a development stage biopharmaceutical company focused primarily on the development of drugs to treat gastrointestinal (GI) disorders and diseases and was incorporated under the laws of the State of Delaware on June 5, 1996 (inception). Since inception, our efforts have been principally devoted to research and development, securing and protecting patents and raising capital. We operate as a holding company through two controlled subsidiaries: Synergy Pharmaceuticals, Inc. (Synergy) (41% owned) and Callisto Research Labs, LLC (100% owned). Synergy owns one inactive subsidiary, IgX, Ltd (Ireland).

All of our drug candidates, currently plecanatide and SP-333 to treat GI disorders and diseases, are being developed exclusively by Synergy. Use of the terms we, our or us in connection with the GI drug candidates discussed herein refer to research and development activities and plans of Synergy.

Synergy's lead drug candidates are as follows:

- (1) Plecanatide, a guanylyl cyclase C (GC-C) receptor agonist, to treat GI disorders, primarily chronic constipation (CC) and constipation-predominant irritable bowel syndrome (IBS-C).
- (2) SP-333, a second generation GC-C receptor agonist, SP-333, now in pre-clinical development to treat gastrointestinal inflammatory diseases.

**HISTORY**

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In March 2002, Callisto Pharmaceuticals, Inc. ( Old Callisto ), a non-public company, purchased 99.7% of the outstanding common shares of Webtronics, Inc., ( Webtronics ) a public company for \$400,000. Webtronics was incorporated in Florida on February 2, 2001 and had limited operations at December 31, 2002.

On April 30, 2003, pursuant to an Agreement and Plan of Merger dated March 10, 2003, as amended April 4, 2003, Synergy Acquisition Corp., a wholly-owned subsidiary of Webtronics merged into Synergy Pharmaceuticals, Inc. ( Synergy-DE ) and Callisto Acquisition Corp., a wholly-owned subsidiary of Webtronics merged into Old Callisto (collectively, the Merger ). As a result of the Merger, Old Callisto and Synergy-DE became wholly-owned subsidiaries of Webtronics. In connection with the Merger, Webtronics issued 17,318,994 shares of its common stock in exchange for outstanding Old Callisto common stock and an additional 4,395,684 shares in exchange for outstanding Synergy-DE common stock. In May 2003, Old Callisto changed its name to Callisto Research Labs, LLC ( Callisto Research ) and Webtronics changed its name to Callisto Pharmaceuticals, Inc. and changed its state of incorporation from Florida to Delaware. Subsequently, 171,818 shares of common stock issued to former Synergy-DE shareholders were returned to us under the terms of certain indemnification agreements.

On July 14, 2008, we entered into an Exchange Agreement dated July 11, 2008 ( Exchange Agreement ), as amended and effective on July 14, 2008, with Pawfect Foods, Inc. ( Pawfect ), Synergy-DE and other holders of Synergy-DE common stock. According to the terms of the Exchange Agreement, Pawfect acquired 100% of the common stock of Synergy-DE, from us and the other holders of Synergy-DE, in exchange for 45,464,760 shares of Pawfect s common stock representing approximately 70% of Pawfect s outstanding common stock (the Exchange Transaction ). We received 44,590,000 of the 45,464,760 shares of Pawfect s common stock exchanged for our ownership of Synergy-DE, representing 68% of Pawfect s outstanding common stock. The remaining 874,760 shares of Pawfect common stock exchanged for ownership of Synergy-DE were issued to certain executive officers of Synergy-DE who received their shares pursuant to a Repurchase Agreement with Synergy-DE dated July 3, 2008 and assumed by Pawfect.

Pawfect was a development stage company selling pet food products utilizing the internet, with immaterial operations at the date of the Exchange Agreement. On July 14, 2008, Pawfect discontinued its pet food business to focus all resources on continuing the development of drugs to treat GI disorders and diseases acquired in connection with the Exchange Agreement. On July 21, 2008 Pawfect,

Table of Contents

amended its articles of incorporation, in the state of Florida, to effect the actions necessary to complete the transactions contemplated by the Exchange Agreement and changed its name to Synergy Pharmaceuticals, Inc. ( Synergy ). Synergy is now traded on the OTC QB under the symbol SGYP.

From inception through December 31, 2011, we have sustained cumulative net losses attributable to common stockholders of \$142,366,313. Our losses have resulted primarily from expenditures incurred in connection with research and development activities, application and filing for regulatory approval of proposed products, stock-based compensation expense, patent filing and maintenance expenses, purchase of in-process research and development, outside accounting and legal services and regulatory, scientific and financial consulting fees, as well as deemed dividends attributable to the beneficial conversion rights of convertible preferred stock at issuance and changes in fair value of derivatives. From inception through December 31, 2011, we have not generated any revenue from operations, expect to incur additional losses to perform further research and development activities and do not currently have any commercial biopharmaceutical products, and do not expect to have such for several years, if at all.

Our product development efforts are thus in their early stages and we cannot make estimates of the costs or the time they will take to complete. The risk of completion of any program is high because of the many uncertainties involved in bringing new drugs to market including the long duration of clinical testing, the specific performance of proposed products under stringent clinical trial protocols, the extended regulatory approval and review cycles, our ability to raise additional capital, the nature and timing of research and development expenses and competing technologies being developed by organizations with significantly greater resources.

**CRITICAL ACCOUNTING POLICIES**

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Our accounting policies are described in Item 8. Financial Statements Note 3 *Summary of Significant Accounting Policies and New Accounting Pronouncements*. The preparation of financial statements in conformity with 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 financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates. We believe that the following discussion represents our critical accounting policies.

**Research and Development**

We do not currently have any commercial biopharmaceutical products, and do not expect to have such for several years, if at all and therefore our research and development costs are expensed as incurred. These include expenditures in connection with an in-house research and development laboratory, salaries and staff costs, application and filing for regulatory approval of our proposed products, purchase of in-process research and development, regulatory and scientific consulting fees and contract research payments to outside suppliers, facilities and universities. While certain of our research and development costs may have future benefits, our policy of expensing all research and development expenditures is predicated on the fact that we have no history of successful commercialization of biopharmaceutical products to base any estimate of the number of future periods that would be benefited.

In June 2007, the EITF of the FASB reached a consensus on ASC Topic 730, *Research and Development* ( ASC Topic 730 ). This guidance requires that non-refundable advance payments for goods or services that will be used or rendered for future research and development activities should be deferred and capitalized. As the related goods are delivered or the services are performed, or when the goods or services are no longer expected to be provided, the deferred amounts are recognized as an expense. We adopted ASC Topic 730 on January 1, 2008 and the adoption did not have a material effect on our consolidated financial position, results of operations or cash flows. As of December 31, 2011 and 2010 we had \$577,745 and \$683,182, respectively, of such deferred amounts, which are included in prepaid and other current assets on the Company's consolidated balance sheets.

### **Stock-Based Compensation**

We rely heavily on incentive compensation in the form of stock options to recruit, retain and motivate directors, executive officers, employees and consultants. Incentive compensation in the form of stock options is designed to provide long-term incentives, develop and maintain an ownership stake and conserve cash during our development stage. Since inception through December 31, 2010 stock-based compensation expense has totaled \$20,591,544 or 14% of our total deficit accumulated during development stage of \$142,366,313.

ASC Topic 718 *Compensation - Stock Compensation* ( ASC 718) requires companies to measure the cost of employee services received in exchange for the award of equity instruments based on the estimated fair value of the award at the date of grant. The expense is to be recognized over the period during which an employee is required to provide services in exchange for the award.

Upon adoption of ASC 718 we selected the Black-Scholes option pricing model as the most appropriate model for determining the estimated fair value for stock-based awards. Use of a valuation model requires management to make certain assumptions with respect to

Table of Contents

selected model inputs. Expected volatility was calculated based on our historical volatility. The expected term was determined based on the simplified method provided in ASC 718. The risk-free interest rate is based on observed interest rate appropriate for the expected term of our stock options. Forfeitures are estimated, based on our historical experience, at the time of grant.

*Fair value of financial instruments*

We have adopted FASB ASC 820 *Fair Value Measurements and Disclosures* ( *ASC 820* ) for financial assets and liabilities that are required to be measured at fair value, and non-financial assets and liabilities that are not required to be measured at fair value on a recurring basis. The carrying value of cash and cash equivalents, accounts payable and accrued expenses approximates fair value due to the relatively short maturity of these instruments.

ASC 820 provides that the measurement of fair value requires the use of techniques based on observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. The inputs create the following fair value hierarchy:

- Level 1 Quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations where inputs are observable or where significant value drivers are observable.
- Level 3 Instruments where significant value drivers are unobservable to third parties.

*Warrants*

We have issued common stock warrants in connection with the execution of certain equity financings. Such warrants are classified as derivative liabilities under the provisions of FASB ASC 815 *Derivatives and Hedging* ( *ASC 815* ), are recorded at their fair market value as of each reporting period. Changes in fair value of derivative liabilities are recorded in the consolidated statement of operations.

The fair value of warrants deemed to be derivative instruments is determined using the Black-Scholes or Binomial option-pricing models using varying assumptions regarding volatility of our common share price, remaining life of the warrant, and risk-free interest rates at each period end. We thus use model-derived valuations where significant value drivers are unobservable to third parties to determine the fair value and accordingly classify such warrants in Level 3 per ASC 820. At December 31, 2011 and 2010 the fair value of such warrants was \$3,325,114 and \$3,487,959, respectively, which we classified as a long term derivative liability on our balance sheets.



As of December 31, 2011 and 2010 we did not hold any Level 1 or Level 2 securities.

## **RESULTS OF OPERATIONS**

### **YEARS ENDED DECEMBER 31, 2011 AND DECEMBER 31, 2010**

We had no revenues during the twelve months ended December 31, 2011 and 2010 because we do not have any commercial biopharmaceutical products and we do not expect to have such products for several years, if at all.

For the twelve months ended December 31, 2011, research and development expenses increased \$3,729,912 or 39% to \$13,318,455 for the twelve months ended December 31, 2011 from \$9,588,543 for the twelve months ended December 31, 2010. This increase in research and development expenses was primarily attributable to initiating the Phase II/III clinical trial of our product candidate plecanatide and the pre-clinical development of SP-333. These clinical and preclinical expenses totaled approximately \$11,119,000 during the twelve months ended December 31, 2011, as compared to \$5,800,000 during the twelve months ended December 31, 2010. This increase was offset by lower manufacturing, formulation, testing and packaging of drug product, totaling approximately \$1,020,000 during the twelve months ended December 31, 2011, as compared to \$2,625,000 during the twelve months ended December 31, 2010.

