

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

**AMENDMENT NO. 1**

To

**FORM S-1  
REGISTRATION STATEMENT**

*UNDER  
THE SECURITIES ACT OF 1933*

**CATALYST PHARMACEUTICAL PARTNERS, INC.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)

2834  
(Primary Standard Industrial  
Classification Code Number)

76-0837053  
(I.R.S. Employer  
Identification Number)

355 Alhambra Circle  
Suite 1500  
Coral Gables, Florida 33134  
(305) 529-2522

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated Filer

Non-accelerated filer  (do not check if a smaller reporting company)

Smaller reporting company

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that the registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a) may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the Registration Statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 24, 2012

Preliminary Prospectus



Shares  
Common Stock

We are offering up to \_\_\_\_\_ shares of common stock pursuant to this prospectus at a price of \$ \_\_\_\_\_ per share. Our common stock is listed on the Nasdaq Capital Market under the symbol "CPRX". On April 24, 2012, the last reported price per share of our common stock as reported on the Nasdaq Capital Market was \$0.91 per share.

Our business and investing in our securities involves significant risks. You should carefully read and consider the "[Risk Factors](#)" beginning on page 4 of this prospectus before investing.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	\$ _____	\$ _____
Underwriting discount (1)	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) See "Underwriting" on page 78 of this prospectus for a description of the compensation payable to the underwriters.

The underwriters may also purchase up to an additional \_\_\_\_\_ shares from us at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover over-allotments, if any. If the underwriters exercise the over-allotment option in full, the total public offering price will be \$ \_\_\_\_\_, the total underwriting discount will be \$ \_\_\_\_\_ and the total proceeds, before expenses, to us will be \$ \_\_\_\_\_.

The underwriters expect to deliver the shares of common stock on or about \_\_\_\_\_, 2012, subject to customary closing conditions.

**Cowen and Company**

*Sole Book-Running Manager*

**Roth Capital Partners**

The date of this prospectus is \_\_\_\_\_, 2012.

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that which is contained in this prospectus. This prospectus may be used only where it is legal to sell these securities. The information in this prospectus may only be accurate on the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of securities.

## SUMMARY

This summary highlights information contained elsewhere in this prospectus; it does not contain all of the information you should consider before investing. You should carefully read the entire prospectus before making an investment decision.

This prospectus includes trademarks, service marks or trade names owned by us or other companies. All trademarks, service marks or trade names included in this prospectus are the property of their respective owners.

*Throughout this prospectus, the terms “we”, “us”, “our” and “company” refer to Catalyst Pharmaceutical Partners, Inc.*

### Our Business

We are a development-stage specialty pharmaceutical company focused on the development and commercialization of prescription drugs targeting diseases and disorders of the central nervous system with a focus on the treatment of addiction and epilepsy. We have two products in clinical development; CPP-109 and CPP-115. We are currently evaluating our lead drug candidate, CPP-109 (our formulation of vigabatrin, a GABA aminotransferase inhibitor) for the treatment of cocaine addiction. We also hope to evaluate CPP-109 for the treatment of other addictions and other selected central nervous system indications. Further, we are in the early stages of developing CPP-115, another GABA aminotransferase inhibitor that, based on our pre-clinical studies to date, we believe is more potent than vigabatrin and may have reduced side effects (e.g., visual field defects, or VFDs) from those associated with vigabatrin. We are planning to develop CPP-115 for several indications, including drug addiction, epilepsy (initially infantile spasms) and other selected central nervous disease indications. CPP-109 and CPP-115 have both been granted “Fast Track” status by the FDA for the treatment of cocaine addiction, which indicates that the FDA has recognized, for this indication, that CPP-109 and CPP-115 are intended for the treatment of a serious or life-threatening condition and demonstrate the potential to address this unmet medical need. We believe that we control all current intellectual property for drugs that have a mechanism of action related to inhibition of GABA aminotransferase.

We are currently involved in the following product development activities: (i) we are jointly conducting with the National Institute on Drug Abuse (NIDA) and the Veterans Administration (VA) a U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction (and, based on current information, we expect to obtain top line results from this trial early in the first quarter of 2013); and (ii) we are conducting a Phase I(a) clinical study evaluating the safety of CPP-115 in healthy volunteers.

Lundbeck Inc.’s (Lundbeck) exclusivity for Sabril® tablets (its version of vigabatrin) as an adjunctive therapy to treat refractory complex partial seizures in adults will expire on August 21, 2014. At the present time, we expect to submit a new drug application (NDA) under Section 505(b)(2) of the Federal Food, Drug and Cosmetic Act (the FDCA) for CPP-109. A 505(b)(2) application is one that relies, at least partially, upon data that a company does not own or have right of reference to, including published literature. A 505(b)(2) application can also rely upon the FDA’s previous findings of safety and efficacy for previously approved products. Additional information in a 505(b)(2) application includes data on manufacturing, bioequivalence and bioavailability; studies to support any change relative to the previously approved product; information with respect to any patents that claim the drug or use of the drug for which approval is sought; and an appropriate certification with respect to any patents listed for the previously approved drug on which investigations relied upon for NDA approval were conducted, or that claim a use of the listed drug. There can be no assurance whether, or to what extent, the FDA will file any 505(b)(2) NDA that we may submit for CPP-109. Further, we will be prevented from submitting a 505(b)(2) NDA for CPP-109 until after August 21, 2014.

Generally, the process of seeking approval of an NDA requires multiple clinical trials, including two “pivotal” U.S. Phase III clinical trials. In our case, because CPP-109 is intended to treat a serious condition for

which there is no approved therapy, there is a possibility that if the data from the Phase II(b) trial are sufficiently compelling, the FDA will file an NDA submitted by us for CPP-109 on the basis of this trial, when combined with the data from the previous clinical trials and studies of vigabatrin to treat addiction. However, it is more likely that the FDA will require at least one Phase III trial supported by the safety and efficacy data obtained from our Phase II(b) clinical trial before they will file an NDA for CPP-109, even if the data from our currently ongoing Phase II(b) clinical trial are compelling. Further, even if the FDA files an NDA for CPP-109 based on the results of our current Phase II(b) trial, we will not be in a position to submit an NDA for CPP-109 until after August 21, 2014. Finally, if the FDA requires more than one Phase III clinical trial, our NDA submission could be delayed even further. There can be no assurance that the data from our ongoing Phase II(b) trial will be sufficiently compelling or that even if such data are sufficiently compelling, that the FDA will file an NDA submitted for CPP-109 based on the results of that trial.

### **Our Strategy**

Our strategy is to become a leading specialty pharmaceutical company focused on the in-licensing and development of proprietary drug candidates for the treatment of selected diseases of the central nervous system. Our near-term strategy is to focus on the regulatory approval of CPP-109 for the treatment of cocaine addiction and to initially demonstrate the safety and efficacy of CPP-115 for the treatment of addiction and epilepsy. Our long-term strategy is to gain approvals for additional indications for CPP-109, including methamphetamine addiction, and to initially gain approval for CPP-115 to treat addiction and epilepsy. Specifically, we intend to:

- Focus on CPP-109 for cocaine addiction. A treatment for cocaine addiction addresses a significant unmet medical need, and we believe that our receipt of Fast Track status from the FDA for CPP-109 for cocaine addiction may facilitate the regulatory approval process. Enrollment for our U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction that we are conducting with NIDA and the VA began in the first quarter of 2011. This trial is currently ongoing and we expect to receive top-line results from this trial early in the first quarter of 2013. Assuming success, we expect that this trial will serve as one of the adequate and well-controlled trials required to support approval of an NDA.
- Develop additional indications for CPP-109. The mechanism of action of CPP-109 and pre-clinical data indicate it may be suitable as a potential treatment for addictions to methamphetamine, nicotine, prescription pain medications, alcohol and marijuana, as well as for obsessive-compulsive disorders including binge eating patterns and compulsive gambling. We hope to develop CPP-109 for one or more of these additional indications, subject to the availability of funding.
- Continue clinical and pre-clinical work on CPP-115. During the fourth quarter of 2011, we completed our IND-enabling studies, filed an IND, and began a Phase I(a) human clinical trial for CPP-115 to evaluate its safety. We expect to receive final results from this Phase I(a) human clinical trial during the second quarter of 2012. Subject to the availability of funding, we hope to begin further human clinical trials for CPP-115 during the early part of 2013.
- Identify and initiate strategic partnering discussions for specific indications in the U.S. and Europe. We believe that there may be several potential pharmaceutical partners interested in jointly developing and marketing CPP-109 and CPP-115 in the U.S. and/or Europe. We have held preliminary discussions with several parties regarding potential transactions, but no agreements have been entered into to date.

### **Company Information**

Our principal executive offices are located at 355 Alhambra Circle, Suite 1500, Coral Gables, Florida 33134, and our telephone number at that address is (305) 529-2522.

**The Offering**

**Shares of Common Stock being offered by us** shares

**Over-allotment option** shares

**Common stock to be outstanding after this offering** shares (or shares if the underwriters' over-allotment option is exercised in full).

**Use of Proceeds** We intend to use the net proceeds of this offering: (i) to fund the activities necessary to support the submission of an NDA for CPP-109 for FDA approval and to prepare for the commercial launch of CPP-109, assuming that the data from the currently ongoing Phase II(b) trial are compelling and the FDA files an NDA submitted by us for CPP-109 based on the data from the Phase II(b) trial, (ii) to manufacture sufficient CPP-115 for use in one or more future safety and/or proof-of-concept studies of CPP-115, and (iii) for general corporate purposes. See "Use of Proceeds" for further information.

**Risk Factors** See "Risk Factors", as well as other information included in this prospectus, for a discussion of factors you should read and consider carefully before investing in our securities.

**Trading Market** Our common stock is traded on the Nasdaq Capital Market under the symbol "CPRX."

The number of shares of our common stock to be outstanding after this offering as shown above is based on 24,741,520 shares outstanding as of April 24, 2012 and excludes:

- 2,019,888 shares of our common stock subject to outstanding options under our 2006 Stock Incentive Plan having a weighted average exercise price of \$1.19 per share;
- 1,459,220 shares of our common stock subject to outstanding options outside of our 2006 Stock Incentive Plan having a weighted average exercise price of \$0.69 per share;
- 239,270 shares of our common stock that have been reserved for issuance in connection with our 2006 Stock Incentive Plan; and
- 1,523,370 shares of our common stock that have been reserved for issuance upon exercise of outstanding warrants at an exercise price of \$1.30 per share.

Except as otherwise indicated, all information in this prospectus assumes no exercise by the underwriters of their over-allotment option.

## RISK FACTORS

*An investment in our securities involves a high degree of risk. You should carefully consider the risks described below as well as the other information in this prospectus before deciding to invest in or maintain your investment in our company. The risks described below are not intended to be an all-inclusive list of the potential risks relating to an investment in our securities. Any of the risk factors described below could significantly and adversely affect our business, prospects, financial condition and results of operations. Additional risks and uncertainties not currently known or that are currently considered to be immaterial may also materially and adversely affect our business. As a result, the trading price or value of our securities could be materially adversely affected and you may lose all or part of your investment.*

### **Risks Related to Our Business**

#### **We are a development stage company. Our limited operating history makes it difficult to evaluate our future performance.**

We are a development stage company. We are the successor by merger to a company that began operations in 2002. As such, we have a limited operating history upon which you can evaluate our current business and our prospects. The likelihood of our future success must be viewed in light of the problems, expenses, difficulties, delays and complications often encountered in the operation of a new business, especially in the pharmaceutical industry, where failures of new companies are common. We are subject to the risks inherent in the ownership and operation of a development stage company, including availability of capital, regulatory setbacks and delays, fluctuations in expenses, competition and government regulation. If we fail to address these risks and uncertainties, our business, results of operations, financial condition and prospects would be adversely affected.

#### **We have no products currently available and we have never had any products available for commercial sale.**

We have had no revenues from product sales to date, currently have no products available for commercial sale, and have never had any products available for commercial sale. We expect to incur losses at least until we can commercialize CPP-109. Our net loss was \$6,391,062 for the year ended December 31, 2011, and as of December 31, 2011 we had a deficit accumulated during the development stage of \$38,102,617. We may never obtain approval of an NDA for CPP-109 or CPP-115 and may never achieve profitability.

#### **Our business will require additional capital.**

Our business will require additional capital to meet our product development objectives. We presently have funds that will allow us to complete: (i) the U.S. Phase II(b) clinical trial of CPP-109 that we are jointly conducting with NIDA and the VA; and (ii) the Phase I(a) clinical trial of CPP-115 evaluating the safety of CPP-115 in humans. We currently expect to receive the results from the U.S. Phase I(a) trial of CPP-115 in the second quarter of 2012 and the Phase II(b) trial of CPP-109 early in the first quarter of 2013. Based on currently available information and without considering the net proceeds of this offering, we estimate that we have sufficient working capital to support our operations through the end of the first quarter of 2013. The expectations described above are based on current information available to us. If the cost of these studies is greater than we expect, or it takes longer to complete and obtain the results of these studies, our assumptions may not prove to be accurate.

At the present time, we will require additional funding to complete studies or trials other than those described above, including any Phase III clinical trial that we may be required to complete before we are in a position to file an NDA for CPP-109 for cocaine addiction and any additional human studies of CPP-115 evaluating the safety and efficacy of its use in treating addiction and epilepsy. Since these studies and trials have not yet been developed, we cannot estimate what our funding requirements will be with respect to such additional

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studies and trials. We will also require additional working capital to support our operations beyond the first quarter of 2013 (without considering the proceeds of this offering). There can be no assurance as to the amount of any such funding that will be required for these purposes or whether any such funding will be available to us when it is required.

We expect to raise any required additional funds through public or private equity offerings, debt financings, capital lease transactions, corporate collaborations, governmental research grants or cost sharing arrangements with NIDA, the National Institute of Neurological Disorders and Stroke (NINDS) or other appropriate agencies that operate under the NIH umbrella, and/or other means. However, there is no assurance that any such grants will be made available, and if available, that we will qualify to receive any such grants. We may also seek to raise additional capital to fund additional product development efforts, even if we have sufficient funds for our planned operations.

Any sale by us of additional equity or convertible debt securities could result in dilution to our stockholders. There can be no assurance that any such required additional funding will be available to us at all or available on terms acceptable to us. Further, to the extent that we raise additional funds through collaborative arrangements, it may be necessary to relinquish some rights to our technologies or grant sublicenses on terms that are not favorable to us. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more research and development programs, which could have an adverse effect on our business.