For the twelve months ended December 31, 2011, general and administrative expenses increased \$266,948 or 4%, to \$7,610,136 for the twelve months ended December 31, 2011 from \$7,343,188 for the twelve months ended December 31, 2010. This increase was primarily due to higher compensation related expenses, partially offset by lower legal expenses.

Table of Contents

Net loss available to common stockholders for twelve months ended December 31, 2011, decreased \$19,000,443 to \$6,793,045 compared to a net loss available to common stockholders of \$ 25,793,488 incurred for the twelve months ended December 31, 2010. The decreased net loss is the result of higher research and development, and general and administrative expenses discussed above, more than offset by the following non-operating items for the twelve months ended December 31, 2011 and 2010.

	Twelve months ended 12/31/2011	Twelve months ended 12/31/2010	Change (\$)
Loss from operations	\$ (20,928,591)	\$ (16,931,731)	\$ (3,996,860)
Interest and investment income	1,695	25,548	(23,853)
Tax credit	367,613	1,025,606	(657,993)
Interest expense notes payable	(11,877)	(322,705)	310,828
Loss on debt extinguishment		(2,099,892)	2,099,892
Change in fair value of derivative instruments	5,257,031	(15,344,578)	20,601,609
Net loss attributable to non-controlling interest	8,521,084	7,854,264	666,820
Net loss available to common stockholders	\$ (6,793,045)	\$ (25,793,488)	\$ 19,000,443

**YEARS ENDED DECEMBER 31, 2010 AND DECEMBER 31, 2009**

We had no revenues during the twelve months ended December 31, 2010 and 2009 because we do not have any commercial biopharmaceutical products and we do not expect to have such products for several years, if at all.

For the twelve months ended December 31, 2010, research and development expenses increased \$6,165,028 or 180% to \$9,588,543 for the twelve months ended December 31, 2010 from \$3,423,515 for the twelve months ended December 31, 2009. This increase in research and development expenses was entirely attributable to continuing the development of our plecanatide product candidate. These expenses included (i) procurement of drug substance, totaling approximately \$2,625,000 as compared to \$910,000 during the 12 months ended December 31, 2009 (ii) plecanatide program expenses including animal studies, analytical testing and clinical data monitoring and patient costs of approximately \$5,484,000, as compared to \$1,956,000 during the 12 months ended December 31, 2009; related to our phase IIa clinical trial initiated in March 2010 and concluded in October 2010, (iii) scientific and regulatory advisory fees and expenses of approximately \$346,000, as compared to \$224,000 during the 12 months ended December 31, 2009, (iv) in-house staff salaries and wages, stock based compensation and employee benefits of approximately \$1,103,000, as compared to \$643,000 during the 12 months ended December 31, 2009 as we hired additional product development personnel.

For the twelve months ended December 31, 2010, general and administrative expenses increased \$2,236,719 or 44%, to \$7,343,188 for the twelve months ended December 31, 2010 from \$5,106,470 for the twelve months ended December 31, 2009. These expenses primarily include (i) higher facilities cost of approximately \$955,000 as compared to \$713,000 during the 12 months ended December 31, 2009, (ii) higher accounting, corporate legal and tax services of approximately \$1,824,000, as compared to \$1,172,000 during the 12 months ended December 31, 2009. This increase is primarily due to filings of registration statements and due diligence related to our registered direct offerings during the twelve months ended December 31, 2010, (iii) consultants and financial advisors of approximately \$2,482,000, as compared to \$1,193,000 during the 12 months ended December 31, 2009, (iv) travel of approximately \$252,000, as compared to \$180,000 during the 12 months ended December 31, 2009 and (v) salaries and wages, stock based compensation and related employee benefits of approximately \$1,825,000, as compared to \$1,846,000 during the 12 months ended December 31, 2009.



Table of Contents

Net loss available to common stockholders for twelve months ended December 31, 2010, increased \$8,904,875 to \$25,793,488, compared to a net loss available to common stockholders of \$16,888,613 incurred for the twelve months ended December 31, 2009. The increased net loss is the result of higher research and development, and general and administrative expenses discussed above, plus the following non-operating items for the twelve months ended December 31, 2010 and 2009.

	Twelve months ended 12/31/2010	Twelve months ended 12/31/2009	Change (\$)
Loss from operations	\$ (16,931,731)	\$ (8,529,985)	\$ (8,401,746)
Interest and investment income	25,548	25,008	540
Tax credit	1,025,606		1,025,606
Interest expense notes payable	(322,705)	(436,693)	113,988
Loss on debt extinguishment	(2,099,892)		(2,099,892)
Change in fair value of derivative instruments	(15,344,578)	(9,413,744)	(5,930,834)
Net loss attributable to non-controlling interest	7,854,264	3,282,393	4,571,871
Series A and B preferred stock conversion rate change accreted as a dividend		(1,815,592)	1,815,592
Net loss available to common stockholders	\$ (25,793,488)	\$ (16,888,613)	\$ (8,904,875)

**LIQUIDITY AND CAPITAL RESOURCES**

As of December 31, 2011, we had \$13,244,961 in cash and cash equivalents, compared to \$1,708,982 as of December 31, 2010. Net cash used in operating activities was \$21,253,344 for the twelve months ended December 31, 2010 as compared to \$12,209,500 during the twelve months ended December 31, 2010. Net cash provided by financing activities for the twelve months ended December 31, 2010 was \$32,789,323, as compared to \$6,710,870 provided during the twelve months ended December 31, 2010.

As of December 31, 2011 we had working capital of \$9,754,600, as compared to a working capital deficit of \$3,806,899 on December 31, 2010.

Worldwide economic conditions and the international equity and credit markets have significantly deteriorated and may remain depressed for the foreseeable future. These developments will make it more difficult for us to obtain additional equity or credit financing, when needed. We have accordingly taken steps to conserve our cash which include extending payment terms to our vendors and suppliers as well as management and staff salary cuts and deferrals. These actions may not be sufficient to allow us time to raise additional capital.

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Our working capital requirements will depend upon numerous factors including but not limited to the nature, cost and timing of pharmaceutical research and development programs. We will be required to raise additional capital within the next twelve months to complete the development and commercialization of current product candidates, to fund the existing working capital deficit and to continue to fund operations at our current cash expenditure levels. To date, our sources of cash have been primarily limited to the sale of equity securities. We cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact our ability to conduct business. If we are unable to raise additional capital when required or on acceptable terms, we may have to (i) significantly delay, scale back or discontinue the development and/or commercialization of one or more of product candidates; (ii) seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; or (iii) relinquish license or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves on unfavorable terms.

Our consolidated financial statements as of December 31, 2011 have been prepared under the assumption that we will continue as a going concern. Our independent registered public accounting firm has issued a report on our financial statements that included an explanatory paragraph referring to our recurring losses from operations and expressing substantial doubt in our ability to continue as a going concern without additional capital becoming available. Our ability to continue as a going concern is dependent upon our ability to obtain additional equity or debt financing, attain further operating efficiencies and, ultimately, to generate revenue. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Table of Contents**CONTRACTUAL OBLIGATIONS AND COMMITMENTS**

The following table is a summary of contractual cash obligations for the periods indicated that existed as of December 31, 2011, and is based on information appearing in the notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

	<b>Total</b>	<b>Less than 1 Year</b>	<b>1-2 Years</b>	<b>3-5 Years</b>	<b>More than 5 Years</b>
Operating leases	\$ 49,243	\$ 49,243	\$	\$	\$
Purchase obligations principally employment and consulting services(1)	3,113,270	1,194,035	1,919,235		
Purchase Obligations Major Vendors(2)	1,496,569	1,496,569			
<b>Total obligations</b>	<b>\$ 4,659,082</b>	<b>\$ 2,739,847</b>	<b>\$ 1,919,235</b>	<b>\$</b>	<b>\$</b>

(1) Represents salary and bonus for remaining term of employment agreements with Gary S. Jacob, CEO, Bernard F Denoyer, Senior Vice President, Finance and consulting fees and bonus for remaining term of consulting agreement with Gabriele M. Cerrone, Chairman.

(2) Represents amounts that will become due upon future delivery of supplies, drug substance and test results from various suppliers, under open purchase orders in connection with Synergy research and development activities as of December 31, 2011.

**OFF-BALANCE SHEET ARRANGEMENTS**

We had no off-balance sheet arrangements as of December 31, 2011.

**RECENT ACCOUNTING PRONOUNCEMENTS**

In June 2011, the FASB issued ASU No. 2011-05, *Presentation of Comprehensive Income* ( ASU 2011-05 ) which is intended to facilitate the convergence of U.S. GAAP and International Financial Reporting Standards ( IFRS ) as well as to increase the transparency of items reported in other comprehensive income. As a result of ASU 2011-05, all nonowner changes in stockholders' equity are required to be presented in a single continuous statement of comprehensive income or in two separate but consecutive statements. The option to present other comprehensive income in the statement of changes in equity has been eliminated. ASU 2011-05 is effective for fiscal years beginning after December 15, 2011 and should be applied retrospectively. The Company expects to adopt this standard beginning in 2012. As ASU 2011-05 impacts presentation only, it will have no effect on the Company's consolidated financial statements.

In May 2011, FASB issued ASU No. 2011-04, Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs. ASU 2011-04 amends Topic 820 to provide common fair value measurement and disclosure requirements in U.S. Generally Accepted Accounting Principles ( U.S. GAAP ) and International Financial Reporting Standards. Consequently, the amendments change the wording used to describe many of the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements, as well as providing guidance on how fair value should be applied where its use is already required or permitted by other standards within U.S. GAAP. ASU No. 2011-04 is to be applied prospectively, and early adoption is not permitted. For public entities, the amendments are effective during interim and annual periods beginning after December 15, 2011. The adoption of ASU No. 2011-04 is not expected to have a material impact on our results of operations or our financial position.

In December 2011, the FASB issued ASU 2011-11, Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities. ASU 2011-11 provides for additional disclosures of both gross information and net information about both instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to an agreement similar to a master netting arrangement. This scope would include derivatives, sale and repurchase agreements and reverse sale and repurchase agreements, and securities borrowing and securities lending arrangements. The amendments in this Update are effective for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods, and disclosures required by these amendments should be provided retrospectively for all comparative periods presented.