### **Our business is subject to substantial competition.**

The biotechnology and pharmaceutical industries are highly competitive. In particular, competition for the development and marketing of therapies to treat addictive substances such as cocaine and methamphetamine and epilepsy is intense and expected to increase. Many of our competitors have substantially greater financial and other resources, larger research and development staffs and more experience developing products, obtaining FDA and other regulatory approval of products and manufacturing and marketing products. We compete against pharmaceutical companies that are developing or currently marketing therapies for epilepsy and addictive substances. In addition, we compete against biotechnology companies, universities, government agencies, and other research institutions in the development of treatments for substance abuse and epilepsy, technologies and processes that are, or in the future may be, the basis for competitive commercial products. While we believe that our product candidates will offer advantages over many of the currently available competing therapies, our business could be negatively impacted if our competitors' present or future treatments are more effective, safer or less expensive than ours, or more readily accepted by regulators, healthcare providers or third-party payers.

Many of our competitors have substantially greater financial, technical, and human resources than we do. In addition, many of our competitors have significantly greater experience than we do in conducting clinical studies and obtaining regulatory approvals of prescription drugs. Accordingly, our competitors may succeed in obtaining FDA approval for products more rapidly than we can. Furthermore, if we are permitted to commence commercial sales of our product candidates, we may also compete with respect to manufacturing efficiency and marketing capabilities. For all of these reasons, we may not be able to compete successfully.

### **We face a risk of product liability claims and may not be able to obtain adequate insurance.**

Our business exposes us to potential liability risks that may arise from the clinical testing, manufacture, and/or sale of CPP-109 or CPP-115. Patients have received substantial damage awards in some jurisdictions against pharmaceutical companies based on claims for injuries allegedly caused by the use of pharmaceutical products used in clinical trials or after FDA approval. Liability claims may be expensive to defend and may result in large judgments against us. We currently carry liability insurance with an aggregate annual coverage limit of \$15,000,000 per claim and \$15,000,000 in the aggregate, with a deductible of \$10,000 per occurrence. Our insurance may not reimburse us for certain claims or the coverage may not be sufficient to cover claims made against us. We cannot predict all of the possible harms or side effects that may result from the use of CPP-109, CPP-115 or any potential future products we may acquire and use in clinical trials or after FDA approval and,



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therefore, the amount of insurance coverage we currently hold may not be adequate to cover all liabilities we might incur. If we are sued for any injury allegedly caused by our products, our liability could exceed our ability to pay the liability. Whether or not we are ultimately successful in any adverse litigation, such litigation could consume substantial amounts of our financial and managerial resources, all of which could have a material adverse effect on our business, financial condition, results of operations, prospects and stock price.

### **The obligations incident to being a public company place significant demands on our management.**

As a public reporting company, we are required to comply with the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC, including periodic reports, disclosures and more complex accounting rules. As directed by Section 404 of Sarbanes-Oxley, the SEC adopted rules requiring public companies to include a report of management on a company's internal control over financial reporting in their Annual Report on Form 10-K. Based on current rules, we are required to annually report under Section 404(a) of Sarbanes-Oxley regarding our management's assessment as to the effectiveness of our internal control over financial reporting. If we are unable to conclude that we have effective internal control over our financial reporting, investors could lose confidence in the reliability of our financial statements, which could result in a decrease in the value of our common stock.

### **Risks Related to the Development of Our Drug Candidates**

#### **There is currently limited clinical evidence supporting the use of vigabatrin to treat addiction.**

There is limited clinical evidence currently indicating that CPP-109 will be a safe and effective treatment for any addiction in humans. To date, one double-blind, placebo controlled trial and two open-label clinical studies have been completed in Mexico relating to the use of vigabatrin in the treatment of cocaine addiction and methamphetamine addiction. Only 76 persons receiving vigabatrin completed these trials in the aggregate. Further, these studies were conducted in Mexico at a single substance abuse center and were not subject to FDA oversight in any respect, including study design and protocol. In the U.S., one double-blind, placebo controlled trial and one double-blind, placebo controlled proof-of-concept study have been completed. Only 121 persons in the aggregate received CPP-109 (vigabatrin) in these trials. None of these studies, individually or in the aggregate, provided enough evidence regarding safety or efficacy to support an NDA filing with the FDA. Further, less than 200 persons have received vigabatrin in clinical trials assessing its efficacy to treat addiction, which is a limited number of subjects.

#### **Our product development efforts may fail.**

Development of our pharmaceutical product candidates is subject to risks of failure. For example:

- CPP-109 or CPP-115 may be found to be ineffective or unsafe, or fail to receive necessary regulatory approvals;
- CPP-109 or CPP-115 may not be economical to market or take substantially longer to obtain necessary regulatory approvals than anticipated; or
- Competitors may market equivalent or superior products.

As a result, our product development activities may not result in any safe, effective and commercially viable products, and we may not be able to commercialize our products successfully. Our failure to develop safe, effective, and/or commercially viable products would have a material adverse effect on our business, prospects, results of operations and financial condition.

#### **Failure can occur at any stage of our product development efforts.**

We will only obtain regulatory approval to commercialize CPP-109 or CPP-115 if we can demonstrate to the satisfaction of the FDA (or the equivalent foreign regulatory authorities) in adequate and well-controlled clinical studies and trials that the drug is safe and effective for its intended use and that it otherwise meets

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approval requirements. A failure of one or more pre-clinical or clinical studies can occur at any stage of product development. We may experience numerous unforeseen events during, or as a result of, testing that could delay or prevent us from obtaining regulatory approval for, or commercializing our product candidates, including but not limited to:

- regulators or institutional review boards (IRBs) may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- conditions may be imposed upon us by the FDA regarding the scope or design of our clinical trials, or we may be required to resubmit our clinical trial protocols to IRBs for reinspection due to changes in the regulatory environment;
- the number of subjects required for our clinical trials may be larger than we anticipate, patient enrollment may take longer than we anticipate, or patients may drop out of our clinical trials at a higher rate than we anticipate;
- we may have to suspend or terminate one or more of our clinical trials if we, regulators, or IRBs determine that the participants are being subjected to unreasonable health risks;
- our third-party contractors, clinical investigators or contractual collaborators may fail to comply with regulatory requirements or fail to meet their contractual obligations to us in a timely manner;
- our tests may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional testing; and
- the costs of our pre-clinical and/or clinical trials may be greater than we anticipate.

### **Vigabatrin has known side effects that may hinder our ability to produce safe and commercially viable products.**

When used long-term as a treatment for epilepsy, a formulation of vigabatrin known as Sabril® has been found to cause the development of peripheral visual field defects, known as VFDs, which increase progressively with continuing drug treatment. We include a standardized evaluation of each patient's visual fields as part of our clinical studies and trials. We do not yet know whether our ultimate formulation for and dosing of vigabatrin will cause VFDs or how the potential for this known side effect will affect our ability to obtain marketing approval for CPP-109.

In addition to VFDs, a wide variety of other adverse effects, including depression and other psychiatric reactions, have been noted in patients treated with Sabril®. As patients with seizures often require treatment with multiple drugs, the relationship of such adverse effects to Sabril®, including the VFDs described above, has not always been clear; however, such other side effects tended to disappear when treatment with Sabril® was stopped.

These known side effects, as well as other side effects that may be discovered during our clinical trials, may cause the FDA or other governmental agencies to halt clinical trials prior to their completion, prevent the initiation of further clinical trials, or deny the approval of CPP-109 as a treatment for addiction. These known side effects will most likely cause the FDA to require as a condition of approval, implementation of a risk evaluation and mitigation strategy (REMS), as was required for the recent approvals of Sabril® for refractory complex partial seizures and infantile spasms. Such strategy will likely include "Black Box" warnings, restrictions on promotion and distribution, a communication plan for healthcare professionals, certification of prescribers and pharmacies, and testing of patients on the drug to monitor whether the administration of the drug continues to be safe and effective for the patient. Should CPP-115 prove to have VFDs (even at levels lower than CPP-109), the above risks will apply to it as well.

**We rely on third parties to conduct our pre-clinical studies and clinical studies and trials, and if they do not perform their obligations to us we may not be able to obtain approval for CPP-109 or CPP-115.**

We do not have the ability to conduct our pre-clinical studies and clinical studies and trials independently. We rely on academic institutions, governmental agencies, such as NIDA and the VA, and third-party research organizations to assist us in designing, managing, monitoring and otherwise carrying out our studies and trials. Accordingly, we do not have control over the timing or other aspects of our studies and trials. If these third parties do not successfully carry out their duties, our studies, trials and our business may be materially adversely affected. While we believe that there are numerous third parties that can assist us with our studies and trials, if the third parties with which we contract do not perform, our product development efforts would likely be delayed by any such change, and our efforts would likely be more expensive.

If we conduct studies with other parties, such as NIDA, we may not have control over all decisions associated with that trial. To the extent that we disagree with the other party on such issues as study design, study timing and the like, it could adversely affect our drug development plans. Although we intend to rely on third parties to manage the data from these studies and trials, we are responsible for confirming that each of our studies and trials is conducted in accordance with its general investigational plan and protocol. Moreover, the FDA and foreign regulatory agencies will require us to comply with applicable regulations and standards, commonly referred to as good laboratory practice and good clinical practice, for conducting, recording and reporting the results of such studies and trials to assure that the data and the results are credible and accurate and that the human study and trial participants are adequately protected. Our reliance on third parties does not relieve us of these obligations and requirements, and we may fail to obtain regulatory approval for our product candidates if these requirements are not met.

**If we are unable to apply for approval for additional indications for CPP-109 through supplemental NDAs, or if we are required to generate safety and efficacy data beyond what we have planned in order to obtain such approval for additional indications, we may suffer material harm to our future financial performance.**

Our current plans for the development of CPP-109 include efforts to generate the data we believe will be necessary in order to obtain marketing approval of CPP-109 for other additional indications including, but not limited to, methamphetamine addiction. If we are successful in obtaining approval of an NDA for CPP-109 as a treatment for cocaine addiction, of which there can be no assurance, we plan to subsequently conduct trials in support of, and submit supplemental NDAs for additional indications. Depending on the data we rely upon, approval for additional indications for CPP-109 may be delayed. In addition, even if we receive supplemental NDA approval, the FDA has broad discretion to require us to generate additional data related to safety and efficacy to supplement the data included in the supplemental NDA. We could be required, before obtaining marketing approval for CPP-109 for additional indications, to conduct substantial new research and development activities, which could be more costly and time-consuming than we currently anticipate. The FDA may not agree that we can market CPP-109 for additional indications. If we are required to generate substantial additional data beyond what we have planned to support approval, our product development and commercialization efforts will be delayed and we may suffer significant harm to our future financial performance. In addition, submission of supplemental NDAs for additional indications, conducting new research and development and generating additional data to support FDA approval will require that we obtain additional financing, and we can provide no assurance that we will be able to obtain such financing on acceptable terms, or at all.

**Due to the nature of patients addicted to drugs, we may face significant delays in our clinical studies and trials due to an inability to recruit patients for our clinical studies and trials or to retain patients in the clinical studies and trials we may perform.**

We may encounter difficulties in our future clinical studies and trials recruiting patients due to the nature of the addiction mechanism and our resulting target patient population. Because addicts are typically addicted to multiple substances, we may not be able to recruit a sufficient number of eligible participants within our

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anticipated timeframe or at all. In addition, due to the neurological and physiological mechanisms and implications of substance addiction, it is likely that many of our clinical study and trial participants will either not comply with trial protocols, or not complete the study or trial. An unusually low rate of compliance or completion will present challenges, such as determining the statistical significance of study or trial results. Additionally, we compete for study and trial subjects with others conducting clinical trials testing other treatments for addictions. Finally, unrelated third parties and investigators in the academic community have expressed interest in testing vigabatrin for the treatment of drug abuse. If these third-party tests are unsuccessful, or if they show significant health risk to the test subjects, our development efforts may also be adversely affected.

### **Risks Related to Commercialization of our Drug Candidates**

#### **We will need to develop marketing, distribution and production capabilities or relationships to be successful.**

In order to generate sales of CPP-109, CPP-115 or any other products we may develop, we must either acquire or develop an internal marketing force with technical expertise and with supporting documentation capabilities, or make arrangements with third parties to perform these services for us. The acquisition and development of a marketing and distribution infrastructure will require substantial resources and compete for available resources with our drug development efforts. To the extent that we enter into marketing and distribution arrangements with third parties, our revenues will depend on the efforts of others. If we fail to enter into such agreements, or if we fail to develop our own marketing and distribution channels, we would experience delays in product sales and incur increased costs.

We have no in-house manufacturing capacity and, to the extent we are successful in completing the development of our product candidates, we will be obliged to rely on contract manufacturers. We cannot assure you that we will successfully manufacture any product we may develop, either independently or under manufacturing arrangements, if any, with third party manufacturers. Moreover, if any manufacturer should cease doing business with us or experience delays, shortages of supply or excessive demands on their capacity, we may not be able to obtain adequate quantities of product in a timely manner, or at all. Manufacturers, and in certain situations their suppliers, are required to comply with current NDA commitments and good manufacturing practices requirements enforced by the FDA, and similar requirements of other countries. The failure by a manufacturer to comply with these requirements could affect its ability to provide us with product.

Any manufacturing problem, natural disaster affecting manufacturing facilities, or the loss of a contract manufacturer could be disruptive to our operations and result in lost sales. Additionally, we will be reliant on third parties to supply the raw materials needed to manufacture our potential products. Any reliance on suppliers may involve several risks, including a potential inability to obtain critical materials and reduced control over production costs, delivery schedules, reliability and quality. Any unanticipated disruption to future contract manufacture caused by problems at suppliers could delay shipment of products, increase our cost of goods sold and result in lost sales. If our suppliers were to be unable to supply us with adequate supply of our product candidates, it could have a material adverse effect on our ability to commercialize CPP-109 or CPP-115.

In the past and currently, we purchase all supplies of our product candidates from single suppliers. While we have contractual freedom to source this ingredient elsewhere, there is no guarantee we will either be successful in identifying alternative supplier(s) or that these manufacturers will be qualified to manufacture the product to our specifications or that such future supplier(s) will have the manufacturing capacity to meet future requirements. All such suppliers are subject to regulatory approval. We cannot assure you that any alternative supplier will have the necessary capacity to meet our requirements or that we can contract with any such manufacturer on acceptable terms or that any such alternative supplier will not require capital investment from us in order for them to meet our requirements.

**We may encounter difficulties in managing our growth, which would adversely affect our results of operations.**

If we are successful in obtaining approval to commercialize CPP-109 or CPP-115, we will need to significantly expand our operations, which could put significant strain on our management and our operational and financial resources. We currently have six employees and conduct much of our operations through outsourcing arrangements. To manage future growth, we will need to hire, train, and manage additional employees. Concurrent with expanding our operational and marketing capabilities, we will also need to increase our product development activities. We may not be able to support, financially or otherwise, future growth, or hire, train, motivate, and manage the required personnel. Our failure to manage growth effectively could limit our ability to achieve our goals.

Our success in managing our growth will depend in part on the ability of our executive officers to continue to implement and improve our operational, management, information and financial control systems and to expand, train and manage our employee base, and particularly to expand, train and manage a specially-trained sales force to market our products. We may not be able to attract and retain personnel on acceptable terms given the intense competition for such personnel among biotechnology, pharmaceutical and healthcare companies, universities and non-profit research institutions. Our inability to manage growth effectively could cause our operating costs to grow at a faster pace than we currently anticipate, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

**Our commercial success will depend on reimbursement from third-party and governmental insurers.**

Sales of pharmaceutical products in the United States depend largely on reimbursement of patients' costs by private insurers, government health care programs including Medicare and Medicaid, and other organizations. These third-party payers control healthcare costs by limiting both coverage and the level of reimbursement for healthcare products. In particular, the rising costs of pharmaceutical products are a subject of considerable attention and debate. Third-party payers are increasingly altering reimbursement levels and challenging the price and cost-effectiveness of pharmaceutical products. The reimbursement status of newly approved pharmaceutical products in particular is generally uncertain. The levels at which government authorities and private health insurers reimburse physicians or patients for the price they pay for CPP-109, CPP-115 and other products we may develop could affect the extent to which we are able to commercialize our products successfully.

**Risks Related to Government Regulation**

**We have not received regulatory approval in the United States or any foreign jurisdiction for the commercial sale of any of our product candidates. The regulatory approval process is lengthy, and we may not be able to obtain all of the regulatory approvals required to manufacture and commercialize our product candidates.**

We do not currently have any products that have been approved for commercialization. We will not be able to commercialize our products until we have obtained the requisite regulatory approvals from applicable governmental authorities. To obtain regulatory approval of a product candidate, we must demonstrate to the satisfaction of the applicable regulatory agency that such product candidate is safe and effective for its intended uses. The type and magnitude of the testing required for regulatory approval varies depending on the product candidate and the disease or condition for which it is being developed. In addition, in the U.S. we must show that the facilities used to manufacture our product candidate are in compliance with current good manufacturing practices (cGMP). We will also have to meet similar regulations in any foreign country where we may seek to commercialize CPP-109 or CPP-115. In general, these requirements mandate that manufacturers follow elaborate procedures for manufacturing, testing, control, documentation and other quality assurance procedures throughout the entire manufacturing and distribution process. The process of obtaining regulatory approvals typically takes several years and requires the expenditure of substantial capital and other resources. Despite the time, expense and resources invested by us in the approval process, we may not be able to demonstrate that our product candidates are safe and effective, in which event we would not receive the regulatory approvals required to market them.

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The FDA and other regulatory authorities generally approve products for particular indications. Our current focus for CPP-109 and CPP-115 is to develop treatments for addiction and, with respect to CPP-115, to also develop treatments for epilepsy. CPP-109 and/or CPP-115 may not be approved for any or all of the indications that we request, which would limit the indications for which we can promote it and adversely impact our ability to generate revenues. We may be required to conduct costly, post-marketing follow-up studies if FDA requests additional information.

### **Our receipt of Fast Track status does not mean that our product development efforts will be accelerated.**

The FDA has granted Fast Track designation to CPP-109 and to CPP-115 for the treatment of cocaine addiction. Fast Track designation means that the FDA recognizes cocaine addiction as a serious or life threatening condition for which there is an unmet medical need and consequently may initiate review of sections of an NDA before the application is complete. However, Fast Track designation does not accelerate the time needed to conduct clinical trials, nor does it mean that the regulatory requirements necessary to obtain an approval are less stringent. Our Fast Track designation does not guarantee that we will qualify for, or be able to take advantage of, priority review procedures following a submission of an NDA. Additionally, our Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data from our clinical development program, or if a competitor's product is approved for the indication we are seeking.

### **If our pre-clinical studies or our clinical studies and trials are unsuccessful or significantly delayed, our ability to commercialize our products will be impaired.**

Before we can obtain regulatory approval for the sale of any of our product candidates, we may have to conduct, at our own expense, pre-clinical tests in animals in order to support the safety of CPP-109 and CPP-115. Pre-clinical testing is expensive, difficult to design and implement, can take several years to complete and is uncertain as to outcome. Our pre-clinical tests may produce negative or inconclusive results, and on the basis of such results, we may decide, or regulators may require us, to halt ongoing clinical trials or conduct additional pre-clinical testing.

We may also need to conduct additional clinical studies and trials demonstrating the efficacy and/or safety of CPP-109 in humans. In the United States, in 2009 we completed both a Phase II(a) clinical trial to assess the efficacy of using CPP-109 as a treatment for cocaine addiction and a clinical proof-of-concept study to assess its efficacy as a treatment for methamphetamine addiction. Neither of these completed studies/trials provided efficacy data which would allow us to obtain approval to commercialize CPP-109 in the U.S. We may also have to conduct additional human trials (in addition to the current Phase II(b) human clinical trial) in order to seek approval to commercialize CPP-109 for the treatment of cocaine addiction. However, even if the results of our clinical trials are promising, CPP-109 may subsequently fail to meet the safety and efficacy standards required to obtain regulatory approvals. Future clinical trials for CPP-109 may not be successfully completed or may take longer than anticipated because of any number of factors, including potential delays in the start of the trial, an inability to recruit clinical trial participants at the expected rate, failure to demonstrate safety and efficacy, unforeseen safety issues, or unforeseen governmental or regulatory delays. The risks described above also apply to our development of CPP-115.

Any clinical trials we might develop and implement may not be completed in a timely manner or at all. Our product candidates may not be found to be safe and effective, and may not be approved by regulatory authorities for the proposed indication. Further, regulatory authorities and IRBs that must approve and monitor the safety of each clinical study may suspend a clinical study at any time if the patients participating in such study are deemed to be exposed to any unacceptable health risk. We may also choose to suspend human clinical studies and trials if we become aware of any such risks. We might encounter problems in our clinical trials, including problems associated with VFDs or other side effects that will cause us, regulatory authorities, or IRBs to delay or suspend such trial or study.

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In other countries where CPP-109, CPP-115 or any other product we develop may be marketed, we will also be subject to regulatory requirements governing human clinical studies, trials and marketing approval for drugs. The requirements governing the conduct of clinical studies, trials, product licensing, pricing and reimbursement varies widely from country to country.

### **Our development of CPP-109 may require at least one, or more than one, U.S. Phase III clinical trial.**

Generally, the process of seeking approval of an NDA requires multiple clinical trials, including two “pivotal” U.S. Phase III clinical trials. In our case, because CPP-109 is intended to treat a serious condition for which there is no approved therapy, there is a possibility that if the data from the Phase II(b) trial are sufficiently compelling, the FDA will file an NDA submitted by us for CPP-109 on the basis of this trial, when combined with the data from the previous clinical trials and studies of vigabatrin to treat addiction. However, the FDA could require a Phase III trial supported by the safety and efficacy data obtained from our Phase II(b) clinical trial before they will file an NDA submitted by us for CPP-109, even if the data from our currently ongoing Phase II(b) clinical trial are compelling. Further, even if the FDA files an NDA based on our current Phase II(b) trial, it is unlikely that we will submit an NDA for CPP-109 until after August 21, 2014. Finally, if the FDA requires one or more Phase III clinical trials, our NDA submission could be delayed even further. There can be no assurance that the data will be compelling from our currently ongoing Phase II(b) clinical trial or that even if such data are compelling, that the FDA will file an NDA submitted by us for CPP-109 based on the results of that trial.

### **The development of CPP-115 is at an early stage.**

Our development of CPP-115 is at an early stage, and it is likely going to be several years before we are in a position to file an NDA for CPP-115. Further, our ability to develop CPP-115 will be dependent on our having the resources to conduct the studies and trials that would be required. There can be no assurance that we will ever file an NDA for CPP-115.

### **If our third-party suppliers or contract manufacturers do not maintain appropriate standards of manufacturing in accordance with cGMP and other manufacturing regulations, our development and commercialization activities could suffer significant interruptions or delays.**

We rely, and intend to continue to rely, on third-party suppliers and contract manufacturers to provide us with materials for our clinical trials and commercial-scale production of our products. These suppliers and manufacturers must continuously adhere to cGMP as well as any applicable corresponding manufacturing regulations outside of the U.S. In complying with these regulations, we and our third-party suppliers and contract manufacturers must expend significant time, money and effort in the areas of design and development, testing, production, record-keeping and quality control to assure that our products meet applicable specifications and other regulatory requirements. Failure to comply with these requirements could result in the FDA’s refusal to approve our product even if the product is proven to be safe and effective, or an enforcement action against us, including warning letters, the seizure of products, suspension or withdrawal of approvals, shutting down of production and criminal prosecution. Any of these third-party suppliers or contract manufacturers will also be subject to inspections by the FDA and other regulatory agencies. If any of our third-party suppliers or contract manufacturers fail to comply with cGMP or other applicable manufacturing regulations, our ability to develop and commercialize our products could suffer significant interruptions and delays.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured the product ourselves, including:

- reliance on the third party for regulatory compliance and quality assurance;
- reliance on the continued financial viability of the third parties;
- limitations on supply availability resulting from capacity and scheduling constraints of the third parties;

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- impact on our reputation in the marketplace if manufacturers of our products, once commercialized, fail to meet the demands of our customers;
- the possible breach of the manufacturing agreement by the third party because of factors beyond our control; and
- the possible termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

If any of our contract manufacturers fail to achieve and maintain appropriate manufacturing standards, patients using our drug candidates could be injured or die, resulting in product liability claims. Even absent patient injury, we may be subject to product recalls, product seizures or withdrawals, delays or failures in testing or delivery, cost overruns or other problems that could seriously harm our business or profitability.

### **If we rely on a sole source of supply to manufacture our products we could be adversely impacted by disruptions in the manufacturing processes or capabilities of our sole supplier.**

We intend to attempt to source our products from more than one supplier. We also intend to enter into contracts with any supplier of our products to contractually obligate them to meet our requirements. However, if we are reliant on a single supplier and that supplier cannot or will not meet our requirements (for whatever reason), our business could be adversely impacted.

### **Even if we obtain regulatory approvals, our drug candidates, CPP-109 and CPP-115, will be subject to ongoing regulatory review. If we fail to comply with continuing U.S. and applicable foreign regulations, we could lose those approvals, and our business would be severely harmed.**

Even if we receive regulatory approval of any drugs we are developing or may develop, we will be subject to continuing regulatory review, including the review of clinical results which are reported after our drug candidates become commercially available approved drugs. As greater numbers of patients use a drug following its approval, side effects and other problems may be observed after approval that were not seen or anticipated during preapproval clinical studies and trials. In addition, the manufacturer, and the manufacturing facilities we use to make any approved drugs, will also be subject to periodic review and inspection by the FDA. The subsequent discovery of previously unknown problems with the drug, manufacturer or facility may result in restrictions on the drug, manufacturer or facility, including withdrawal of the drug from the market. If we fail to comply with applicable continuing regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approval, product recalls and seizures, operating restrictions and criminal prosecutions.

Our product promotion and advertising is also subject to regulatory requirements and continuing regulatory review. In particular, the marketing claims we will be permitted to make in labeling or advertising regarding our marketed products will be limited by the terms and conditions of the FDA-approved labeling. We must submit copies of our advertisements and promotional labeling to the FDA at the time of initial publication or dissemination. If the FDA believes these materials or statements promote our products for unapproved indications, or with unsubstantiated claims, or if we fail to provide appropriate safety related information, the FDA could allege that our promotional activities misbrand our products. Specifically, the FDA could issue an untitled letter or warning letter, which may demand, among other things, that we cease such promotional activities and issue corrective advertisements and labeling. The FDA also could take enforcement action including seizure of allegedly misbranded product, injunction or criminal prosecution against us and our officers or employees. If we repeatedly or deliberately fail to submit such advertisements and labeling to the agency, the FDA could withdraw our approvals. Moreover, the Department of Justice can bring civil or criminal actions against companies that promote drugs or biologics for unapproved uses, based on the False Claims Act and other federal laws governing reimbursement for such products under the Medicare, Medicaid and other federally supported healthcare programs. Monetary penalties in such cases have often been substantial, and civil penalties can include costly mandatory compliance programs and exclusion from federal healthcare programs.



**Substantial and changing healthcare regulations by state and federal authorities in the U.S. could reduce or eliminate our commercial opportunity in the addiction treatment industry.**

Healthcare organizations, both public and private, continue to change the manner in which they operate and pay for services. These organizations have had to adapt to extensive and complex laws and regulations and judicial decisions governing activities including drug manufacturing and marketing. Additionally, the healthcare industry in recent years has been subject to increasing levels of government regulation of reimbursement rates and capital expenditures. We believe that the industry will continue to be subject to increasing regulation, as well as political and legal action, as additional proposals to reform the healthcare system continue to be discussed by Congress and state legislatures. This is particularly so in light of the legislative healthcare reform approved by Congress in 2010. Any new legislative initiatives, if enacted, may further increase government regulation of or other involvement in healthcare, lower reimbursement rates and otherwise change the operating environment for healthcare companies. We cannot predict the likelihood of all future changes in the healthcare industry in general, or the addiction treatment industry in particular, or what impact they may have on our results of operations, financial condition or business. Government regulations applicable to our proposed products or the interpretation thereof might change and thereby prevent us from marketing some or all of our products and services for a period of time or indefinitely.

**Risks Related to Our Dependence on Third Parties**

**We are dependent on our relationship and license agreements with Brookhaven and Northwestern University, and we rely upon the patent rights granted to us for vigabatrin and CPP-115 pursuant to the license agreements.**

All of our patent rights for CPP-109 are derived from our license agreement with Brookhaven Science Associates, LLC, as operator of Brookhaven National Laboratory under contract with the United States Department of Energy (“Brookhaven”). Pursuant to this license agreement, we have licensed rights under nine patents in the United States, and have broad foreign filings in major international markets, that were filed and obtained by Brookhaven relating to the use of vigabatrin for a range of indications, including the treatment of a wide variety of substance addictions. The eight issued patents expire between 2018 and 2022, with the principal patents expiring in 2018. We also have the right to future foreign patents obtained by Brookhaven relating to the use of vigabatrin in treating addiction. See “*Business — Licensing and Patents*” for more information about our license with Brookhaven and our licensed patents and patent applications. These rights are subject to the right of the U.S. government, under limited circumstances, to practice the covered inventions for or on its own behalf. We may lose our rights to these patents and patent applications if we breach our obligations under the license agreement, including, without limitation, our financial obligations to Brookhaven. If we violate or fail to perform any term or covenant of the license agreement, Brookhaven may terminate the license agreement upon satisfaction of any applicable notice requirements and expiration of any applicable cure periods. Additionally, any termination of the license agreement, whether by us or by Brookhaven, will not relieve us of our obligation to pay any license fees owing at the time of such termination. If we fail to retain our rights under the license agreement, we would not be able to commercialize CPP-109, and our business, results of operations, financial condition and prospects would be materially adversely affected.