In December 2011, the FASB issued ASU 2011-12, Comprehensive Income (Topic 220): Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting

Table of Contents

Standards Update No. 2011-05. ASU 2011-12 defers the specific requirement to present items that are reclassified from accumulated other comprehensive income to net income separately with their respective components of net income and other comprehensive income. ASU 2011-12 did not defer the requirement to report comprehensive income either in a single continuous statement or in two separate but consecutive financial statements. The amendments are effective at the same time as the amendments in ASU 2011-05.

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

At December 31, 2011 and 2010, a substantial portion of our cash and cash equivalents consists of short term, highly liquid investments in money market savings accounts held at commercial banks.

*Interest Rate Risk*

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of interest rates, particularly because our investments are in short-term money marketable funds. Due to the short-term duration of our investment portfolio and the relatively low risk profile of our investments, a sudden change in interest rates would not have a material effect on the fair market value of our portfolio, nor our operating results or cash flows.

Recently, there has been concern in the credit markets regarding the value of a variety of mortgage-backed and auction rate securities and the resulting effect on various securities markets. We do not hold any auction rate securities. We do not believe our cash, and cash equivalents investments have significant risk of default or illiquidity, however, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. Given the current instability of financial institutions, we cannot provide assurance that we will not experience losses on these deposits.

Our capital lease obligations bear interest at a fixed rate and therefore these leases have no exposure to changes in interest rates.

*Foreign Currency Risk*

We have no operations outside the U.S. and do not hold any foreign currency denominated financial instruments.

*Effects of Inflation*



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We do not believe that inflation and changing prices during the years ended December 31, 2011, 2010 and 2009 had a significant impact on our results of operations.

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

The full text of our audited consolidated financial statements as of December 31, 2011 and 2010 and for the fiscal years ended December 31, 2011, 2010 and 2009 and for the period from June 5, 1996 (inception) to December 31, 2011, begins on page F-1 of this Annual Report on Form 10-K.

### **ITEM 9A. CONTROLS AND PROCEDURES.**

#### *a) Disclosure Controls and Procedures*

Our chief executive officer and chief financial officer evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2011. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective, at the reasonable assurance level, in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Table of Contents

***b) Management's Report on Internal Control over Financial Reporting***

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for our company. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Exchange Act, as a process designed by, or under the supervision of, a company's principal executive and principal financial officers and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
- (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made in accordance with authorizations of management and directors of the company; and
- (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

We conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, we conclude that, at December 31, 2011, our internal control over financial reporting was effective.

***c) Changes in Internal Control over Financial Reporting***

As required by Rule 13a-15(d) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation of the internal control over financial reporting to determine whether any changes occurred during the quarter ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our principal executive officer and principal financial officer concluded there were no such changes during the quarter ended December 31, 2011.

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This annual report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our independent registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

### **ITEM 9B. OTHER INFORMATION.**

None.

Table of Contents**PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.**

The following table sets forth certain information regarding the directors and executive officers of Callisto Pharmaceuticals, Inc. as of March 29, 2012:

Name	Age	Position
Gabriele M Cerrone	40	Chairman of the Board
Gary S. Jacob	65	Chief Executive Officer, Chief Scientific Officer and Director
Bernard F. Denoyer	64	Senior Vice President, Finance and Secretary
John P. Brancaccio	64	Director
Randall Johnson	65	Director

**Gabriele M. Cerrone** has served as our Chairman of the Board of Directors since May 2003 and a consultant since January 2005. From March 1999 to January 2005 Mr. Cerrone served as a Senior Vice President of Investments of Oppenheimer & Co. Inc., a financial services firm. In May 2001, Mr. Cerrone led the restructuring of SIGA Technologies, Inc., a biotechnology company, and served on its board of directors from May 2001 to May 2003. Mr. Cerrone co-founded TrovaGene, Inc. (formerly Xenomics, Inc.), a diagnostics company, and served as Co-Chairman from July 2005 until November 2006. Mr. Cerrone also co-founded FermaVir Pharmaceuticals, Inc., a biotechnology company, and served as Chairman from August 2005 to September 2007, when the company was acquired by Inhibitex, Inc., a biotechnology company. Mr. Cerrone served as a director of Inhibitex, Inc. from September 2007 until February 2012 when it was acquired by Bristol-Myers Squibb Company. Mr. Cerrone currently serves as a director of TrovaGene, Inc. In addition, Mr. Cerrone is Chairman and a consultant to Synergy Pharmaceuticals, Inc. Mr. Cerrone is the managing partner of Panetta Partners Ltd., a Colorado limited partnership that is a private investor in both public and private venture capital in the life sciences and technology arena as well as real estate. Mr. Cerrone's experience in finance and investment banking allows him to contribute broad financial and strategic planning expertise and led to the Board's conclusion that he should serve as a director of the company.

**Gary S. Jacob, Ph.D.** has served as our Chief Executive Officer as well as Chief Scientific Officer since May 2003 and a Director since October 2004. Dr. Jacob has also served as President, Chief Executive Officer and a Director of Synergy Pharmaceuticals, Inc. since July 2008, Chairman of Synergy-DE from October 2003 until July 2008 and Chief Scientific Officer of Synergy DE from 1999 to 2003. Dr. Jacob is also a director of TrovaGene, Inc. (formerly Xenomics, Inc.), a diagnostics company. Dr. Jacob served as Chief Scientific Officer of Synergy DE from 1999 to 2003. Dr. Jacob has over twenty-five years of experience in the pharmaceutical and biotechnology industries across multiple disciplines including research & development, operations and business development. Prior to 1999, Dr. Jacob served as a Monsanto Science Fellow, specializing in the field of glycobiology, and from 1997 to 1998 was Director of Functional Genomics, Corporate Science & Technology, at Monsanto Company. Dr. Jacob also served from 1990 to 1997 as Director of Glycobiology at G.D. Searle Pharmaceuticals Inc. During the period of 1986 to 1990, he was Manager of the G.D. Searle Glycobiology Group at Oxford University, England. Dr. Jacob's broad management expertise in the pharmaceutical and biotechnology industries provides relevant experience in a number of strategic and operational areas and led to the Board's conclusion that he should serve as a director of our company.

**Bernard F. Denoyer** has served as our Senior Vice President, Finance since December 2007 and from January 2004 to November 2007 served as our Vice President, Finance and Secretary. Since July 2008 Mr. Denoyer has also served as Senior Vice President, Finance and Secretary of

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Synergy. From October 2000 to December 2003, Mr. Denoyer was an independent consultant providing interim CFO and other services to emerging technology companies, including Callisto and certain portfolio companies of Marsh & McLennan Capital, LLC. From October 1994 until September 2000, Mr. Denoyer served as Chief Financial Officer and Senior Vice President at META Group, Inc., a public information technology research company, where he was instrumental in their 1995 IPO. From 1990 to 1993 he served as Vice President Finance of Environetics, Inc., a pharmaceutical water diagnostic test business, acquired by IDEXX Laboratories, Inc.

Table of Contents

**John P. Brancaccio**, a retired CPA, has served as a director of our company since April 2004. Since April 2004, Mr. Brancaccio has been the Chief Financial Officer of Accelerated Technologies, Inc., an incubator for medical device companies. From May 2002 until March 2004, Mr. Brancaccio was the Chief Financial Officer of Memory Pharmaceuticals Corp., a biotechnology company. From 2000 to 2002, Mr. Brancaccio was the Chief Financial Officer/Chief Operating Officer of Eline Group, an entertainment and media company. Mr. Brancaccio is currently a director of Alfacell Corporation as well as a director of TrovaGene, Inc. (formerly Xenomics, Inc.) and Synergy Pharmaceuticals, Inc. Mr. Brancaccio's chief financial officer experience provides him with valuable financial and accounting expertise which the Board believes qualifies him to serve as a director of our company.

**Randall Johnson, Ph.D.** has served as a director of our company since February 2005. Since February 2002, Dr. Johnson has been serving as a consultant to various venture capital, biotechnology and pharmaceutical companies focusing on oncology. From October 1982 to February 2002, Dr. Johnson served in a number of capacities at GlaxoSmithKline PLC/SmithKline Beecham Pharmaceuticals, most recently as a Group Director in the Department of Oncology Research. Dr. Johnson's experience in drug development qualifies him to serve as a director of our company.

## COMPENSATION OF DIRECTORS

Under the 2005 Directors' Stock Option Plan, upon election to the Board, each non-employee and non-consultant director receives a grant of 45,000 stock options vesting over three years and having an exercise price equal to the fair market value of the common stock on the date of grant. Upon re-election to the Board, each of our non-employee and non-consultant directors receive an annual grant of 6,000 options vesting over three years having an exercise price equal to the fair market value of the common stock on the date of grant. In addition, non-employee and non-consultant directors will receive an annual grant of options with an exercise price equal to the fair market value of the common stock on the date of grant for serving on Board committees which will vest in one year. Chairpersons of each of the Audit Committee, Compensation Committee and Corporate Governance/Nominating Committee receive 5,000, 3,500 and 2,000 stock options, respectively, and members of such committees receive 3,000, 2,000 and 1,000 stock options, respectively.

Non-employee and non-consultant directors also receive an annual cash fee of \$15,000 as well as cash compensation for serving on board committees. Chairpersons of each of the Audit Committee, Compensation Committee and Corporate Governance/Nominating Committee receive \$10,000, \$7,000 and \$4,000, respectively, and members of such committees receive \$6,000, \$4,000 and \$2,500, respectively.

## AUDIT COMMITTEE

The Audit Committee's responsibilities include: (i) reviewing the independence, qualifications, services, fees, and performance of the independent registered public accountants, (ii) appointing, replacing and discharging the independent auditors, (iii) pre-approving the professional services provided by the independent auditors, (iv) reviewing the scope of the annual audit and reports and recommendations submitted by the independent auditors, and (v) reviewing our financial reporting and accounting policies, including any significant changes, with management and the independent auditors.

The Audit Committee currently consists of John Brancaccio, chairman of the Audit Committee, and Randall Johnson. Our board of directors has determined that each of Mr. Johnson and Mr. Brancaccio is independent as that term is defined under applicable SEC rules and under the current listing standards of NASDAQ. Mr. Brancaccio is our audit committee financial expert. The Board of Directors has adopted a written charter

setting forth the authority and responsibilities of the Audit Committee. A copy of this charter is available at our web site [www.callistopharma.com](http://www.callistopharma.com).