All of our patent rights for CPP-115 are derived from our license agreement with Northwestern University (Northwestern). Pursuant to this license agreement, we have exclusive worldwide rights to two patents in the United States. These were filed and obtained by Northwestern relating to compositions of matter for a class of molecules, including CPP-115. Both patents expire in 2023. Additionally, we have licensed rights from Northwestern to a pending patent for derivatives of vigabatrin that are unrelated to CPP-115. See “*Business — Licensing and Patents*” for more information about our license with Northwestern and our licensed patents and patent applications. These rights are subject to the right of Northwestern, under limited circumstances, to practice the covered inventions for or on its own behalf for research. We may lose our rights to these patents and patent applications if we breach our obligations under the license agreement, including, without limitation, our financial obligations, including milestone payments, to Northwestern. If we violate or fail to perform any term or covenant of the license agreement, Northwestern may terminate the license agreement upon satisfaction of any applicable

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notice requirements and expiration of any applicable cure periods. Additionally, any termination of the license agreement, whether by us or by Northwestern, will not relieve us of our obligation to pay any license fees owing at the time of such termination. If we fail to retain our rights under the license agreement, we would not be able to commercialize CPP-115, and our business, results of operations, financial condition and prospects would be materially adversely affected.

A patent to protect CPP-115 in all anticipated non-U.S. markets throughout the world was filed in March 2011 under the Patent Cooperation Treaty (PCT). Prosecution of this patent is ongoing, but it cannot be assured that the claims of this patent will be allowed, or, even if allowed, whether such claims will be allowed in a form that will provide adequate protection for CPP-115 outside the United States.

If we obtain approval to market CPP-109 or CPP-115, our commercial success will depend in large part on our ability to use patents, especially those licensed to us by Brookhaven and Northwestern, respectively, to exclude others from competing with us. The patent position of emerging pharmaceutical companies like us can be highly uncertain and involve complex legal and technical issues. Until our licensed patents are interpreted by a court, either because we have sought to enforce them against a competitor or because a competitor has preemptively challenged them, we will not know the breadth of protection that they will afford us. Our patents may not contain claims sufficiently broad to prevent others from practicing our technologies or marketing competing products. Third parties may intentionally design around our patents so as to compete with us without infringing our patents. Moreover, the issuance of a patent is not conclusive as to its validity or enforceability, and so our patents may be invalidated or rendered unenforceable if challenged by others. Third parties may intentionally attempt to design around our patents so as to compete with us without infringing our patents. Moreover, the issuance of a patent is not conclusive as to its validity or enforceability, and so our patents may be invalidated or rendered unenforceable if challenged by others.

As a result of the foregoing factors, we cannot be certain how much protection from competition patent rights will provide us.

### **We rely on third parties to conduct our pre-clinical studies and our clinical studies and trials, and those third parties may not perform satisfactorily, including failing to meet established deadlines for the completion of such trials.**

We do not currently have the ability to independently conduct pre-clinical studies or clinical studies and trials for our drug candidates, and we rely on third parties such as governmental agencies (including NIDA and the VA), and third-party contract research organizations, medical institutions and clinical investigators, to conduct such studies and trials. Our reliance on third parties for development activities reduces our control over these activities. These third parties may not complete activities on schedule, or may not conduct our pre-clinical studies and our clinical studies and trials in accordance with regulatory requirements or our study design. To date, we believe that the parties with which we are working have performed well, and we have no reason to believe they will not continue to do such work in the future. However, if these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be required to replace them. Although we believe there are a number of other parties with which we could engage to continue these activities, it may cause a delay in the affected study or trial and/or increase the cost of such study or trial. Accordingly, our efforts to obtain regulatory approvals for and commercialize our drug candidates may be delayed.

### **Risks Related to Our Intellectual Property**

#### **Our success will depend significantly on our ability to operate without infringing the patents and other proprietary rights of third parties.**

While we are not currently aware of any third-party patents which we may infringe, there can be no assurance that we do not or will not infringe on patents held by third parties or that third parties will not claim that we have infringed on their patents. In the event that our technologies infringe or violate the patent or other

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proprietary rights of third parties, we may be prevented from pursuing product development, manufacturing or commercialization of our products that utilize such technologies. There may be patents held by others of which we are unaware that contain claims that our products or operations infringe. In addition, given the complexities and uncertainties of patent laws, there may be patents of which we are aware that we may ultimately be held to infringe, particularly if the claims of the patent are determined to be broader than we believe them to be. Adding to this uncertainty, in the U.S., patent applications filed in recent years are confidential for 18 months, while older applications are not publicly available until the patent issues. As a result, avoiding patent infringement may be difficult.

If a third party claims that we infringe its patents, any of the following may occur:

- we may be required to pay substantial financial damages if a court decides that our technologies infringe a competitor's patent, which can be tripled if the infringement is deemed willful, or be required to discontinue or significantly delay development, marketing, selling and licensing of the affected products and intellectual property rights;
- a court may prohibit us from selling or licensing our product without a license from the patent holder, which may not be available on commercially acceptable terms or at all, or which may require us to pay substantial royalties or grant cross-licenses to our patents; and
- we may have to redesign our product so that it does not infringe others' patent rights, which may not be possible or could require substantial funds or time and require additional studies.

In addition, employees, consultants, contractors and others may use the proprietary information of others in their work for us or disclose our proprietary information to others. As an example, we do not currently have written agreements regarding confidentiality or any other matters with several principal members of our Scientific Advisory Board. If our employees, consultants, contractors or others disclose our data to others or use data belonging to others in connection with our business, it could lead to disputes over the ownership of inventions derived from that information or expose us to potential damages or other penalties.

The occurrence of any of these events could have a material adverse effect on our business, financial condition, results of operations or prospects.

### **We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.**

There is substantial history of litigation and other proceedings regarding patent and intellectual property rights in the pharmaceutical industry. We may be forced to defend claims of infringement brought by our competitors and others, and we may institute litigation against others who we believe are infringing our intellectual property rights. The outcome of intellectual property litigation is subject to substantial uncertainties and may, for example, turn on the interpretation of claim language by the court, which may not be to our advantage, or on the testimony of experts as to technical facts upon which experts may reasonably disagree.

Under our license agreements, we have the right to bring legal action against any alleged infringers of the patents we license. However, we are responsible for all costs relating to such potential litigation. We have the right to any proceeds received as a result of such litigation, but, even if we are successful in such litigation, there is no assurance we would be awarded any monetary damages.

Our involvement in intellectual property litigation could result in significant expense to us. Some of our competitors have considerable resources available to them and a strong economic incentive to undertake substantial efforts to stop or delay us from commercializing products. For example, Ovation Pharmaceuticals, which held the rights in North America to Sabril® for the treatment of epilepsy (prior to the acquisition of Ovation by Lundbeck), had, in the past, indicated its intent to develop Sabril® for the treatment of cocaine addiction and methamphetamine addiction. However, we have no current evidence that Lundbeck, which now

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owns Ovation, is pursuing clinical trials intended to support approval for either of these indications. We believe that Lundbeck would infringe our patent rights if they seek to commercialize Sabril® to treat cocaine addiction and/or methamphetamine addiction, and we have advised Lundbeck of our belief in that regard. We intend to vigorously pursue infringement claims against Lundbeck if it seeks to commercialize Sabril® for these indications. However, we, unlike Lundbeck and many of our other competitors, are a relatively small company with comparatively few resources available to us to engage in costly and protracted litigation. Moreover, regardless of the outcome, intellectual property litigation against or by us could significantly disrupt our development and commercialization efforts, divert our management's attention and quickly consume our financial resources.

In addition, if third parties file patent applications or issue patents claiming technology that is also claimed by us in pending applications, we may be required to participate in interference proceedings with the U.S. Patent Office or in other proceedings outside the U.S., including oppositions, to determine priority of invention or patentability. Even if we are successful in these proceedings, we may incur substantial costs, and the time and attention of our management and scientific personnel will be diverted from product development or other more productive matters.

### **Risks Related to Our Common Stock and this Offering**

#### **We are highly dependent on our small number of key personnel and advisors.**

We are highly dependent on our officers, on our Board of Directors and on our scientific advisors. The loss of the services of any of these individuals could significantly impede the achievement of our scientific and business objectives. Other than an employment agreement with Patrick J. McEnany, our Chairman, President and Chief Executive Officer with respect to his services, and the consulting agreements we have with our medical director and with several of our scientific advisors, we have no employment or retention agreements with our officers, directors or scientific advisors. If we lose the services of any of our existing officers, directors or scientific advisors, or if we were unable to recruit qualified replacements on a timely basis for persons who leave our employ, our efforts to develop CPP-109, CPP-115 or other products might be significantly delayed. We do not carry key-man insurance on any of our personnel.

We have relationships with our scientific advisers and collaborators at academic and other institutions. Such individuals are employed by entities other than us and may have commitments to, or consulting advisory contracts with, such entities that may limit their availability to us. Although each scientific advisor and collaborator has agreed not to perform services for another person or entity that would create an appearance of a conflict of interest, the Chairman of our Scientific Advisory Board, Stephen L. Dewey, Ph.D., is actively involved in the investigation of neurological mechanisms involved in the addiction process. His research might result in pharmaceutical products that are competitive with, or superior to, CPP-109 or CPP-115. Similarly, other similar conflicts may arise from the work in which other scientific advisers and/or collaborators are involved.

#### **Delaware law and our certificate of incorporation and by-laws contain provisions that could delay and discourage takeover attempts that stockholders may consider favorable.**

Certain provisions of our certificate of incorporation and by-laws, and applicable provisions of Delaware corporate law, may make it more difficult for or prevent a third party from acquiring control of us or changing our Board of Directors and management. These provisions include:

- the ability of our Board of Directors to issue preferred stock with voting or other rights or preferences;
- limitations on the ability of stockholders to amend our charter documents, including stockholder supermajority voting requirements;
- the inability of stockholders to act by written consent or to call special meetings;

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- requirements that special meetings of our stockholders may only be called by the Board of Directors; and
- advance notice procedures our stockholders must comply with in order to nominate candidates for election to our Board of Directors or to place stockholders' proposals on the agenda for consideration at meetings of stockholders.

On September 20, 2011, our Board of Directors approved the adoption of a stockholder rights plan. The rights plan was implemented through our entry into a rights agreement with Continental Stock Transfer & Trust Company, as rights agent, and the declaration of a non-taxable dividend distribution of one preferred stock purchase right (each, a Right) for each outstanding share of our common stock. The dividend was paid on October 7, 2011 to holders of record as of that date. Each right is attached to and trades with the associated share of common stock. The rights will become exercisable only if a person acquires beneficial ownership of 17.5% or more of our common stock (or, in the case of a person who beneficially owned 17.5% or more of our common stock on the date the rights plan was adopted, such person acquires beneficial ownership of any additional shares of our common stock) or after the date of the Rights Agreement, commences a tender offer that, if consummated, would result in beneficial ownership by a person of 17.5% or more of our common stock. The rights will expire on September 20, 2016, unless the rights are earlier redeemed or exchanged.

In addition, Section 203 of the Delaware General Corporation Law generally prohibits us from engaging in a business combination with any person who owns 15% or more of our common stock for a period of three years from the date such person acquired such common stock, unless board or stockholder approval is obtained. These provisions could make it difficult for a third party to acquire us, or for members of our Board of Directors to be replaced, even if doing so would be beneficial to our stockholders.

Any delay or prevention of a change of control transaction or changes in our Board of Directors or management could deter potential acquirors or prevent the completion of a transaction in which our stockholders could receive a substantial premium over the then current market price for their shares.

### **We do not intend to pay cash dividends on our common stock in the foreseeable future.**

We have never declared or paid any cash dividends on our common stock or other securities, and we currently do not anticipate paying any cash dividends in the foreseeable future. Accordingly, investors should not invest in our common stock if they require dividend income. Our stockholders will not realize a return on their investment unless the trading price of our common stock appreciates, which is uncertain and unpredictable.

### **Future sales of our common stock may cause our stock price to decline.**

As of the date of this prospectus, we had 24,741,520 shares of our common stock outstanding. We also had outstanding an aggregate of 3,479,108 options to purchase shares of common stock, of which 3,059,108 shares were exercisable, and common stock purchase warrants to purchase 1,523,370 shares of common stock. We have registered for future sale: (i) 2,688,828 shares of common stock that we may issue under our 2006 Stock Incentive Plan and (ii) 1,459,220 shares of common stock underlying our outstanding stock options that were granted pursuant to written agreements. The outstanding options make a part of the shares registered both under and outside of our 2006 Stock Incentive Plan. Sales of restricted shares or shares underlying stock options, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

### **The trading price of the shares of our common stock could be highly volatile.**

The market price of our common stock has fluctuated in the past and is likely to fluctuate in the future. Market prices for early-stage pharmaceutical companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- developments concerning our clinical studies and trials and our pre-clinical studies;

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- announcements of product development successes and failures by us or our competitors;
- new products introduced or announced by us or our competitors;
- adverse changes in the abilities of our third-party manufacturers to provide drug or product in a timely manner or to meet FDA requirements;
- changes in reimbursement levels;
- changes in financial estimates by securities analysts;
- actual or anticipated variations in operating results;
- expiration or termination of licenses (particularly our licenses from Brookhaven and Northwestern), research contracts or other collaboration agreements;
- conditions or trends in the regulatory climate and the biotechnology and pharmaceutical industries;
- intellectual property, product liability or other litigation against us;
- changes in the market valuations of similar companies;
- changes in pharmaceutical company regulations or reimbursements as a result of healthcare reform or other legislation;
- changes in economic conditions; and
- sales of shares of our common stock, particularly sales by our officers, directors and significant stockholders, or the perception that such sales may occur.

In addition, equity markets in general, and the market for emerging pharmaceutical and life sciences companies in particular, have experienced substantial price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies traded in those markets. In addition, changes in economic conditions in the United States, Europe or globally could impact our ability to grow profitably. Adverse economic changes are outside our control and may result in material adverse impacts on our business or financial results. These broad market and industry factors may materially affect the market price of our shares, regardless of our own development and operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class-action litigation has often been instituted against that company. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources, which could have a material adverse effect on our business, financial condition and results of operations.

### **We may be unable to maintain our listing on the Nasdaq Capital Market.**

Nasdaq listing rules require that listed companies maintain certain standards, including maintaining \$2.5 million in stockholder equity and/or \$35 million total market value of listed securities, as well as a bid price of at least \$1.00 per share. Our stock price is currently under \$1.00 per share. If our stock price does not rise above \$1.00 per share within the next 30-days, the Nasdaq Stock Market could take steps to delist our common stock from the Nasdaq Capital Market. Further, if we are unable to maintain the values set forth above, the Nasdaq Stock Market could take steps to delist our common stock from the Nasdaq Capital Market. While we would attempt, in such a case, to seek alternative listing for our common stock, such delisting would immediately affect the liquidity, and likely the value, of our common stock.

### **We may allocate the net proceeds from this offering in ways that you and other shareholders may not approve.**

We currently intend to use the net proceeds of this offering to fund the activities necessary to support submission of an NDA for CPP-109 for FDA approval and the costs to prepare for commercialization of CPP-109, assuming that the data from the currently ongoing Phase II(b) trial are compelling and the FDA files an NDA submitted by us for CPP-109 based on the data from the Phase II(b) trial, to manufacture sufficient

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CPP-115 for use in one or more future safety and/or proof-of-concept studies of CPP-115, and for general corporate purposes. See “*Use of Proceeds*.” However, because of the factors described above, we cannot at this time determine with specificity the particular uses of the proceeds from this offering. As a result, our management will retain broad discretion in the allocation and use of the net proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock.

### **You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.**

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the offering price of \$            per share, if you purchase shares of common stock in this offering (and assuming no exercise by the underwriters of the over-allotment option), you will suffer immediate and substantial dilution of approximately \$            per share in the net tangible book value of the common stock. See “*Dilution*” for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains “forward-looking statements”, as that term is defined in the Private Securities Litigation Reform Act of 1995. These include statements regarding our expectations, beliefs, plans or objectives for future operations and anticipated results of operations. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, “believes”, “anticipates”, “proposes”, “plans”, “expects”, “intends”, “may”, and other similar expressions are intended to identify forward-looking statements. Such statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. The forward-looking statements made in this prospectus are based on current expectations that involve numerous risks and uncertainties.

The successful development of CPP-109, CPP-115 or any other product we may acquire, develop or license is highly uncertain. We cannot reasonably estimate or know the nature, timing, or estimated expenses of the efforts necessary to complete the development of, or the period in which material net cash inflows are expected to commence due to the numerous risks and uncertainties associated with developing such products, including the uncertainty of:

- the scope, rate of progress and expense of our pre-clinical studies, proof-of-concept studies and clinical studies and trials and other product development activities;
- our ability to complete our studies on a timely basis and within the budgets we establish for such trials;
- whether our studies and trials will be successful;
- the ability of our third-party suppliers or contract manufacturers to maintain compliance with cGMP;
- the results of our pre-clinical studies and clinical studies and trials, and the number and scope of such studies and trials that will be required for us to seek and obtain approval of NDAs for CPP-109 and CPP-115;
- the expense of filing, and potentially prosecuting, defending and enforcing any patent claims and other individual property rights;
- whether others develop and commercialize products competitive to our products;
- changes in the laws and regulations affecting our business;
- our ability to attract and retain skilled employees; and
- changes in general economic conditions and interest rates.

Our current plans and objectives are based on assumptions relating to the development of our current product candidates. Although we believe that our assumptions are reasonable, any of our assumptions could prove inaccurate. In light of the significant uncertainties inherent in the forward-looking statements made herein, which reflect our views only as of the date of this prospectus, you should not place undue reliance upon such statements. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.



## USE OF PROCEEDS

We estimate that the net proceeds of this offering, after deducting the underwriting discount and the estimated offering expenses payable by us, will be approximately \$ (or approximately \$ if the underwriters exercise their over-allotment option in full). We currently expect to use the net proceeds of this offering for the following purposes:

- to fund the activities necessary to support submission of an NDA for CPP-109 for FDA approval and to pay the costs of preparing for the commercialization of CPP-109 (such as manufacturing production batches of CPP-109), assuming that the data from the currently ongoing Phase II(b) trial are compelling and the FDA files an NDA submitted by us for CPP-109 based on the data from the Phase II(b) trial;
- to fund the manufacture of sufficient CPP-115 for use in one or more future safety and/or proof-of-concept studies of CPP-115; and
- for general corporate purposes.

We anticipate that if the proceeds of this offering are used for the purposes described above, we will have sufficient working capital following this offering to support our operations through the middle of 2014. Further, while we will use the proceeds of this offering to manufacture sufficient CPP-115 for use in future proof-of-concept studies of CPP-115, the proceeds of this offering will not be sufficient to fund any such studies.

Due to the factors set forth above, we cannot currently determine with absolute certainty how we will use the proceeds from this offering. As a result, our management will retain broad discretion in the allocation and use of the net proceeds from this offering. Pending their use as described above, we intend to invest the net proceeds in high quality, short-term, interest-bearing securities. We will pay all of the costs associated with registering the securities covered by this prospectus.

## MARKET PRICE OF OUR COMMON STOCK

### Market Information

Our common stock trades on the Nasdaq Capital Market under the symbol “CPRX.” From November 8, 2006 through September 2, 2009, our common stock traded on the Nasdaq Global Market under the same symbol. There was no public market for our common stock before November 8, 2006. The following table sets forth the high and low closing sales prices per share of our common stock as reported on the Nasdaq Capital Market for the period indicated.

	<u>High</u>	<u>Low</u>
<b>Year Ended December 31, 2010</b>		
First Quarter	\$0.87	\$0.56
Second Quarter	\$2.00	\$0.71
Third Quarter	\$1.32	\$0.90
Fourth Quarter	\$1.19	\$0.91
<b>Year Ended December 31, 2011</b>		
First Quarter	\$1.38	\$1.05
Second Quarter	\$1.93	\$1.10
Third Quarter	\$1.82	\$1.07
Fourth Quarter	\$1.46	\$0.96
<b>Year Ended December 31, 2012</b>		
First Quarter	\$1.34	\$1.05
Second Quarter (through April 24, 2012)	\$1.11	\$0.80

### Stockholders

As of March 23, 2012, there were 54 holders of record of our common stock, which includes custodians who hold our securities for the benefit of others. We estimate that there are approximately 3,100 beneficial holders of our common stock.

## DIVIDEND POLICY

We have not paid any dividends on our common stock to date and do not anticipate that we will pay dividends in the foreseeable future. Any payment of cash dividends on our common stock in the future will be dependent upon the amount of funds legally available, our earnings, if any, our financial condition, our anticipated capital requirements and other factors that the board of directors may think are relevant. However, we currently intend for the foreseeable future to follow a policy of retaining all of our earnings, if any, to finance the development and expansion of our business and, therefore, do not expect to pay any dividends on our common stock in the foreseeable future.

## DILUTION

Purchasers of the securities offered by this prospectus will suffer immediate and substantial dilution in the net tangible book value per share of the common stock they purchase. Our net tangible book value as of December 31, 2011 was \$3,760,698, or approximately \$0.15 per share of our common stock. Net tangible book value per share represents the amount of total tangible assets less total liabilities, divided by the number of shares of our common stock outstanding as of December 31, 2011.

Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers in this offering and the net tangible book value per share of our common stock immediately after this offering. After giving effect to the sale of \_\_\_\_\_ shares of common stock in this offering at an offering price of \$ \_\_\_\_\_ per share, and after deducting the underwriting discount and the estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2011 would have been \$ \_\_\_\_\_, or approximately \$ \_\_\_\_\_ per share of our common stock. This represents an immediate increase in net tangible book value of \$ \_\_\_\_\_ per share of common stock to our already existing stockholders and an immediate dilution in net tangible book value of \$ \_\_\_\_\_ per share of common stock to purchasers in this offering. The following table illustrates this per share dilution:

Public offering price per share		\$
Net tangible book value per share as of December 31, 2011	\$0.15	
Increase per share attributable to this offering	\$	
As adjusted net tangible book value per share as of December 31, 2011		\$
Dilution per share to new investors participating in this offering		\$

If the underwriters exercise in full their option to purchase \_\_\_\_\_ additional shares of common stock at the public offering price of \$ \_\_\_\_\_ per share, the as adjusted net tangible book value after this offering would be \$ \_\_\_\_\_, or approximately \$ \_\_\_\_\_ per share, representing an increase in net tangible book value of \$ \_\_\_\_\_ per share to existing stockholders and immediate dilution in net tangible book value of \$ \_\_\_\_\_ per share to investors participating in this offering at the public offering price of \$ \_\_\_\_\_ per share.

The above table is based on 24,701,420 shares outstanding as of December 31, 2011 and excludes:

- 40,100 shares of common stock issued subsequent to December 31, 2011 upon the cashless exercise of certain outstanding stock options;
- 2,263,888 shares of our common stock subject to outstanding options under our 2006 Stock Incentive Plan having a weighted average exercise price of \$1.19 per share;
- 1,459,220 shares of our common stock subject to outstanding options outside of our 2006 Stock Incentive Plan having a weighted average exercise price of \$0.69 per share;
- 239,270 shares of our common stock that have been reserved for issuance in connection with our 2006 Stock Incentive Plan; and
- 1,523,370 shares of our common stock that have been reserved for issuance upon exercise of outstanding warrants at an exercise price of \$1.30 per share.

To the extent that any outstanding options or warrants are exercised, new options are issued under our 2006 Stock Incentive Plan, or we otherwise issue additional shares of common stock in the future, at a price less than the public offering price, there will be further dilution to new investors.

### SELECTED FINANCIAL DATA

The selected statement of operations data for the years ended December 31, 2011, 2010, 2009 and for the cumulative period from inception (January 4, 2002) through December 31, 2011, and the balance sheet data as of December 31, 2011 and 2010, have been derived from our audited financial statements included elsewhere in this prospectus. The selected statement of operations data for the years ended December 31, 2008 and 2007 and the selected balance sheet data at December 31, 2009, 2008 and 2007 have been derived from financial statements that are not included in this prospectus. Historical results are not necessarily indicative of future results. This selected financial data should be read in conjunction with “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*” and our financial statements and related notes included elsewhere in this prospectus.

	Year Ended December 31,					Cumulative period from inception (January 4, 2002) through December 31, 2011
	2011	2010	2009	2008	2007	
<b>Statement of Operations Data:</b>						
Revenues – government grant	\$ —	\$ 488,958	\$ —	\$ —	\$ —	\$ 488,958
<b>Operating costs and expenses:</b>						
Research and development	3,383,965	2,306,781	5,097,440	8,710,441	3,040,659	25,643,708
General and administrative	2,698,174	2,206,358	2,177,954	2,183,504	1,986,470	14,105,748
Total operating costs and expenses	<u>6,082,139</u>	<u>4,513,139</u>	<u>7,275,394</u>	<u>10,893,945</u>	<u>5,027,129</u>	<u>39,749,456</u>
Loss from operations	(6,082,139)	(4,024,181)	(7,275,394)	(10,893,945)	(5,027,129)	(39,260,498)
Interest income	10,985	17,858	33,466	329,348	887,636	1,477,789
Change in fair value of warrants liability	(319,908)	—	—	—	—	(319,908)
Loss before income taxes	(6,391,062)	(4,006,323)	(7,241,928)	(10,564,597)	(4,139,493)	(38,102,617)
Provision for income taxes	—	—	—	—	—	—
Net loss	<u>\$ (6,391,062)</u>	<u>\$ (4,006,323)</u>	<u>\$ (7,241,928)</u>	<u>\$ (10,564,597)</u>	<u>\$ (4,139,493)</u>	<u>\$ (38,102,617)</u>
Net loss per share – basic and diluted	<u>\$ (0.29)</u>	<u>\$ (0.22)</u>	<u>\$ (0.48)</u>	<u>\$ (0.81)</u>	<u>\$ (0.33)</u>	
Weighted average shares outstanding – basic and diluted	<u>21,728,292</u>	<u>18,580,223</u>	<u>15,066,799</u>	<u>13,013,041</u>	<u>12,525,405</u>	

	As of December 31,					
	2011	2010	2009	2008	2007	
<b>Balance Sheet Data:</b>						
Cash and cash equivalents		\$6,029,067	\$5,475,158	\$7,779,277	\$11,766,629	\$15,943,896
Working capital		5,394,382	5,476,443	7,593,272	10,485,039	16,228,401
Total assets		6,249,257	5,831,488	7,966,382	12,032,968	16,679,922
Warrants liability		1,645,240	—	—	—	—
Total liabilities		2,488,559	313,709	348,522	1,472,753	357,165
Stockholders’ equity		3,760,698	5,517,779	7,617,860	10,560,215	16,322,757

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following information together with our financial statements and notes thereto that are included in this prospectus. This discussion contains forward-looking statements that involve risk, uncertainties, and assumptions. Actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including, but not limited to, those presented under "Risk Factors" and elsewhere in this prospectus.

### Introduction

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to provide an understanding of our financial condition, changes in financial condition and results of operations. The discussion and analysis is organized as follows:

- *Overview.* This section provides a general description of our business, trends in our industry, as well as significant occurrences which we believe are important in understanding our financial condition and results of operations.
- *Recent Accounting Pronouncements.* This section provides an analysis of relevant recent accounting pronouncements issued by the Financial Accounting Standards Board (FASB) and /or other standard-setting bodies and the effect of those pronouncements.
- *Results of Operations.* This section provides an analysis of our results of operations for all three fiscal years presented in the accompanying statements of operations.
- *Liquidity and Capital Resources.* This section provides an analysis of our cash flows, capital resources, off-balance sheet arrangements and our outstanding commitments, if any.
- *Critical Accounting Policies and Estimates.* This section discusses those accounting policies that are both considered important to our financial condition and results of operations, and require significant judgment and estimates on the part of management in their application. All of our significant accounting policies, including the critical accounting policies, are also summarized in the notes to the financial statements included in this prospectus.
- *Caution Concerning Forward-Looking Statements.* This section discusses how certain forward-looking statements made throughout this MD&A and in other sections of this prospectus are based on management's present expectations about future events and are inherently susceptible to uncertainty and changes in circumstance.

### Overview

We are a development-stage specialty pharmaceutical company focused on the development and commercialization of prescription drugs targeting diseases and disorders of the central nervous system with a focus on the treatment of addiction and epilepsy. We have two products in clinical development; CPP-109 and CPP-115. We are currently evaluating our lead drug candidate, CPP-109 (our formulation of vigabatrin, a GABA aminotransferase inhibitor) for the treatment of cocaine addiction. We also hope to evaluate CPP-109 for the treatment of other addictions and other selected central nervous system indications. Further, we are in the early stages of developing CPP-115, another GABA aminotransferase inhibitor that, based on our pre-clinical studies to date, we believe is more potent than vigabatrin and may have reduced side effects (e.g., visual field defects, or VFDs) from those associated with vigabatrin. We are planning to develop CPP-115 for several indications, including drug addiction, epilepsy (initially infantile spasms) and other selected central nervous disease indications. CPP-109 and CPP-115 have both been granted "Fast Track" status by the FDA for the treatment of cocaine addiction, which indicates that the FDA has recognized, for this indication, that CPP-109 and CPP-115 are intended for the treatment of a serious or life-threatening condition and demonstrate the potential to address this unmet medical need. We believe that we control all current intellectual property for drugs that have a mechanism of action related to inhibition of GABA aminotransferase.