#### **COMPENSATION COMMITTEE**

The Compensation Committee has responsibility for assisting the Board of Directors in, among other things, evaluating and making recommendations regarding the compensation of the executive officers and directors of our company; assuring that the executive officers are compensated effectively in a manner consistent with our stated compensation strategy; producing an annual report on executive compensation in accordance with the rules and regulations promulgated by the SEC; periodically evaluating the terms and administration of our incentive plans and benefit programs and monitoring of compliance with the legal prohibition on loans to our directors and executive officers.

The Compensation Committee currently consists of Randall Johnson, chairman of the Compensation Committee and John Brancaccio. The Board of Directors has determined that all of the members are independent under the current listing standards of NASDAQ. The Board of Directors has adopted a written charter setting forth the authority and responsibilities of the Compensation Committee. A copy of this charter is available at our web site [www.callistopharma.com](http://www.callistopharma.com).

Table of Contents

*Compensation Committee Interlocks and Insider Participation*

None of the members of our compensation committee is an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee, except for Gabriele M. Cerrone and Gary S. Jacob.

**CORPORATE GOVERNANCE/NOMINATING COMMITTEE**

The Corporate Governance/Nominating Committee has responsibility for assisting the Board in, among other things, effecting Board organization, membership and function including identifying qualified Board nominees; effecting the organization, membership and function of Board committees including composition and recommendation of qualified candidates; establishment of and subsequent periodic evaluation of successor planning for the chief executive officer and other executive officers; development and evaluation of criteria for Board membership such as overall qualifications, term limits, age limits and independence; and oversight of compliance with the Corporate Governance Guidelines. The Corporate Governance/Nominating Committee shall identify and evaluate the qualifications of all candidates for nomination for election as directors.

The Corporate Governance/Nominating Committee currently consists of John Brancaccio, Chairman of the Corporate Governance/Nominating Committee. The Board of Directors has determined that all of the members are independent under the current listing standards of NASDAQ. The Board of Directors has adopted a written charter setting forth the authority and responsibilities of the Corporate Governance/Nominating Committee. A copy of this charter is available at our web site [www.callistopharma.com](http://www.callistopharma.com).

**COMPLIANCE WITH SECTION 16(A) OF THE EXCHANGE ACT**

Section 16(a) of the Securities Exchange Act of 1934 requires our officers and directors, and persons who own more than ten percent of a registered class of our equity securities, to file reports of ownership and changes in ownership with the Securities and Exchange Commission. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file. Based on a review of the copies of such forms received, we believe that during 2011, all filing requirements applicable to our officers, directors and greater than ten percent beneficial owners were complied with.

**CODE OF BUSINESS CONDUCT AND ETHICS**

We have adopted a formal Code of Business Conduct and Ethics applicable to all Board members, executive officers and employees. A copy of this Code of Business Conduct and Ethics is posted on our website at [www.callistopharma.com](http://www.callistopharma.com).



**ITEM 11. EXECUTIVE COMPENSATION.****SUMMARY COMPENSATION TABLE**

The following table provides certain summary information concerning compensation awarded to, earned by or paid to our Chief Executive Officer, Principal Financial Officer and two other highest paid executive officers whose total annual salary and bonus exceeded \$100,000 (collectively, the named executive officers ) for fiscal year 2011.

<b>Gabriele M. Cerrone(2)</b>	2011	319,043	340,648	1,244,126	1,903,817
Chairman of the Board	2010	309,750	1,397,762(3)	11,787,403(4)	13,494,915
	2009	278,521	150,000		428,521
<b>Gary S. Jacob</b>	2011	324,450	346,421	1,244,126	1,914,997
Chief Executive Officer and	2010	315,000	189,000	11,787,403(4)	12,291,403
Chief Scientific Officer	2009	285,000	150,000		435,000
<b>Bernard F. Denoyer</b>	2011	200,850	54,508		255,358
Senior Vice President, Finance	2010	195,000		329,667(4)	524,667
and Principal Financial Officer	2009	176,249			176,249

(1) Amounts represent Callisto and Synergy aggregate grant date fair value in accordance with FASB ASC Topic 718.

(2) Mr. Cerrone is being paid pursuant to a consulting agreement with Synergy.

(3) \$1,211,912 of such amount represents an accrued realization bonus. Mr. Cerrone had agreed with us to defer payment of his bonus until the earlier of (i) March 31, 2012, (ii) the completion of a financing transaction yielding gross proceeds of \$30 million on a cumulative basis subsequent to October 6, 2010 or (iii) the tenth business day after termination of the consulting agreement without cause or good reason (including a termination following a change of control transaction as that term is defined in his consulting agreement). In consideration of Mr. Cerrone agreeing to permit us to defer payment of his bonus we agreed to indemnify him from any liability for taxes or penalties that he may incur pursuant to Section 409A of the Internal Revenue Code and comparable state income tax laws. This bonus was paid in full during the year ended December 31, 2011

(4) Substantially all of the options underlying these amounts vest and are exercisable at \$0.70 per share upon a change of control of Synergy.

Table of Contents**OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END**

The following table sets forth information for the named executive officers regarding the number of shares subject to both exercisable and unexercisable Callisto stock options, as well as the exercise prices and expiration dates thereof, as of December 31, 2011.

Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options	Option Exercise Price	Option Expiration Date
Gary S. Jacob	130,000	260,000	\$ 0.26	130,000 on January 25, 2012, 130,000 on January 25, 2013
	500,000		1.50	June 13, 2013
	112,500	162,500(1)	3.00	June 29, 2014
	200,000		1.01	July 6, 2015
	50,000		1.64	March 17, 2016
	75,000		0.81	February 16, 2017
Bernard F. Denoyer	25,000	50,000	0.26	25,000 on January 25, 2012, 25,000 on January 25, 2013
	100,000		3.60	January 15, 2014
	50,000		1.38	July 29, 2015
	100,000		0.66	April 12, 2017
Gabriele M Cerrone	130,000	260,000	0.26	130,000 on January 25, 2012, 130,000 on January 25, 2013
	333,055		1.30	April 22, 2013
	75,000		1.50	June 13, 2013
	100,000		3.20	April 26, 2014
	375,000		1.70	January 10, 2015
	225,000		0.96	January 25, 2017

(1) The remaining 162,500 options vest upon certain drug development or licensing benchmarks.

**DIRECTOR COMPENSATION**

The following table sets forth summary information concerning the total compensation earned by our non-employee directors in 2011 for services to our company.

Name	Fees Earned or Paid In Cash
John P. Brancaccio(1)	\$ 31,500
Randall Johnson(2)	\$ 28,000
Riccardo Dalla-Favera(3)	\$ 3,750

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(1) Stock options for the purchase of an aggregate of 176,123 Callisto shares were outstanding as of December 31, 2011, of which 168,123 were exercisable

(2) Stock options for the purchase of an aggregate of 153,000 Callisto shares were outstanding as of December 31, 2011, of which 145,000 were exercisable

(3) Stock options for the purchase of an aggregate of 101,000 Callisto shares were outstanding as of December 31, 2011, of which 101,000 were exercisable. Dr. Della-Favera resigned his director position effective April 15, 2011.

Table of Contents

**EMPLOYMENT AGREEMENTS AND CHANGE IN CONTROL AGREEMENTS**

On April 6, 2004, Kunwar Shailubhai, Ph.D. entered into an employment agreement with Synergy in which he agreed to serve as Senior Vice President, Drug Discovery. Dr. Shailubhai's employment agreement was for a term of 12 months beginning April 6, 2004 and is automatically renewed for successive one year periods at the end of each term. On July 9, 2008, Dr. Shailubhai was appointed Chief Scientific Officer of Synergy, his salary is currently \$236,907 per year and he is eligible to receive a discretionary performance bonus of up to 25% of his salary per year.

On May 2, 2011, Dr. Gary Jacob entered into a second amended and restated employment agreement with Synergy in which he agreed to serve as Chief Executive Officer and President. The term of the agreement was effective as of August 1, 2008 and continues until December 31, 2014 and is automatically renewed for successive one year periods at the end of each term. Dr. Jacob's current salary is \$324,450 per year. Dr. Jacob is eligible to receive a cash bonus of up to 50% of his base salary per year based on meeting certain performance objectives and bonus criteria. Such performance objectives and bonus criteria for 2012 had not been determined as of March 14, 2012. Dr. Jacob is also eligible to receive a realization bonus in the event that Synergy enters into an out-license agreement for our technology or enter into a joint venture in which we contribute such rights to the joint venture where the enterprise value equals or exceeds a minimum of \$250 million during the term of the agreement or the license fees Synergy contracts to receive equals or exceeds \$50 million. The realization bonus will be equal to the enterprise value in the case of a joint venture or the sum of the license fees actually received in the case of an out license, multiplied by 0.5%. In addition, in the event Synergy engages in a merger transaction or a sale of substantially all of our assets where (i) our enterprise value at the time of the merger or sale equals or exceed \$400 million and our stockholders prior to consummation of the merger or sale beneficially own less than 20% of the stock of the surviving entity after consummation of the merger or (ii) our enterprise value at the time of the merger or sale or 12 months after the merger or sale equals or exceed \$250 million and our stockholders prior to consummation of the merger or sale beneficially own 20% or more of the stock of the surviving entity after consummation of the merge, Dr. Jacob shall receive a bonus in an amount determined by multiplying the enterprise value by 2.5%.

If the employment agreement is terminated by Synergy other than for cause or as a result of Dr. Jacob's death or permanent disability or if Dr. Jacob terminates his employment for good reason which includes a change of control, Dr. Jacob shall receive (i) a severance payment equal to the higher of the aggregate amount of his base salary for the then remaining term of the agreement or twelve times the average monthly base salary paid or accrued during the three full calendar months preceding the termination, (ii) expense compensation in an amount equal to twelve times the sum of his average base salary during the three full months preceding the termination, (iii) immediate vesting of all unvested stock options and the extension of the exercise period of such options to the later of the longest period permitted by our stock option plans or ten years following the termination date, (iv) payment in respect of compensation earned but not yet paid and (v) payment of the cost of medical insurance for a period of twelve months following termination. In the event Dr. Jacob's employment was terminated upon a change of control as of December 31, 2011, he would have been entitled to receive a lump sum payment of \$973,350, less applicable withholding.

On May 2, 2011, Gabriele M. Cerrone, our Chairman of the Board, entered into an amended and restated consulting agreement with Synergy. The term of the agreement was effective as of August 1, 2008 and continues until December 31, 2014 and is automatically renewed for successive one year periods at the end of each term. Pursuant to the agreement, Mr. Cerrone's current compensation is \$319,043 per year. Mr. Cerrone is eligible to receive a cash bonus of up to 50% of his base compensation per year based on meeting certain performance objectives and bonus criteria. Such performance objectives and bonus criteria for 2012 had not been determined as of March 14, 2012. Mr. Cerrone is also eligible to receive a realization bonus in the event that Synergy enters into an out-license agreement for our technology or enter into a joint venture in which Synergy contributes such rights to the joint venture where the enterprise value equals or exceeds a minimum \$250 million during the term of the agreement or the license fees Synergy contracts to receive equals or exceeds \$50 million. The realization bonus will be equal to the enterprise value in the case of a joint venture or financing or the sum of the license fees actually received multiplied by 0.5%. In addition, in the event Synergy engages in a merger transaction or a sale of substantially all of our assets where (i) our enterprise value at the time of the merger or sale equals or exceed \$400 million and our stockholders prior to consummation of the merger or sale beneficially own less than 20% of the stock of the surviving entity after consummation of the merger or (ii) our enterprise value at the time of the merger or sale or 12 months after the merger or sale equals or exceed \$250 million and our stockholders prior to consummation of the merger or sale beneficially

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own 20% or more of the stock of the surviving entity after consummation of the merge, Mr. Cerrone shall receive a bonus in an amount determined by multiplying the enterprise value by 2.5%.

On October 6, 2010 Synergy achieved the \$20 million threshold required for Mr. Cerrone's realization bonus to be accrued on the cumulative gross proceeds of financing transactions since August 1, 2008. This bonus totaled \$1,211,912, was deemed compensatory in

Table of Contents

nature and charged to expense during the year ended December 31, 2010. Mr. Cerrone has agreed with Synergy to defer payment of his bonus until the earlier of (i) March 31, 2012, (ii) the completion of a financing transaction yielding gross proceeds of \$30 million on a cumulative basis subsequent to October 6, 2010 or (iii) the tenth business day after termination of the consulting agreement without cause or good reason (including a termination following a change of control transaction as that term is defined in his consulting agreement). In consideration of Mr. Cerrone agreeing to permit Synergy to defer payment of his bonus Synergy agreed to indemnify him from any liability for taxes or penalties that he may incur pursuant to Section 409A of the Internal Revenue Code and comparable state income tax laws. This bonus was paid in full during the year ended December 31, 2011, which payment does not terminate Synergy's indemnification liability.

If the consulting agreement is terminated by Synergy other than for cause or as a result of Mr. Cerrone's death or permanent disability or if Mr. Cerrone terminates the agreement for good reason which includes a change of control, Mr. Cerrone shall receive (i) a severance payment equal to the higher of the aggregate amount of his base compensation for the then remaining term of the agreement or twelve times the average monthly base compensation paid or accrued during the three full calendar months preceding the termination, (ii) expense compensation in an amount equal to twelve times the sum of his average base compensation during the three full months preceding the termination, (iii) immediate vesting of all unvested stock options and the extension of the exercise period of such options to the later of the longest period permitted by our stock option plans or ten years following the termination date, (iv) payment in respect of compensation earned but not yet paid and (v) payment of the cost of medical insurance for a period of twelve months following termination. In the event Mr. Cerrone's employment was terminated upon a change of control as of December 31, 2011, he would have been entitled to receive a lump sum payment of \$957,129 less applicable withholding.

On January 20, 2011, Bernard F. Denoyer entered into an executive employment agreement with Synergy in which he agreed to serve as Senior Vice President, Finance. The term of the agreement was effective as of January 20, 2011, continues until January 20, 2013 and is automatically renewed for successive one year periods at the end of each term. Mr. Denoyer's base salary is currently \$200,850 and he is eligible to receive a cash bonus of up to 20% of his base salary per year at the discretion of the Compensation Committee of the Board of Directors. If the employment agreement is terminated by Synergy other than for cause or as a result of Mr. Denoyer's death or permanent disability or if Mr. Denoyer terminates his employment for good reason which includes a change of control, Mr. Denoyer shall receive (i) a severance payment equal to the higher of the aggregate amount of his base salary for the then remaining term of the agreement or twelve times the average monthly base salary paid or accrued during the three full calendar months preceding the termination, (ii) immediate vesting of all unvested stock options and the extension of the exercise period of such options to the later of the longest period permitted by our stock option plans or ten years following the termination date, (iii) payment in respect of compensation earned but not yet paid and (iv) payment of the cost of medical insurance for a period of twelve months following termination. In the event Mr. Denoyer's employment was terminated upon a change of control as of December 31, 2011, he would have been entitled to receive a lump sum payment of \$211,855, less applicable withholding.

Table of Contents

**STOCK OPTION PLANS**

We rely on incentive compensation in the form of stock options to retain and motivate directors, executive officers, employees and consultants. Incentive compensation in the form of stock options is designed to provide long-term incentives to directors, executive officers, employees and consultants, to encourage them to remain with us and to enable them to develop and maintain an ownership position in our common stock.

**Callisto Pharmaceuticals, Inc. Stock Option Plans**

In 1996, Callisto adopted the 1996 Incentive and Non-Qualified Stock Option Plan (the Plan) for employees, consultants and outside directors to purchase up to 2,000,000 shares of common stock. This Plan was amended in December 2002 to increase the number of shares authorized under the Plan to 10,000,000. The option term for the 3,113,817 options outstanding as of December 31, 2011 under the Plan is ten years from date of grant. The Plan terminated on January 1, 2006 under its original terms and no further options will be granted under the Plan.

On October 20, 2005, our stockholders approved the 2005 Equity Compensation Incentive Plan. The maximum number of shares of common stock with respect to which awards may be granted under the 2005 Equity Plan is 5,000,000. The option term for options granted under the 2005 Equity Plan is ten years from date of grant and there were 2,770,000 options available for future grants as of December 31, 2011.

On October 20, 2005, our stockholders approved our 2005 Directors Stock Option Plan. The maximum number of shares of common stock with respect to which awards may be granted under the 2005 Directors Plan is 1,000,000. The option term for options granted under the 2005 Directors Plan is ten years from date of grant and there are 833,000 option shares available for future grants as of December 31, 2011.

Our 2005 Equity Compensation Incentive Plan authorizes the grant of stock options to directors (excluding outside directors), eligible employees, including executive officers and consultants. The value realizable from exercisable options is dependent upon the extent to which our performance is reflected in the value of our common stock at any particular point in time. Equity compensation in the form of stock options is designed to provide long-term incentives to directors, executive officers and other employees. We approve the granting of options in order to motivate these employees to maximize stockholder value. Generally, vesting for options granted under the stock option plan is determined at the time of grant, and options expire after a 10-year period. Options are generally granted at an exercise price not less than the fair market value at the date of grant. As a result of this policy, directors, executives, employees and consultants are rewarded economically only to the extent that the stockholders also benefit through appreciation in the market. Options granted to employees are based on such factors as individual initiative, achievement and performance. In administering grants to executives, the Compensation Committee of the Board of Directors evaluates each executive's total equity compensation package. The compensation committee generally reviews the option holdings of each of the executive officers, including vesting and exercise price and the then current value of such unvested options. We consider equity compensation to be an integral part of a competitive executive compensation package and an important mechanism to align the interests of management with those of our stockholders.

The options we grant under the 2005 Equity Plan may be either incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the Code), or non-statutory stock options at the discretion of the Board of Directors and as reflected in the terms of the written option agreement. None of our stock option plans are qualified deferred compensation plans under Section 401(a) of the Code, and are not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). As of December 31,

2011, we have 1,924,555 stock options outstanding not subject to our stock option plans.



Table of Contents

**Synergy Pharmaceuticals, Inc. Stock Option Plan**

During 2008, Synergy adopted the 2008 Equity Compensation Incentive Plan (the Synergy Plan ) which is intended to promote the best interests of its stockholders by (i) assisting Synergy and its Subsidiaries in the recruitment and retention of persons with ability and initiative, (ii) providing an incentive to such persons to contribute to the growth and success of Synergy s businesses by affording such persons equity participation in Synergy and (iii) associating the interests of such persons with those of Synergy and its Subsidiaries and stockholders. Stock options granted under the Synergy Plan, typically vest after three years of continuous service from the grant date and have a contractual term of ten years. As of December 31, 2011 there were 5,964,039 stock options outstanding under the Synergy Plan and 1,535,961 shares available for future issuances. On March 1, 2010, a majority of the Synergy shareholders acting by written consent approved an amendment to the Synergy Plan increasing the number of shares reserved under the Synergy Plan to 7,500,000 shares.

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

The following table sets forth certain information regarding beneficial ownership of shares of our common stock as of March 29, 2012 by (i) each person know to beneficially own more than 5% of the outstanding common stock, (ii) each of our directors, (iii) the Named Executive Officers and (iv) all directors and executive officers as a group. Except as otherwise indicated, the persons named in the table have sole voting and investment power with respect to all shares beneficially owned, subject to community property laws, where applicable. Unless otherwise indicated, the address of each beneficial owner listed below is c/o Callisto Pharmaceuticals, Inc., 420 Lexington Avenue, Suite 1609, New York, N.Y. 10170.

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Table of Contents

Name and Address of Beneficial Owner	Shares of Common Stock Beneficially Owned(1)	
	Number of Shares	Percentage and Class
Gabriele M. Cerrone Chairman of the Board	3,417,292(2)	2.1%
Gary S. Jacob Chief Executive Officer, Chief Scientific Officer and Director	1,851,745(3)	1.2%
Bernard Denoyer Senior Vice President, Finance and Secretary	300,000(4)	*
John Brancaccio Director	168,123(5)	*
Randall K. Johnson Director	145,000(6)	*
All Directors and Executive Officers as a group (5 persons)	5,882,160(7)	3.6%
5% or Greater Stockholders		
R. Merrill Hunter	25,376,872	16.1%

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\* less than 1%

(1) Applicable percentage ownership as of March 29, 2012 is based upon 158,516,071 shares of common stock outstanding.

(2) Includes 1,368,055 shares of common stock issuable upon exercise of stock options.

(3) Includes 1,597,500 shares of common stock issuable upon exercise of stock options.

(4) Consists of 300,000 shares of common stock issuable upon exercise of stock options.

(5) Consists of 168,123 shares of common stock issuable upon exercise of stock options.

(6) Consists of 145,000 shares of common stock issuable upon exercise of stock options.

(7) Includes 3,578,678 shares of common stock issuable upon exercise of stock options.

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Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting and investment power with respect to securities. Beneficial ownership determined in this manner may not constitute ownership of such securities for other purposes or indicate that such person has an economic interest in such securities.