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The successful development of CPP-109, CPP-115 or any other product we may acquire, develop or license is highly uncertain. We cannot reasonably estimate or know the nature, timing, or estimated expenses of the efforts necessary to complete the development of, or the period in which material net cash inflows are expected to commence, or if any net cash inflows will actually commence, due to the numerous risks and uncertainties associated with developing such products, including the uncertainty of:

- the scope, rate of progress and expense of our pre-clinical studies and trials, and other product development activities;
- the results of our pre-clinical studies and clinical studies and trials, and the number of clinical trials (and the scope of such trials) that will be required for us to seek and obtain approval of NDA's for CPP-109 and CPP-115; and
- the expense of filing, and potentially prosecuting, defending and enforcing any patent claims and other intellectual property rights.

We are currently involved in the following product development activities: (i) we are jointly conducting with NIDA and the VA a U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction (and, based on current information, we expect to obtain top line results from this trial early in the first quarter of 2013); and (ii) we are conducting a Phase I(a) clinical study evaluating the safety of CPP-115 in healthy volunteers.

Based on an analysis of our current financial condition and forecasts of available cash, we believe that we have sufficient resources to: (i) complete the above-described Phase I(a) clinical trial of CPP-115 and Phase II(b) clinical trial of CPP-109 and (ii) support our operations through the first quarter of 2013. However, there can be no assurance that we will actually have sufficient funds for these purposes. We will also require additional funding to complete any other pre-clinical and clinical studies and trials that may be required for us to submit NDAs for and commercialize CPP-109 and CPP-115 and (without considering the proceeds of this offering) to support our operations beyond the first quarter of 2013. There can be no assurance that we will obtain additional funding or ever be able to commercialize either of our product candidates. See "*Liquidity and Capital Resources*" below.

### **Basis of presentation**

#### *Revenues – government grant*

We are a development stage company and have no revenues from product sales to date. We will not have revenues from product sales until such time as we receive approval of CPP-109 or CPP-115, successfully commercialize our products or enter into a licensing agreement which may include up-front licensing fees, of which there can be no assurance.

During 2010, we were notified that we had been certified to receive a cash grant aggregating \$488,958 under the Qualifying Therapeutic Discovery Projects Program (section 48D of the Internal Revenue Code), \$354,933 of which was received in 2010, and \$134,025 of which was received in 2011. The grant related to two qualifying therapeutic projects, CPP-109 for the treatment of stimulant dependence and CPP-115 for the treatment of epilepsy and stimulant dependence. We have recorded such as government grant revenue in the accompanying statements of operations.

#### *Research and development expenses*

Our research and development expenses consist of costs incurred for company-sponsored research and development activities. The major components of research and development costs include pre-clinical study costs, clinical manufacturing costs, clinical study and trial expenses, insurance coverage for clinical trials, consulting, scientific advisors and other third-party costs, salaries and employee benefits, stock-based

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compensation expense, supplies and materials and allocations of various overhead costs related to our product development efforts. To date, all of our research and development resources have been devoted to the development of CPP-109 and CPP-115, and we expect this to continue for the foreseeable future. Costs incurred in connection with research and development activities are expensed as incurred.

Our cost accruals for clinical studies and trials are based on estimates of the services received and efforts expended pursuant to contracts with numerous clinical study and trial sites and clinical research organizations. In the normal course of business we contract with third parties to perform various clinical study and trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows. Payments under the contracts depend on factors such as the achievement of certain events or milestones, the successful enrollment of patients, the allocation of responsibilities among the parties to the agreement, and the completion of portions of the clinical study or trial or similar conditions. The objective of our accrual policy is to match the recording of expenses in our financial statements to the actual services received and efforts expended. As such, expense accruals related to pre-clinical and clinical studies or trials are recognized based on our estimate of the degree of completion of the event or events specified in the specific study or trial contract. We monitor service provider activities to the extent possible; however, if we underestimate activity levels associated with various studies or trials at a given point in time, we could be required to record significant additional research and development expenses in future periods. Pre-clinical and clinical study and trial activities require significant up front expenditures. We anticipate paying significant portions of a study or trial's cost before such begins, and incurring additional expenditures as the study or trial progresses and reaches certain milestones.

### *Selling and marketing expenses*

We do not currently have any selling or marketing expenses, as we have not yet received approval for the commercialization of CPP-109 or CPP-115. We expect we will begin to incur such costs upon our filing of an NDA, so that we can have a sales force in place to commence our selling efforts immediately upon receiving approval of such NDA, of which there can be no assurance.

### *General and administrative expenses*

Our general and administrative expenses consist primarily of salaries and personnel expenses for accounting, corporate and administrative functions. Other costs include administrative facility costs, regulatory fees, and professional fees for legal, information technology, accounting and consulting services.

### *Stock-based compensation*

We recognize expense for the fair value of all stock-based awards to employees, directors, scientific advisors and consultants in accordance with U.S. generally accepted accounting principles. For stock options we use the Black-Scholes option valuation model in calculating the fair value of the awards.

### *Warrants Liability*

We issued warrants to purchase shares of our common stock as part of the equity financing completed in October 2011. In accordance with U.S. generally accepted accounting principles, we have recorded the fair value of the warrants as a liability in the accompanying balance sheet at December 31, 2011 using a Black-Scholes option-pricing model. We will remeasure the fair value of the warrants liability at each reporting date until the warrants are exercised or have expired. Changes in the fair value of the warrants liability are reported in the statements of operations as income or expense. The fair value of the warrants liability is subject to significant fluctuation based on changes in the inputs to the Black-Scholes option-pricing model, including our common stock price, expected volatility, expected life, the risk-free interest rate and dividend yield. The market price for our common stock has been and may continue to be volatile. Consequently, future fluctuations in the price of our common stock may cause significant increases or decreases in the fair value of the warrants.

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### *Income Taxes*

We have incurred operating losses since inception. As of December 31, 2011 and 2010, we had net operating loss carryforwards of approximately \$19,980,000 and \$17,439,000, respectively. Our net deferred tax asset has a 100% valuation allowance as of December 31, 2011 and 2010, as we believe it is more likely than not that the deferred tax asset will not be realized. The net operating loss carry-forwards will expire at various dates beginning 2023 through 2031. If an ownership change, as defined under Internal Revenue Code 382, occurs, the use of these carry-forwards may be subject to limitations.

As required by ASC 740, *Income Taxes*, we recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

### **Recent Accounting Pronouncements**

In June 2011, the FASB issued changes to the presentation of comprehensive income. These changes give an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The option to present components of other comprehensive income as part of the statement of changes in stockholders' equity was eliminated. The items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income were not changed. These changes become effective for fiscal years beginning after December 15, 2011, except for the reclassification adjustments out of accumulated other comprehensive income that become effective for fiscal years ending after December 15, 2012. The adoption of these changes will not have a material effect on our financial statements as we do not currently report any components of comprehensive income (loss) other than our net loss.

### **Results of Operations**

#### ***Years Ended December 31, 2011 and 2010***

##### *Revenues*

We had no revenues for the year ended December 31, 2011. We had a \$488,958 government grant awarded to us in 2010 which was our only revenue in 2010. The government grant was a Section 48D tax grant that we received in the fourth quarter of 2010 and the first quarter of 2011.

##### *Research and Development Expenses*

Year	Amount	Change from Prior Year	Percentage of Total Operating Costs and Expenses
2011	\$3,383,965	46.7%	55.6%
2010	\$2,306,781	(54.7%)	51.1%

Our expenses, excluding stock-based compensation, for research and development for the year ended December 31, 2011 increased compared to amounts expended in the same period in 2010. During 2011, we continued our Phase II(b) trial studying CPP-109 for the treatment of cocaine addiction that was initiated in the fourth quarter of 2010, performed pre-clinical testing for CPP-115, and began our Phase I(a) trial for CPP-115. We expect that research and development expenses will continue to be substantial in 2012 as we continue the research and development activities described under the overview section of this MD&A.



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In our research and development activities for 2011 and 2010, we recorded stock-based compensation relating to the value of stock options granted to certain employees and non-employees. The amount of stock-based compensation recorded in 2011 and 2010 relating to our research and development activities was \$111,283 and \$179,737, respectively. The weighted-average grant-date fair value of the stock options granted in 2011 and 2010 was \$0.79 and \$0.75, respectively.

### *Selling and Marketing Expenses*

We had no selling and marketing expenses during 2011 and 2010. We anticipate that we will begin to incur sales and marketing expenses when we file NDA's for CPP-109 or CPP-115, in order to develop a sales organization to market products we may develop upon the receipt of required approvals.

### *General and Administrative Expenses*

Year	Amount	Change from Prior Year	Percentage of Total Operating Costs and Expenses
2011	\$2,698,174	22.3%	44.4%
2010	\$2,206,358	1.3%	48.9%

Included in general and administrative expenses in the years 2011 and 2010 was stock-based compensation expense of \$305,452 and \$270,352, respectively. General and administrative expenses include, among other expenses, office expenses, legal, accounting and consulting fees and travel expenses for our administrative employees, consultants and members of our Board. The increase in general and administrative expenses for the year ended December 31, 2011 when compared to the same period in 2010 is primarily due to increases in payroll expense, as we accrued severance related to a separation during 2011, director compensation, travel expenses and stock-based compensation expense offset by decreases in professional fees. We expect general and administrative cost to remain relatively stable in future periods as we continue the monitoring and oversight of our clinical trials evaluating CPP-109 and CPP-115.

### *Stock-Based Compensation*

We issued stock options to several of our employees, directors, and consultants in 2011 and 2010. Total stock-based compensation expense for the years ended December 31, 2011 and 2010 was \$416,735 and \$450,089, respectively.

### *Change in fair value of warrants liability*

In connection with the October 2011 equity offering, we issued warrants to purchase an aggregate of 1,523,370 shares of common stock. The fair value of the warrants is recorded in the liability section of the balance sheet and was estimated at \$1.6 million and \$1.3 million at December 31, 2011 and at the closing date of the October 2011 offering, respectively. The fair value of the warrants liability is determined at the end of each reporting period with the resulting gains or losses recorded as the change in fair value of warrant liability in the statements of operations. For the year ended December 31, 2011, we recognized a loss of \$319,908 due to the change in the fair value of the warrants liability. The loss during 2011 was principally a result of the increase of our stock price between the closing date of the October 2011 equity offering and December 31, 2011. Future changes in the fair value of the warrants liability will be due primarily to fluctuations in the value of our common stock.

### *Interest Income*

We reported interest income in all periods relating to our investment of funds received from our registered direct offerings. The decrease in interest income for the year ended December 31, 2011 as compared to the year ended December 31, 2010 was due to lower interest rates and lower average investment balances as the proceeds from our registered direct offerings were used to fund our product-development activities and our operations. Substantially all such funds were invested in short-term interest bearing obligations.

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### *Income Taxes*

We have incurred net operating losses since inception. Consequently, we have applied a 100% valuation allowance against our deferred tax asset as we believe that it is more likely than not that the deferred tax asset will not be realized.

### *Net Loss*

Net loss was \$6,391,062 in the year ended December 31, 2011 (\$0.29 per basic and diluted share), as compared to \$4,006,323 in the year ended December 31, 2010 (\$0.22 per basic and diluted share).

### **Years Ended December 31, 2010 and 2009**

#### *Revenues*

We had \$488,958 of revenues for the year ended December 31, 2010, all of which were derived from the Section 48D tax grants awarded to us in 2010 that we received in the fourth quarter of 2010 and the first quarter of 2011. We had no revenues for the year ended December 31, 2009.

#### *Research and Development Expenses*

Year	Amount	Change from Prior Year	Percentage of Total Operating Costs and Expenses
2010	\$2,306,781	(54.7%)	51.1%
2009	\$5,097,440	(41.5%)	70.0%

Our expenses, excluding stock-based compensation, for research and development for the year ended December 31, 2010 decreased significantly compared to amounts expended in the same period in 2009. During 2009, we completed our U.S. Phase II clinical trial evaluating CPP-109 for use in the treatment of cocaine addiction and our proof-of-concept study evaluating CPP-109 for use in the treatment of methamphetamine addiction.

In our research and development activities for 2010 and 2009, we recorded stock-based compensation relating to the value of stock options and restricted shares granted to certain employees and non-employees. The amount of stock-based compensation recorded in 2010 and 2009 relating to our research and development activities was \$179,737 and \$272,184, respectively. The weighted-average grant-date fair value of the stock options granted in 2010 and 2009 was \$0.75 and \$0.55, respectively.

#### *Selling and Marketing Expenses*

We had no selling and marketing expenses during 2010 and 2009. We anticipate that we will begin to incur sales and marketing expenses when we file NDA's for CPP-109 or CPP-115, in order to develop a sales organization to market products we may develop upon the receipt of required approvals.

#### *General and Administrative Expenses*

Year	Amount	Change from Prior Year	Percentage of Total Operating Costs and Expenses
2010	\$2,206,358	1.3%	48.9%
2009	\$2,177,954	(0.3%)	30.0%

Included in general and administrative expenses in the years 2010 and 2009 was stock-based compensation expense of \$270,352 and \$329,254, respectively. General and administrative expenses include, among other expenses, office expenses, legal, accounting and consulting fees and travel expenses for our administrative

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employees, consultants and members of our Board. The increase in general and administrative expenses for the year ended December 31, 2010 when compared to the same period in 2009 is primarily due to increases in consulting and travel expenses, offset by decreases in stock-based compensation expense and professional fees.

### *Stock-Based Compensation*

We issued stock options to several of our employees, directors, and consultants in 2010 and 2009. Total stock-based compensation expense for the years ended December 31, 2010 and 2009 was \$450,089 and \$601,438, respectively.

### *Interest Income*

We reported interest income in all periods relating to our investment of funds received from our registered direct offerings. The decrease in interest income for the year ended December 31, 2010 as compared to the year ended December 31, 2009 was due to lower interest rates and lower average investment balances as the proceeds from our registered direct offerings were used to fund our product-development activities and our operations. Substantially all such funds were invested in short-term interest bearing obligations.

### *Income taxes*

We have incurred net operating losses since inception. Consequently, we have applied a 100% valuation allowance against our deferred tax asset as we believe that it is more likely than not that the deferred tax asset will not be realized.

### *Net Loss*

Net loss was \$4,006,323 in the year ended December 31, 2010 (\$0.22 per basic and diluted share), as compared to \$7,241,928 in the year ended December 31, 2009 (\$0.48 per basic and diluted share).