Table of Contents

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

On May 2, 2011, Gabriele M. Cerrone, our Chairman of the Board, entered into an amended and restated consulting agreement with Synergy. The term of the agreement was effective as of August 1, 2008 and continues until December 31, 2014 and is automatically renewed for successive one year periods at the end of each term. Pursuant to the agreement, Mr. Cerrone's current compensation is \$319,043 per year. Mr. Cerrone is eligible to receive a cash bonus of up to 50% of his base compensation per year based on meeting certain performance objectives and bonus criteria. Such performance objectives and bonus criteria for 2012 had not been determined as of March 14, 2012. Mr. Cerrone is also eligible to receive a realization bonus in the event that Synergy enters into an out-license agreement for our technology or enter into a joint venture in which Synergy contributes such rights to the joint venture where the enterprise value equals or exceeds a minimum \$250 million during the term of the agreement or the license fees Synergy contracts to receive equals or exceeds \$50 million. The realization bonus will be equal to the enterprise value in the case of a joint venture or financing or the sum of the license fees actually received multiplied by 0.5%. In addition, in the event Synergy engages in a merger transaction or a sale of substantially all of our assets where (i) our enterprise value at the time of the merger or sale equals or exceeds \$400 million and our stockholders prior to consummation of the merger or sale beneficially own less than 20% of the stock of the surviving entity after consummation of the merger or (ii) our enterprise value at the time of the merger or sale or 12 months after the merger or sale equals or exceeds \$250 million and our stockholders prior to consummation of the merger or sale beneficially own 20% or more of the stock of the surviving entity after consummation of the merge, Mr. Cerrone shall receive a bonus in an amount determined by multiplying the enterprise value by 2.5%.

On October 6, 2010 Synergy achieved the \$20 million threshold required for Mr. Cerrone's realization bonus to be accrued on the cumulative gross proceeds of financing transactions since August 1, 2008. This bonus totaled \$1,211,912, was deemed compensatory in nature and charged to expense during the year ended December 31, 2010. Mr. Cerrone has agreed with Synergy to defer payment of his bonus until the earlier of (i) March 31, 2012, (ii) the completion of a financing transaction yielding gross proceeds of \$30 million on a cumulative basis subsequent to October 6, 2010 or (iii) the tenth business day after termination of the consulting agreement without cause or good reason (including a termination following a change of control transaction as that term is defined in his consulting agreement). In consideration of Mr. Cerrone agreeing to permit Synergy to defer payment of his bonus Synergy agreed to indemnify him from any liability for taxes or penalties that he may incur pursuant to Section 409A of the Internal Revenue Code and comparable state income tax laws. This bonus was paid in full during the year ended December 31, 2011, which payment does not terminate Synergy's indemnification liability.

If the consulting agreement is terminated by Synergy other than for cause or as a result of Mr. Cerrone's death or permanent disability or if Mr. Cerrone terminates the agreement for good reason which includes a change of control, Mr. Cerrone shall receive (i) a severance payment equal to the higher of the aggregate amount of his base compensation for the then remaining term of the agreement or twelve times the average monthly base compensation paid or accrued during the three full calendar months preceding the termination, (ii) expense compensation in an amount equal to twelve times the sum of his average base compensation during the three full months preceding the termination, (iii) immediate vesting of all unvested stock options and the extension of the exercise period of such options to the later of the longest period permitted by our stock option plans or ten years following the termination date, (iv) payment in respect of compensation earned but not yet paid and (v) payment of the cost of medical insurance for a period of twelve months following termination. In the event Mr. Cerrone's employment was terminated upon a change of control as of December 31, 2011, he would have been entitled to receive a lump sum payment of \$957,129 less applicable withholding.

**CONFLICTS OF INTEREST**

Gabriele Cerrone and his affiliates are subject to certain potential conflicts of interests. His consulting agreement expressly recognizes that he may provide consulting services to others. In addition, from time to time, he or his affiliates may be presented with business opportunities which could be suitable for our business and Mr. Cerrone is not subject to any restrictions with respect to other business activities, except to the extent

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such activities are in violation of our Code of Conduct and Ethics or violate general confidentiality provisions of his consulting agreement. In instances where there is potential conflict of interest or business opportunity, with respect to any officer or director, including Mr. Cerrone, our Audit Committee has both the authority and responsibility to review such matters and take appropriate actions.

Any future transactions with officers, directors or 5% stockholders will be on terms no less favorable to us than could be obtained from independent parties. Any affiliated transactions must be approved by a majority of our independent and disinterested directors who have access to our counsel or independent legal counsel at our expense.

Table of Contents

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

**AUDIT FEES**

The aggregate fees billed and unbilled for the fiscal years ended December 31, 2011 and December 31, 2010, for professional services rendered by our principal accountants for the audits of our annual financial statements, the review of our financial statements included in our quarterly reports on Form 10-Q and consultations and consents were approximately \$397,890 and \$365,000, respectively.

**AUDIT-RELATED FEES**

There were no aggregate fees billed for the fiscal years ended December 31, 2011 and 2010 for assurance and related services rendered by our principal accountants related to the performance of the audit or review of our financial statements.

**TAX AND OTHER FEES**

The aggregate fees billed and unbilled for the fiscal years ended December 31, 2011 and 2010 for professional services rendered by our principal accountants for tax preparation services was \$22,650 for each year.

Consistent with SEC policies and guidelines regarding audit independence, the Audit Committee is responsible for the pre-approval of all audit and permissible non-audit services provided by our principal accountants on a case-by-case basis. Our Audit Committee has established a policy regarding approval of all audit and permissible non-audit services provided by our principal accountants. Our Audit Committee pre-approves these services by category and service. Our Audit Committee has pre-approved all of the services provided by our principal accountants.

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(1)

*Index to Financial Statement Schedules:*

<u>Index to Consolidated Financial Statements</u>	F-1
<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets as of December 31, 2011 and 2010</u>	F-3

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<u>Consolidated Statement of Operations for each of the three years ended December 31, 2011, 2010 and 2009 and for the period June 5, 1996 (inception) to December 31, 2011</u>	F-4
<u>Consolidated Statement of Changes in Stockholder s Equity (Deficit) for the period June 5, 1996 (inception) to December 31, 2011</u>	F-5
<u>Consolidated Statements of Cash Flows for each of the three years ended December 31, 2011, 2010 and 2009 and for the period June 5, 1996 (inception) to December 31, 2011</u>	F-12
<u>Notes to Consolidated Financial Statements</u>	F-13

(2)

*List of Documents Filed as a Part of This Report:*

All schedules have been omitted because the required information is included in the consolidated financial statements or the notes thereto, or is not applicable or required.

(3)

*Index to Exhibits*

### Exhibit Index

The Exhibits listed below are identified by numbers corresponding to the Exhibit Table of Item 601 of Regulation S-K. The Exhibits designated by an asterisk (\*) are management contracts or compensatory plans or arrangements required to be filed pursuant to Item 15. Two asterisks (\*\*) indicate confidential treatment requested with respect to deleted portions of this agreement.

<b>Exhibit No.</b>	<b>Description</b>
3.1	Certificate of Incorporation, as amended (Incorporated by reference to Exhibit 2.1 filed with the Company s Annual Report on Form 10-K filed on March 28, 2008)

Table of Contents

3.2	Certificate of Designations, Number, Voting Powers, Preferences and Rights of Series A Convertible Preferred Stock of Callisto Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 3.1 filed with the Company's Current Report on Form 8-K filed on October 27, 2006)
3.3	Certificate of Amendment to Certificate of Designations, Number, Voting Powers, Preferences and Rights of Series A Convertible Preferred Stock of Callisto Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 3.2 filed with the Company's Current Report on Form 8-K filed on December 27, 2006)
3.4	Certificate of Amendment to Certificate of Designations, Number, Voting Powers, Preferences and Rights of Series A Convertible Preferred Stock of Callisto Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 3.2 filed with the Company's Current Report on Form 8-K filed on August 7, 2007)
3.5	Certificate of Amendment to Certificate of Designations, Number, Voting Powers, Preferences and Rights of Series A Convertible Preferred Stock of Callisto Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 3.1 filed with the Company's Current Report on Form 8-K filed on September 22, 2009)
3.6	Bylaws, as amended (Incorporated by reference to Exhibit 3.1 filed with the Company's Current Report on Form 8-K filed on June 4, 2007)
4.1	1996 Incentive and Non-Qualified Stock Option Plan (Incorporated by reference to Exhibit 4.1 filed with the Company's Current Report on Form 8-K filed on May 15, 2003)
4.4	2005 Equity Compensation Incentive Plan (Incorporated by reference to Appendix B filed with the Company's Definitive Proxy Statement on Schedule 14A filed on August 31, 2005)
4.5	2005 Directors' Stock Option Plan (Incorporated by reference to Appendix C filed with the Company's Definitive Proxy Statement on Schedule 14A filed on August 31, 2005)



Table of Contents

- 10.1 Employment Agreement dated April 6, 2004 by and between Synergy Pharmaceuticals Inc. and Kunwar Shailubhai (Incorporated by reference to Exhibit 10.2 filed with the Company's Annual Report on Form 10-KSB on April 14, 2004)\*
- 10.2 Amended and Restated License Agreement dated as of December 31, 2007 by and between Callisto Pharmaceuticals, Inc. and AnorMED Corporation, as successor in interest to AnorMED, Inc. (Incorporated by reference to Exhibit 10.3 filed with the Company's Annual Report on Form 10-K on March 28, 2008)\*\*
- 10.3 Amendment dated October 19, 2005 to the Employment Agreement dated as of April 6, 2004 by and between Synergy Pharmaceuticals Inc. and Kunwar Shailubhai (Incorporated by reference to Exhibit 10.5 filed with the Company's Current Report on Form 8-K filed on October 21, 2005)\*
- 10.4 Patent and Technology License Agreement dated January 10, 2006 between The University of Texas M.D. Anderson Cancer Center and Callisto Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 10.22 filed with the Company's Annual Report on Form 10-K filed on March 31, 2006)\*\*
- 10.5 Amended and Restated Employment Agreement dated December 10, 2007 by and between Callisto Pharmaceuticals, Inc and Bernard Denoyer (Incorporated by reference to Exhibit 10.26 filed with the Company's Annual Report on Form 10-K on March 28, 2008)\*

Table of Contents

<b>Exhibit No.</b>	<b>Description</b>
10.6	Technology Assignment Agreement between Callisto Pharmaceuticals, Inc. and AnorMED Corporation, a wholly owned subsidiary of Genzyme Corporation, dated December 19, 2008 (incorporated by reference to Exhibit 10.13 filed with the Company's Annual Report on Form 10-K filed on April 15, 2009).
10.7	Amended and Restated Executive Employment Agreement by and between Callisto Pharmaceuticals, Inc. and Gary S. Jacob dated March 11, 2009 (incorporated by reference to Exhibit 10.18 filed with the Company's Annual Report on Form 10-K filed on April 15, 2009).*
10.8	Amended and Restated Consulting Agreement by and between Callisto Pharmaceuticals, Inc. and Gabriele M. Cerrone dated March 11, 2009 (incorporated by reference to Exhibit 10.19 filed with the Company's Annual Report on Form 10-K filed on April 15, 2009).*
14	Code of Business Conduct and Ethics (Incorporated by reference to Exhibit 14 filed with the Company's Annual Report on Form 10-KSB filed on April 14, 2004)
21	List of Subsidiaries
23	Consent of BDO USA, LLP
31.1	Certification of Chief Executive Officer required under Rule 13a-14(a)/15d-14(a) under the Exchange Act
31.2	Certification of Principal Financial Officer required under Rule 13a-14(a)/15d-14(a) under the Exchange Act
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	Financial statements from the Annual Report on Form 10-K of the Company for the Year Ended December 31, 2011 as filed March 30, 2012 formatted in Extensible Business Reporting Language (XBRL): (i) the Condensed Consolidated Statements of Operations, (ii) the Condensed Consolidated Balance Sheets, (iii) the Condensed Consolidated Statements of Cash Flows (iv) the Condensed Consolidated Statement of Stockholders Equity (Deficit) and (v) the Notes to Consolidated Financial Statements tagged as blocks of text.

Table of Contents

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CALLISTO PHARMACEUTICALS, INC.  
(Registrant)

Date: March 30, 2012

By:

/s/ GARY S. JACOB  
Gary S. Jacob,  
*Chief Executive Officer*

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

SIGNATURE	TITLE	DATE
/s/ GARY S. JACOB Gary S. Jacob	Chief Executive Officer and Director (Principal Executive Officer)	March 30, 2012
/s/ BERNARD F. DENOYER Bernard F. Denoyer	Senior Vice President, Finance (Principal Financial and Accounting Officer)	March 30, 2012
/s/ GABRIELE M. CERRONE Gabriele M. Cerrone	Chairman of the Board	March 30, 2012
/s/ JOHN P. BRANCACCIO John P. Brancaccio	Director	March 30, 2012
/s/ RANDALL K. JOHNSON Randall K. Johnson	Director	March 30, 2012

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
**(A Development Stage Company)**

**Index to the Consolidated Financial Statements**

<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets as of December 31, 2011 and 2010</u>	F-3
<u>Consolidated Statements of Operations for the three years ended December 31, 2011, 2010 and 2009 and June 5, 1996 (inception) to December 31, 2011</u>	F-4
<u>Consolidated Statements of Changes in Stockholders' Equity (Deficit) for the period June 5, 1996 (Inception) to December 31, 2011</u>	F-5
<u>Consolidated Statements of Cash Flows for the three years ended December 31, 2011, 2010 and 2009 and for the period June 5, 1996 (Inception) to December 31, 2011</u>	F-12
<u>Notes to the Consolidated Financial Statements</u>	F-13

Table of Contents

**Report of Independent Registered Public Accounting Firm**

Board of Directors and Stockholders  
Callisto Pharmaceuticals, Inc.  
New York, New York

We have audited the accompanying consolidated balance sheets of Callisto Pharmaceuticals, Inc. and Subsidiaries (a development stage company) (the Company) as of December 31, 2011 and 2010, the related consolidated statements of operations and cash flows for each of the three years in the period ended December 31, 2011 and for the period from June 5, 1996 (inception) to December 31, 2011 and the related consolidated statement of stockholders' equity (deficit) for the period from June 5, 1996 (inception) to December 31, 2011. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, 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 Callisto Pharmaceuticals, Inc. and Subsidiaries as of December 31, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011 and for the period from June 5, 1996 (inception) to December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regards to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ BDO USA, LLP  
New York, New York  
March 30, 2012

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
**(A Development Stage Company)**

**CONSOLIDATED BALANCE SHEETS**

	December 31, 2011	December 31, 2010
<b>ASSETS</b>		
Current Assets:		
Cash and cash equivalents	\$ 13,244,961	\$ 1,708,982
Prepaid expenses and other	796,028	769,403
Tax credits receivable	377,865	781,127
<b>Total Current Assets</b>	<b>14,418,854</b>	<b>3,259,512</b>
Property and equipment, net	5,774	9,397
Security deposits	87,740	87,740
<b>Total Assets</b>	<b>\$ 14,512,368</b>	<b>\$ 3,356,649</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY/(DEFICIT)</b>		
Current Liabilities:		
Accounts payable	\$ 3,206,827	\$ 4,755,361
Accrued expenses	1,457,427	2,311,050
<b>Total Current Liabilities</b>	<b>4,664,254</b>	<b>7,066,411</b>
Derivative financial instruments, at estimated fair value warrants	3,325,114	3,487,959
<b>Total Liabilities</b>	<b>7,989,368</b>	<b>10,554,370</b>
Commitments and contingencies		
Stockholders' Deficit:		
Series A convertible preferred stock, par value \$0.0001, 700,000 shares authorized, 8,000 shares outstanding at December 31, 2011 and December 31, 2010, respectively	1	1
Series B convertible preferred stock, par value \$0.0001, 2,500,000 shares authorized, no shares outstanding at December 31, 2011 and December 31, 2010, respectively		
Common stock, par value of \$0.0001 per share: 225,000,000 shares authorized; 158,516,071 and 157,509,404 shares outstanding at December 31, 2011 and December 31, 2010, respectively	15,852	15,751
Additional paid-in capital	168,531,201	139,496,452
Deficit accumulated during development stage	(142,366,313)	(135,573,268)
<b>Total Stockholders' Equity</b>	<b>26,180,741</b>	<b>3,938,936</b>
Non-controlling interest	(19,657,741)	(11,136,657)
<b>Total Stockholders' Equity/(Deficit)</b>	<b>6,523,000</b>	<b>(7,197,721)</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 14,512,368</b>	<b>\$ 3,356,649</b>

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



Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
**(A Development Stage Company)**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

	Year ended December 31,			For the period
	2011	2010	2009	June 5, 1996 (inception) to December 31, 2011
	\$	\$	\$	\$
Revenues				
Costs and Expenses:				
Research and development	13,318,455	9,588,543	3,423,515	59,094,517
Government grants				(1,135,318)
Purchased in-process research and development				6,944,553
General and administrative	7,610,136	7,343,188	5,106,470	60,372,657
Loss from Operations	(20,928,591)	(16,931,731)	(8,529,985)	(125,276,409)
Interest and investment income	1,695	25,548	25,008	916,577
Tax credit	367,613	1,025,606		1,393,219
Interest expense on notes payable	(11,877)	(322,705)	(436,693)	(943,124)
Loss on debt extinguishment		(2,099,892)		(2,099,892)
Change in fair value of derivative instruments	5,257,031	(15,344,578)	(9,413,744)	(16,910,285)
Net Loss	(15,314,129)	(33,647,752)	(18,355,414)	(142,919,914)
Net Loss attributable to noncontrolling interest	8,521,084	7,854,264		19,657,741
Net loss attributable to controlling interest	(6,793,045)	(25,793,488)	(18,355,414)	(123,262,173)
Series A Preferred stock conversion rate change and beneficial conversion feature accreted as a dividend			(136,889)	(5,025,849)
Series B Preferred stock conversion rate change and beneficial conversion feature accreted as a dividend			(1,678,703)	(12,174,391)
Cumulative effect of adopting ASC Topic 815 January 1, 2009				(1,903,900)
Net loss attributable to common stockholders	\$ (6,793,045)	\$ (25,793,488)	\$ (20,171,006)	\$ (142,366,313)
<i>Weighted Average Common Shares Outstanding</i>				
Basic and Diluted	158,298,920	69,033,439	51,394,669	
<i>Net Loss per Common Share</i>				
Basic and Diluted	\$ (0.10)	\$ (0.37)	\$ (0.39)	



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

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT)**

	Preferred Shares	Preferred Stock, Par Value	Common Shares	Common Stock, Par Value	Additional Paid in Capital
Balance at inception, June 5, 1996		\$		\$	\$
Issuance of founder shares			2,642,500	264	528
Common stock issued			1,356,194	136	272
Common stock issued via private placement			1,366,667	137	1,024,863
Balance, December 31, 1996			5,365,361	537	1,025,663
Net loss for the year					
Common stock issued via private placement			1,442,666	144	1,081,855
Balance, December 31, 1997			6,808,027	681	2,107,518
Net loss for the year					
Amortization of stock-based compensation					52,778
Common stock issued via private placement			1,416,667	142	1,062,358
Common stock issued for services			788,889	79	591,588
Common stock repurchased and cancelled			(836,792)	(84)	(96,916)
Balance, December 31, 1998			8,176,791	818	3,717,326
Net loss for the year					
Deferred compensation - stock options					9,946
Amortization of stock-based compensation					
Common stock issued for services					3,168,832
Common stock issued via private placement			346,667	34	259,966
Balance, December 31, 1999			8,523,458	852	7,156,070
Net loss for the year					
Amortization of stock-based compensation					
Common stock issued			4,560,237	455	250,889
Other					432
Preferred shares issued	3,485,299	348			5,986,302
Preferred stock issued for services	750,000	75			1,124,925
Balance, December 31, 2000	4,235,299	\$	423	13,083,695	\$
				1,307	\$
					14,518,618