## **Liquidity and Capital Resources**

Our historical capital resource requirements have been the funding of working capital and pre-clinical and clinical testing of our drug candidates, CPP-109 and CPP-115. We have historically funded all of our operating requirements from equity issuances.

Since our inception, we have financed our operations primarily through the net proceeds of our private placements, an initial public offering (IPO) and from registered direct offerings under our shelf registration statements. At December 31, 2011, we had cash and cash equivalents of \$6,029,067 and working capital of \$5,394,382, as compared to cash and cash equivalents of \$5,475,158 and working capital of \$5,476,443 at December 31, 2010. At December 31, 2011 substantially all of our cash and cash equivalents were deposited with one financial institution. Throughout 2011, we periodically had cash balances at certain financial institutions in excess of federally insured limits.

We have to date incurred operating losses, and we expect these losses to increase substantially in the future as we expand our product development programs and prepare for the commercialization of CPP-109 and CPP-115. We anticipate using current cash on hand to finance these activities. It will likely take several years to obtain the necessary regulatory approvals to commercialize CPP-109 or CPP-115 in the United States.

We currently believe that we have the cash resources to complete our currently ongoing clinical trials and studies and to continue our operations through the first quarter of 2013 (without considering the proceeds of this offering). These expectations are based on current information available to us. If the cost of these studies is greater than we expect, or if such studies take longer to complete, our assumptions may not prove to be accurate.

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At the present time, we will require additional funding to complete studies or trials other than those described above, including any Phase III clinical trial that we may be required to complete before we are in a position to file an NDA for CPP-109 for cocaine addiction and any additional human studies of CPP-115 evaluating the safety and efficacy of its use in treating addiction and epilepsy. Since these additional studies or trials have not yet been developed, we cannot estimate what our funding requirements will be with respect to such studies or trials. We will also require additional working capital to support our operations beyond the first quarter of 2013. There can be no assurance as to the amount of any such funding that will be required for these purposes or whether any such funding will be available to us when it is required.

In that regard, our future funding requirements will depend on many factors, including:

- the scope, rate of progress and cost of our clinical trials and other product development activities;
- future clinical trial results;
- the performance of our third-party suppliers or contract manufacturers;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the cost and timing of regulatory approvals;
- the cost and delays in product development as a result of any changes in regulatory oversight applicable to our products;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the effect of competition and market developments;
- the cost of filing and potentially prosecuting, defending and enforcing any patent claims and other intellectual property rights; and
- the extent to which we acquire or invest in other products.

We expect to raise any required additional funds through public or private equity offerings, corporate collaborations or other means. We also intend to seek governmental grants for a portion of the required funding for our clinical trials and pre-clinical trials. We may also seek to raise additional capital to fund additional product development efforts, even if we have sufficient funds for our planned operations. Any sale by us of additional equity or convertible debt securities could result in dilution to our stockholders. There can be no assurance that any such required additional funding will be available to us at all or available on terms acceptable to us. Further, to the extent that we raise additional funds through collaborative arrangements, it may be necessary to relinquish some rights to our technologies or grant sublicenses on terms that are not favorable to us. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more research and development programs, which could have an adverse effect on our business.

On December 3, 2010, we filed a shelf registration statement with the SEC to sell up to \$30 million of common stock and warrants to purchase common stock. This shelf registration statement was declared effective by the SEC on December 15, 2010. The number of shares we can sell and the amount of proceeds we can raise from the sale of such shares are limited to 20% of our outstanding common stock (if priced at a discount to market and subject to certain exceptions) and 33% of our public float during a rolling 12-month period, respectively, pursuant to applicable NASDAQ marketplace and SEC rules. There can be no assurance we will be able to successfully sell any more shares under our 2010 shelf registration statement.

To date we have completed two underwritten public offerings under our 2010 shelf registration statement:

- On March 11, 2011, we raised net proceeds of approximately \$2.2 million from the sale of 2,259,943 shares of our common stock; and
- On October 28, 2011, we raised net proceeds of approximately \$3.2 million from the sale of 3,046,740 shares of our common stock and five-year warrants to purchase 1,523,370 shares of our common stock at an exercise price of \$1.30 per share.

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On June 2, 2008, we filed a shelf registration statement with the SEC to sell up to \$30 million of common stock. This shelf registration was declared effective by the SEC on June 26, 2008. We completed three registered direct public offerings to institutional investors under our 2008 shelf registration statement:

- On September 12, 2008, we raised net proceeds of approximately \$4.1 million from the sale of 1,488,332 shares of our common stock;
- On October 6, 2009, we raised net proceeds of approximately \$3.7 million from the sale of 3,973,000 shares of our common stock; and
- On August 8, 2010, we raised net proceeds of approximately \$1.5 million from the sale of 1,351,352 shares of our common stock.

Our 2008 shelf registration statement expired on June 26, 2011 and we can no longer sell any shares under this shelf registration statement.

### *Cash Flows*

Net cash used in operations was \$4,985,049 and \$3,757,405, respectively, for the years ended December 31, 2011, and 2010. During the year ended December 31, 2011, net cash used in operating activities was primarily attributable to our net loss of \$6,391,062 and an increase of \$31,272 in prepaid expenses and deposits, partially offset by a decrease in government grant receivables of \$134,025 and increases of \$158,001 in accounts payable and of \$365,781 in accrued expenses and other liabilities. The loss was further offset by \$779,478 of non-cash expenses. Non-cash expenses include depreciation, stock-based compensation expense and the change in fair value of the warrants liability.

Net cash used in investing activities was \$3,620 and \$2,867, respectively, for 2011 and 2010. Such funds were used primarily for purchases of computer equipment.

Net cash provided by financing activities was \$5,542,578 and \$1,456,153, respectively, for 2011 and 2010. During 2011 and 2010, net cash from financing activities consisted of the net proceeds from the sale of shares of common stock in registered direct public offerings under our shelf registration statements. Such funds have been used to fund our research and development costs and our general and administrative costs.

### *Contractual Obligations (1)*

As of December 31, 2011, we had contractual obligations as follows:

	Total	Payments Due by Period			After 5 years
		Less than 1 year	1-3 years	4-5 years	
Operating lease obligations	\$398,069	\$ 53,666	\$ 134,282	\$ 142,294	\$ 67,827
License obligations	105,000	105,000	—	—	—
Total	\$503,069	\$ 158,666	\$ 134,282	\$ 142,294	\$ 67,827

- (1) We have not included in the table above milestone or royalty payment obligations where we are not able to determine when or if the related milestones will be achieved, or when or if the events triggering payment of the obligations will occur.

We have entered into the following contractual arrangements:

- *Payments to Brookhaven under our license agreement.* We have agreed to pay Brookhaven a fee of \$100,000 in the year of NDA approval for CPP-109, \$250,000 in each of the second and third years following approval, and \$500,000 per year thereafter until the license agreement expires. We are also

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obligated to reimburse Brookhaven upon the filing of an NDA for CPP-109 and upon obtaining FDA regulatory approval to sell any licensed products for certain of their patent-related expenses. We believe that such potential obligation is approximately \$166,000 at December 31, 2011. See “*Dispute with Brookhaven*” below.

- *Payments to Northwestern under our license agreement.* We have agreed to pay Northwestern an upfront fee of \$35,000, expense reimbursements of approximately \$33,000, and certain milestone payments in future years relating to clinical development activities with respect to CPP-115 or payable upon passage of time, and royalties on any products resulting from the license agreement. The first milestone payment of \$50,000 was made during December 2011 after the filing of an IND for CPP-115. At December 31, 2011, we had paid \$127,812 in connection with this agreement, and had accrued license fees of \$102,500 in the accompanying balance sheet.
- *Payments under our agreement with NIDA.* We have agreed to supply the study drug (and matching placebo) as well as fund certain expenses for the U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction that we are jointly conducting with NIDA and the VA. We currently estimate that we will pay approximately \$1.4 million in connection with this agreement. As of December 31, 2011 we had paid approximately \$1.0 million of this amount and had accounts payable of approximately \$55,000 and accrued liabilities of approximately \$75,000 in the accompanying balance sheet in connection with these agreements.
- *Payments for drug development, pre-clinical and clinical studies and trials.* We estimate that we will pay various consultants, drug manufacturers and other vendors approximately \$1.0 million in connection with our drug development work, including pre-clinical and clinical studies and trials, consulting and data analysis. At December 31, 2011, we had paid approximately \$502,000 of this amount and had accounts payable of approximately \$57,000 and accrued liabilities of approximately \$20,000 in the accompanying balance sheet in connection with these agreements.
- *Employment agreement.* We have entered an employment agreement with our Chief Executive Officer that requires us to make base salary payments of approximately \$387,000 per annum in 2012.
- *Leases for office space.* We have entered into lease agreements for our office space that require payments of approximately \$6,000 per month.

### *Dispute with Brookhaven*

Brookhaven has formally advised us that they believe that the amount due them for patent related expenses as of December 31, 2011 was approximately \$1.3 million. We believe that we are only liable to Brookhaven for approximately \$166,000, and we have advised Brookhaven that we dispute their determination of patent-related expenses due under the license agreement. There can be no assurance as to the outcome of this matter. In any event, no patent-related expenses are due to Brookhaven under the license agreement until the submission by the Company of an NDA for CPP-109.

### *Off-Balance Sheet Arrangements*

We currently have no debt. Capital lease obligations as of December 31, 2011 and 2010 were not material. We have operating leases for our office facilities. We do not have any off-balance sheet arrangements as such term is defined in rules promulgated by the SEC.

### **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make judgments, estimates, and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the

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date of the financial statements, as well as the reported revenue and expenses during the reporting periods. We continually evaluate our judgments, estimates and assumptions. We base our estimates on the terms of underlying agreements, our expected course of development, historical experience and other factors we believe are reasonable based on the circumstances, the results of which form our management's basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The list below is not intended to be a comprehensive list of all of our accounting policies. In many cases, the accounting treatment of a particular transaction is specifically dictated by generally accepted accounting principles, or GAAP. There are also areas in which our management's judgment in selecting any available alternative would not produce a materially different result. Our financial statements and the notes thereto included elsewhere in this prospectus contain accounting policies and other disclosures as required by GAAP.

### *Pre-clinical study and clinical trial expenses*

Research and development expenditures are charged to operations as incurred. Our expenses related to pre-clinical and clinical trials are based on actual and estimated costs of the services received and efforts expended pursuant to contracts with multiple research institutions and any contract research organization (CRO) that conducts and manages our clinical trials. The financial terms of these agreements are subject to negotiation and will vary from contract to contract and may result in uneven payment flows. Generally, these agreements will set forth the scope of the work to be performed at a fixed fee or unit price. Payments under these contracts will depend on factors such as the successful enrollment of patients or the completion of clinical trial milestones. Expenses related to clinical trials generally are accrued based on contracted amounts applied to the level of patient enrollment and activity according to the protocol. If timelines or contracts are modified based upon changes in the clinical trial protocol or scope of work to be performed, we would be required to modify estimates accordingly on a prospective basis.

### *Warrants Liability*

We have issued warrants to purchase our common stock that may require us to purchase unexercised warrants for a cash amount equal to their fair value following the announcement of specified events defined as "Fundamental Transactions" (Fundamental Transactions) involving the company, which is deemed to occur if we are acquired in an all cash transaction or by a company that is not listed on a national securities exchange, or when the common stock is no longer listed on a national securities exchange. The cash settlement provisions require use of the Black-Scholes model in calculating the cash payment value in the event of a Fundamental Transaction. As a consequence of these provisions, the warrants are classified as a liability on our balance sheets. The cash settlement value at the time of any future Fundamental Transaction will depend upon the value of the following inputs at that time: the price per share of our common stock, the volatility of our common stock, the expected term of the warrant, the risk-free interest rate based on U.S. Treasury security yields, and our dividend yield. The fair value of the warrants is determined using a Black-Scholes model. The valuation of warrants is subjective and is affected by changes in inputs to the valuation model including the price per share of our common stock, the historical volatility of our stock price, risk-free rates based on U.S. Treasury security yields, the expected term of the warrants and our dividend yield. Changes in these assumptions can materially affect the fair value estimate. We could ultimately incur amounts to settle the warrant at a cash settlement value that is significantly different than the carrying value of the liability on our financial statements. We will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire, or are amended in a way that would no longer require these warrants to be classified as a liability. Changes in the fair value of the common stock warrants liability are recognized as a component of other income (expense) in the statement of operations.

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### *Stock-based compensation*

We recognize stock-based compensation for the fair value of all share-based payments, including grants of stock options and restricted stock units. For stock options, we use the Black-Scholes option valuation model to determine the fair value of stock options on the date of grant. This model derives the fair value of stock options based on certain assumptions related to expected stock price volatility, expected option life, risk-free interest rate and dividend yield. For 2011, expected volatility is based on reviews of historical volatility of our common stock. For 2010 and prior, our expected volatility was based on the historical volatility of other publicly traded development stage companies in the same industry, due to our short history as a public company. The estimated expected option life is based upon estimated employee exercise patterns and considers whether and the extent to which the options are in-the-money. During 2011, we estimated the expected option life for options granted to employees and directors based upon the simplified method. Under this method, the expected option life is presumed to be the mid-point between the vesting date and the end of the contractual term. We will continue to use the simplified method until we have sufficient historical exercise data to estimate the expected life of the options. The risk-free interest rate assumption is based upon the U.S. Treasury yield curve appropriate for the estimated expected life of our stock options awards. For the years ended December 31, 2011, 2010 and 2009, the assumptions used were an estimated annual volatility of 130%, 100% and 90%, average expected holding periods of three to five years, four to five years and four to five years, and risk-free interest rates of 0.29% to 1.55%, 0.81% to 2.44% and 1.26% to 2.60%, respectively.

### **Caution Concerning Forward-Looking Statements**

This prospectus contains “forward-looking statements”, as that term is defined in the Private Securities Litigation Reform Act of 1995. These include statements regarding our expectations, beliefs, plans or objectives for future operations and anticipated results of operations. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, “believes”, “anticipates”, “proposes”, “plans”, “expects”, “intends”, “may”, and other similar expressions are intended to identify forward-looking statements. Such statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. The forward-looking statements made in this prospectus are based on current expectations that involve numerous risks and uncertainties.