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

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Unamortized Deferred Stock-Based Compensation	Deficit Accumulated during the Development Stage	Total Stockholders Equity
Balance at inception, June 5, 1996	\$	\$	\$
Issuance of founder shares		(404,005)	(403,213)
Common stock issued			408
Common stock issued via private placement			1,025,000
Balance, December 31, 1996		(404,005)	622,195
Net loss for the year		(894,505)	(894,505)
Common stock issued via private placement			1,081,999
Balance, December 31, 1997		(1,298,510)	809,689
Net loss for the year		(1,484,438)	(1,484,438)
Amortization of stock-based compensation			52,778
Common stock issued via private placement			1,062,500
Common stock issued for services			591,667
Common stock repurchased and cancelled			(97,000)
Balance, December 31, 1998		(2,782,948)	935,196
Net loss for the year		(4,195,263)	(4,195,263)
Deferred compensation - stock options	(9,946)		
Amortization of stock-based compensation	3,262		3,262
Common stock issued for services			3,168,832
Common stock issued via private placement			260,000
Balance, December 31, 1999	(6,684)	(6,978,211)	172,027
Net loss for the year		(2,616,261)	(2,616,261)
Amortization of stock-based compensation	4,197		4,197
Common stock issued			251,344
Other			432
Preferred shares issued			5,986,650
Preferred stock issued for services			1,125,000
Balance, December 31, 2000	\$ (2,487)	\$ (9,594,472)	\$ 4,923,389

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

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Preferred Shares	Preferred Stock, Par Value	Common Shares	Common Stock, Par Value	Additional Paid in Capital
Balance, December 31, 2000	4,235,299	\$ 423	13,083,695	\$ 1,307	\$ 14,518,618
Net loss for the year					
Deferred compensation stock options					20,000
Amortization of stock-based compensation					
Balance, December 31, 2001	4,235,299	423	13,083,695	1,307	14,538,618
Net loss for the year					
Amortization of stock-based compensation					
Balance, December 31, 2002	4,235,299	423	13,083,695	1,307	14,538,618
Net loss for the year					
Conversion of preferred stock in connection with the merger	(4,235,299)	(423)	4,235,299	423	
Common stock issued to former Synergy stockholders			4,329,927	432	6,494,458
Common stock issued in exchange for Webtronics common stock			1,503,173	150	(150)
Deferred compensation stock options					9,313,953
Amortization of stock-based compensation					
Private placement of common stock, net			2,776,666	278	3,803,096
Balance, December 31, 2003			25,928,760	2,590	34,149,975
Net loss for the year					
Common stock issued via private placements, net			3,311,342	331	6,098,681
Warrant and stock-based compensation for services in connection with the merger					269,826
Common stock returned from former Synergy stockholders			(90,000)	(9)	(159,083)
Stock issued for patent rights			25,000	3	56,247
Common stock issued for services			44,000	7	70,833
Variable account for stock options					(816,865)
Amortization of stock-based compensation					
Stock-based compensation					240,572
Balance, December 31, 2004		\$	29,219,102	\$ 2,922	\$ 39,910,186

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



Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
**(A development stage company)**

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Unamortized Deferred Stock-Based Compensation	Deficit Accumulated during the Development Stage	Total Stockholders Equity
Balance, December 31, 2000	\$ (2,487)	\$ (9,594,472)	\$ 4,923,389
Net loss for the year		(1,432,046)	(1,432,046)
Deferred compensation stock options	(20,000)		
Amortization of stock-based compensation	22,155		22,155
Balance, December 31, 2001	(332)	(11,026,518)	3,513,498
Net loss for the year		(1,684,965)	(1,684,965)
Amortization of stock-based compensation	332		332
Balance, December 31, 2002		(12,711,483)	1,828,865
Net loss for the year		(13,106,247)	(13,106,247)
Conversion of preferred stock in connection with the merger			
Common stock issued to former Synergy stockholders			6,494,890
Common stock issued in exchange for Webtronics common stock			
Deferred compensation stock options	(9,313,953)		
Amortization of stock-based compensation	3,833,946		3,833,946
Private placement of common stock, net			3,803,374
Balance, December 31, 2003	(5,480,007)	(25,817,730)	2,854,828
Net loss for the year		(7,543,467)	(7,543,467)
Common stock issued via private placements, net			6,099,012
Warrant and stock-based compensation for services in connection with the merger			269,826
Common stock returned from former Synergy stockholders			(159,092)
Stock issued for patent rights			56,250
Common stock issued for services			70,840
Variable account for stock options			(816,865)
Amortization of stock-based compensation	3,084,473		3,084,473
Stock-based compensation	93,000		333,572
Balance, December 31, 2004	\$ (2,302,534)	\$ (33,361,197)	\$ 4,249,377

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

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Series A Convertible Preferred Shares	Series A Convertible Preferred Stock, Par Value	Common Shares	Common Stock, Par Value	Additional Paid in Capital	Unamortized Deferred Stock-Based Compensation	Deficit Accumulated during the Development Stage	Total Stockholders Equity
Balance, December 31, 2004		\$	29,219,102	\$ 2,922	\$ 39,910,186	\$ (2,302,534)	\$ (33,361,197)	\$ 4,249,377
Net loss for the year							(11,779,457)	(11,779,457)
Deferred stock-based compensation new grants					1,571,772	(1,571,772)		
Amortization of stock-based compensation						2,290,843		2,290,843
Variable accounting for stock options					75,109			75,109
Common stock issued via private placement March 2005			1,985,791	198	3,018,203			3,018,401
Common stock issued via private placement August 2005			1,869,203	187	1,812,940			1,813,127
Finders fees and expenses					(176,249)			(176,249)
Exercise of common stock warrant			125,000	13	128,737			128,750
Common stock issued for services			34,000	3	47,177			47,180
Balance, December 31, 2005			33,233,096	3,323	46,387,875	(1,583,463)	(45,140,654)	(332,919)
Net loss for the year							(12,919,229)	(12,919,229)
Amortization of stock-based compensation					2,579,431			2,579,431
Reclassification of deferred unamortized stock-based compensation upon adoption of SFAS No. 123R					(1,583,463)	1,583,463		
Common stock issued via private placement February 2006			4,283,668	428	5,139,782			5,140,210
Common stock issued via private placement April 2006			666,667	67	799,933			800,000
Finders fees and expenses	11,775	1			(1,051,717)			(1,051,716)
Waiver and lock-up agreement			740,065	74	579,622			579,696
Common stock issued for services			87,000	9	121,101			121,110
Exercise of common stock warrants			184,500	18	190,017			190,035
Series A convertible preferred stock issued via private placement	574,350	57			5,743,443			5,743,500
Detachable warrants					2,384,485			2,384,485
Beneficial conversion feature accreted as a							(2,384,485)	(2,384,485)

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dividend

Balance, December 31, 2006	586,125	\$	58	39,194,996	\$	3,919	\$	61,290,509	\$	(60,444,368)	\$	850,118
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The accompanying notes are an integral part of these consolidated financial statements.

F-9

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Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Series A Convertible Preferred Shares	Series A Convertible Preferred Stock, Par Value	Series B Convertible Preferred Shares	Series B Convertible Preferred Stock, Par Value	Common Shares	Common Stock, Par Value	Additional Paid in Capital	Deficit Accumulated during the Development Stage	Total Stockholders Equity
Balance, December 31, 2006	586,125	\$ 58		\$	39,194,996	\$ 3,919	\$ 61,290,509	\$ (60,444,368)	\$ 850,118
Net loss for the year								(7,887,265)	(7,887,265)
Stock-based compensation expense							591,561		591,561
Common stock issued for services					80,000	8	36,792		36,800
Series A convertible preferred stock, issued via private placement	28,000	4					279,997		280,001
Finders fees and expenses, Series A private placement							(36,400)		(36,400)
Conversion of Series A preferred stock to common stock	(395,450)	(40)			7,668,165	767	(727)		
Beneficial conversion feature accreted as a dividend to Series A convertible preferred stock							2,504,475	(2,504,475)	
Series B convertible preferred stock, issued via private placement			1,147,050	115			11,470,385		11,470,500
Finders fees and expenses, Series B private placement							(920,960)		(920,960)
Beneficial conversion feature accreted as a dividend to Series B convertible preferred stock							10,495,688	(10,495,688)	
Change in fair value of Series B warrants from date of issuance to expiration of put option							(2,591,005)		(2,591,005)
Balance, December 31, 2007	218,675	22	1,147,050	115	46,943,161	4,694	83,120,315	(81,331,796)	1,793,350
Net loss for the year								(9,655,471)	(9,655,471)
Recapitalization of majority owned subsidiary via private placements of common stock							2,951,913		2,951,913
Minority interest in equity of subsidiary acquired							(42,824)		(42,824)
Stock-based compensation expense							589,063		589,063
Proceeds from issuance of 11% Notes attributable to							181,732		181,732

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detachable warrants									
Conversion of Series A preferred stock to common stock	(120,675)	(12)			2,413,500	241		(229)	
Conversion of Series B preferred stock to common stock			(10,000)	(1)	200,000	20		(19)	
Balance, December 31, 2008	98,000 \$	10	1,137,050 \$	114	49,556,661 \$	4,955 \$	86,799,951 \$	(90,987,267) \$	(4,182,237)

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

Table of Contents

**CALLISTO PHARMACEUTICALS, INC.**  
(A development stage company)

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS EQUITY (DEFICIT) (Continued)**

	Series A Convertible Preferred Shares	Series A Convertible Preferred Stock	Series B Convertible Preferred Shares	Series B Convertible Preferred Stock	Common Shares	Common Stock Par Value	Additional Paid in Capital	Deficit Accumulated during the Development Stage	Non- Controlling Interest	Total Stockholders Equity (Deficit)
Balance, December 31, 2008	98,000	\$ 10	1,137,050	\$ 114	49,556,661	4,955	\$ 86,799,951	\$ (90,987,267)		\$ (4,182,237)
Cumulative effect of adoption of ASC Topic 815							(181,732)	(1,903,900)		(2,085,632)
Net Loss								(15,073,021)	(3,282,393)	(18,355,414)
Stock based compensation expense							1,119,856			1,119,856
Conversion of Series A preferred stock to common stock	(35,000)	(4)			894,445	89	(85)			
Conversion of Series B preferred stock to common stock			(122,884)	(12)	2,963,236	296	(284)			
Private placements of common stock of majority owned subsidiary							15,970,100			15,970,100
Fees and expenses associated with private placements of majority owned subsidiary							(260,002)			(260,002)
Preferred Stock dividend attributable to reset of conversion price in conjunction with waiver of liquidation preference							1,815,592	(1,815,592)		
Cashless Conversion of Warrants to Common Stock					193,769	19	(19)			
Balance December 31, 2009	63,000	\$ 6	1,014,166	\$ 102	53,608,111	\$ 5,359	\$ 105,263,377	\$ (109,779,780)	(3,282,393)	\$ (7,793,329)
Net Loss								(25,793,488)	(7,854,264)	(33,647,752)
Stock based compensation expense	(55,000)	(5)			1,527,777	153	854,651 (148)			854,651

Conversion of  
Series A preferred  
stock to common  
stock