The successful development of CPP-109, CPP-115 or any other product we may acquire, develop or license is highly uncertain. We cannot reasonably estimate or know the nature, timing, or estimated expenses of the efforts necessary to complete the development of, or the period in which material net cash inflows are expected to commence due to the numerous risks and uncertainties associated with developing such products, including the uncertainty of:

- the scope, rate of progress and expense of our pre-clinical studies, proof-of-concept studies and clinical studies and trials and other product development activities;
- our ability to complete our studies on a timely basis and within the budgets we establish for such trials;
- whether our studies and trials will be successful;
- the results of our pre-clinical studies and clinical studies and trials, and the number and scope of such studies and trials that will be required for us to seek and obtain approval of NDAs for CPP-109 and CPP-115;
- the ability of our third-party suppliers or contract manufacturers to maintain compliance with cGMP;
- the expense of filing, and potentially prosecuting, defending and enforcing any patent claims and other individual property rights;
- whether others develop and commercialize products competitive to our products;
- changes in the laws and regulations affecting our business;



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- our ability to attract and retain skilled employees; and
- changes in general economic conditions and interest rates.

Our current plans and objectives are based on assumptions relating to the development of our current product candidates. Although we believe that our assumptions are reasonable, any of our assumptions could prove inaccurate. In light of the significant uncertainties inherent in the forward-looking statements made herein, which reflect our views only as of the date of this prospectus, you should not place undue reliance upon such statements. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

## BUSINESS

Catalyst Pharmaceutical Partners, Inc. is a development-stage specialty pharmaceutical company focused on the development and commercialization of prescription drugs targeting diseases and disorders of the central nervous system with a focus on the treatment of addiction and epilepsy. We have two products in clinical development; CPP-109 and CPP-115. We are currently evaluating our lead drug candidate, CPP-109 (our formulation of vigabatrin, a GABA aminotransferase inhibitor) for the treatment of cocaine addiction. We also hope to evaluate CPP-109 for the treatment of other addictions and other selected central nervous system indications. Further, we are in the early stages of developing CPP-115, another GABA aminotransferase inhibitor that, based on our pre-clinical studies to date, we believe is more potent than vigabatrin and may have reduced side effects (e.g., visual field defects, or VFDs) from those associated with vigabatrin. We are planning to develop CPP-115 for several indications, including drug addiction, epilepsy (initially infantile spasms) and other selected central nervous disease indications. CPP-109 and CPP-115 have both been granted “Fast Track” status by the FDA for the treatment of cocaine addiction, which indicates that the FDA has recognized that CPP-109 and CPP-115 are intended for the treatment of a serious or life-threatening condition and demonstrate the potential to address unmet medical needs. We believe that we control all current intellectual property for drugs that have a mechanism of action related to inhibition of GABA aminotransferase.

The successful development of CPP-109, CPP-115, or any other product we may acquire, develop or license in the future, is highly uncertain. We cannot reasonably estimate or know the nature, timing, or estimated expenses of the efforts necessary to complete the development of, or the period in which material net cash inflows are expected to commence, or if any net cash inflows will actually commence, due to the numerous risks and uncertainties associated with developing such products, including the uncertainty of:

- the results of our pre-clinical studies and clinical studies and trials, and the number of clinical trials (and the scope of such trials) that will be required for us to seek and obtain approval of New Drug Applications (NDAs) for CPP-109 and CPP-115; and
- the expense of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

We are currently involved in the following product development activities: (i) we are jointly conducting with the National Institute on Drug Abuse (NIDA) and the Veterans Administration (VA) a U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction (and, based on current information, we expect to obtain top line results from this trial early in the first quarter of 2013); and (ii) we are conducting a Phase I(a) clinical study evaluating the safety of CPP-115 in healthy volunteers.

Based on an analysis of our current financial condition and forecasts of available cash and without considering the proceeds of this offering, we believe that we have sufficient resources to: (i) complete the above-described Phase I(a) clinical study of CPP-115 and the Phase II(b) clinical trial of CPP-109 and (ii) support our operations through the first quarter of 2013. However, there can be no assurance that we will actually have sufficient funds for these purposes. We will require additional funding to complete any other pre-clinical studies and trials that may be required to submit NDAs for and commercialize CPP-109 and CPP-115 and (without considering the proceeds of this offering) to support our operations beyond the first quarter of 2013. There can be no assurance that we will obtain additional funding or ever be able to commercialize either of our product candidates. See “*Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources*” above.

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### Our Drug Candidates

The following table summarizes key information regarding our drug candidates:

<u>Drug Candidate</u>	<u>Indications</u>	<u>Current Status</u>
CPP-109	Addiction	Conducting a Phase II(b) clinical trial in conjunction with NIDA and the VA for cocaine addiction.
CPP-115	Addiction, Epilepsy	Conducting a Phase I(a) human safety study

### Mechanism of Action

We believe that our drug candidate CPP-109 will be an effective treatment for addiction and that our drug candidate CPP-115 will be an effective treatment for both addiction and epilepsy, because they both increase endogenous GABA levels in the brain through the inhibition of GABA-aminotransferase (GABA-AT). GABA-AT is responsible for the eventual breakdown of GABA and helps to balance its inhibitory effects.

GABA, the most abundant inhibitory neurotransmitter in the brain, inhibits over-excitation of neurons. When GABA binds to a GABA receptor, it raises the action potential threshold of that neuron and inhibits the post-synaptic neuron from “firing” and triggering the release of neurotransmitters that send a signal to subsequent neurons. This is the mechanism explaining the efficacy of CPP-109 vigabatrin as an adjunctive treatment for refractory complex partial seizures in adults. In the case of addiction, increased GABA reduces the perception of pleasure and reward by dampening levels of dopamine release brought about by all drugs of abuse, but most notably by stimulants like cocaine and methamphetamine. Addictive drugs have been shown to block or overwhelm mechanisms involved in the removal of dopamine from synaptic clefts in the mesolimbic pathways of the brain, resulting in highly elevated levels of dopamine available to stimulate receptors and a dramatically heightened sense of pleasure or reward. GABA also helps induce relaxation and sleep, and contributes to functions such as motor control and vision.

CPP-109 and CPP-115 are GABA analogs that are readily absorbed and promptly available to the central nervous system, producing effects that last for many hours after a single dose. Due to the fact that these drugs are not “receptor active”, their administration does not appear to affect the baseline levels of dopamine, nor those variations in dopamine levels caused by normal stimuli. We believe that the similarities between CPP-115 and the well characterized drug, CPP-109, will simplify the development of CPP-115 because potential development risks can be better predicted and managed.

### History and Side Effect Profile of Vigabatrin

Vigabatrin has been marketed for decades in over 30 countries by Sanofi-Aventis and its predecessors under the brand names Sabril®, Sabrillex® and Sabrilan® (hereinafter referred to as “Sabril®”) as an adjunct (add-on) treatment for adult epilepsy and as a primary treatment for the management of infantile spasms. The composition of matter patents for Sabril® in the U.S. expired more than ten years ago. On August 21, 2009, the FDA approved two NDAs for Sabril® for the treatment of infantile spasms and as an adjunctive therapy for adult patients with refractory complex partial seizures who have failed treatments with several other anti-epileptic drugs. The NDAs are for different formulations of Sabril® and both NDAs are held by Lundbeck. Due to the risks of visual field damage associated with vigabatrin, Sabril® was approved under an FDA-mandated Risk Evaluation and Mitigation Strategy (REMS) program and is only available through a special restricted distribution program approved by the FDA.

In chronic use for the treatment of epilepsy, vigabatrin has been generally well tolerated with lower than average neurological side effects compared to other approved epilepsy therapies. The most common side effects reported have been drowsiness and fatigue. However, one clearly established adverse side effect is the

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development, of peripheral visual field defects, or VFDs. VFDs occur in approximately 33% of patients when cumulative dosage levels of vigabatrin approach approximately 1,500 grams. These VFDs are manifest as a constriction of the peripheral field of vision (i.e. “tunnel vision”).

Based on available information as described above and our clinical trial experience to date, we believe that VFDs occur at cumulative doses far higher than the total dosage amount we anticipate will be used for addiction treatment. To date, we believe that no subjects treated in the trial conducted in Mexico, or in our previously completed U.S. Phase II(a) cocaine trial or our methamphetamine human proof-of-concept study, have shown any evidence of VFDs.

CPP-115 is structurally similar to vigabatrin. Due to these similarities, we believe that these two drugs will share a number of biochemical features related to absorption, metabolism, and elimination, and our pre-clinical studies of CPP-115 to date support our expectations. However, based upon our pre-clinical studies of CPP-115 to date, we expect that there will be a significant reduction, and possibly elimination, of VFDs from the use of CPP-115 compared to vigabatrin. However, there can be no assurance that this will ultimately prove to be the case.

### **CPP-109 (Vigabatrin) To Treat Addiction**

In 2002, we obtained from Brookhaven an exclusive license for several patent and patent applications to develop vigabatrin as a treatment for cocaine and other addictions. We have been granted Fast Track status for CPP-109 from the FDA for cocaine addiction. Under the Federal Food, Drug, and Cosmetic Act, or FDCA, the FDA is directed to facilitate the development and expedite review of drugs and biologics intended to treat serious or life-threatening conditions that demonstrate the potential to address unmet medical needs for such conditions. Fast Track designation emphasizes communication between us and the FDA and affords us benefits that may help to expedite the approval process. For example, Fast Track designation affords us the potential to submit an NDA for CPP-109 on a rolling, or modular, basis, allowing the FDA to review sections of the NDA in advance of receiving our full submission. The designation also means that we may have increased communications with the FDA regarding the design of our clinical studies, which we hope will expedite the development and review of our application for the approval of CPP-109 for cocaine addiction and provide greater certainty overall in the regulatory pathway. However, there can be no assurance that our receipt of Fast Track status will assist us in the regulatory process for CPP-109.

### **CPP-115 for the Treatment of Addiction and Epilepsy**

In August 2009, we licensed the exclusive worldwide rights to commercialize certain composition of matter patents relating to a new class of novel GABA aminotransferase inhibitors and derivatives of vigabatrin. We intend to develop these compounds for a broad range of central nervous system illnesses that could benefit from the inhibition of GABA aminotransferase. CPP-115 is our lead compound from this group of composition of matter patents.

The development efforts of CPP-115 were led by Dr. Richard B. Silverman, the John Evans Professor of Chemistry at Northwestern University (Northwestern). Dr. Silverman, who holds 44 patents, is the inventor of pregabalin, also known as Lyrica®, which is marketed by Pfizer. His goal in inventing the compound that became CPP-115 was to mimic the mechanism of action of vigabatrin, while making it both more potent and specific.

CPP-115 works by the same mechanism of action as CPP-109; the inhibition of GABA aminotransferase, which leads to increased brain GABA levels that reduce epileptogenesis or dampen the addiction reinforcing dopamine surge. We believe that CPP-115 and vigabatrin are the only two GABA aminotransferase inhibitors, either under development or marketed at this time, and that our patent estates for CPP-109 and CPP-115 are the only existing, currently in force, intellectual property rights for drugs with this primary mode of action.

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Based on testing to date, CPP-115 has been shown to be at least 200 times more potent than CPP-109, our version of vigabatrin, in both in-vitro and animal model studies. The increased potency could enable the development of dosage forms potentially administrable by other routes of administration compared with the marketed oral, immediate release formulations of vigabatrin, Sabril®. Further, based on pre-clinical testing completed to date, CPP-115 has a superior specificity to GABA aminotransferase and may have reduced side effects (e.g., VFDs) compared with Sabril®.

CPP-115 has been granted Fast Track status by the FDA for the treatment of cocaine addiction and orphan drug designation for the treatment of infantile spasms. CPP-115 has also been granted orphan medicinal product designation in the EU for the treatment of West Syndrome (a form of infantile spasms).

### **Our Strategy**

Our strategy is to become a leading specialty pharmaceutical company focused on the in-licensing and development of proprietary drug candidates for the treatment of selected diseases of the central nervous system. Our near-term strategy is to focus on the regulatory approval of CPP-109 for the treatment of cocaine addiction and to initially demonstrate the safety and efficacy of CPP-115 for the treatment of addiction and epilepsy. Our long-term strategy is to gain approvals for additional indications for CPP-109, including methamphetamine addiction, and to initially gain approval for CPP-115 to treat addiction and epilepsy. Specifically, we intend to:

- Focus on CPP-109 for cocaine addiction. A treatment for cocaine addiction addresses a significant unmet medical need, and we believe that our receipt of Fast Track status from the FDA for CPP-109 for cocaine addiction may facilitate the regulatory approval process. Enrollment for our U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction we are conducting with NIDA and the VA began in the first quarter of 2011. This trial is currently ongoing and we expect to receive top-line results from this trial early in the first quarter of 2013. Assuming success, we expect that this trial will serve as one of the adequate and well-controlled trials required to support approval of an NDA.
- Develop additional indications for CPP-109. The mechanism of action of CPP-109 and pre-clinical data indicate it may be suitable as a potential treatment for addictions to methamphetamine, nicotine, prescription pain medications, alcohol and marijuana, as well as for obsessive-compulsive disorders including binge eating patterns and compulsive gambling. We hope to develop CPP-109 for one or more of these additional indications, subject to the availability of funding.
- Continue clinical and pre-clinical work on CPP-115. During the fourth quarter of 2011, we completed our IND-enabling studies, filed an IND, and began a Phase I(a) human clinical trial for CPP-115 to evaluate its safety. We expect to receive final results from this Phase I(a) human clinical trial during the second quarter of 2012. Subject to the availability of funding, we hope to begin further human clinical trials for CPP-115 during the early part of 2013.
- Identify and initiate strategic partnering discussions for specific indications in the U.S. and Europe. We believe that there may be several potential pharmaceutical partners interested in jointly developing and marketing CPP-109 and CPP-115 in the U.S. and/or Europe. We have held preliminary discussions with several parties regarding potential transactions, but no agreements have been entered into to date.

### **Our Potential Markets**

#### *Drug Addiction*

Historically, individuals suffering from addiction have been treated primarily through behavioral modification and therapy. These treatments have shown a high rate of relapse. We believe that a pharmacological treatment for cocaine addiction and/or other stimulant addictions, including methamphetamine, would complement and significantly improve the effectiveness of counseling programs.

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Despite the significant public health implications, there are very few therapies approved for the treatment of addiction, either in the United States or in the rest of the world. Further, there are no therapies currently approved for addiction to stimulant substances, such as cocaine and methamphetamine. We believe that currently approved drugs for addiction treatment, as well as compounds under development (other than CPP-109 and CPP-115), are subject to the following limitations:

- no single compound has broad applicability for treatment of multiple addictions;
- many of these compounds are “receptor active”, which means they have drug-like effects themselves and have the potential for abuse or addiction;
- increasing dosages over time may be required due to development of tolerance; and
- they are often ineffective at eliminating drug cravings or responding to increasing levels of drug use.

We believe that CPP-109 and CPP-115 do not suffer from these limitations and therefore, if approved, that both will have the potential to become widely prescribed, safe and effective treatments for cocaine, methamphetamine and other addictions.

Addictive drugs are used recreationally because of the transient, pleasurable effect they have on the user. Recent scientific evidence has established that drug abuse can interfere with the brain’s normal balance of neurotransmitter release and reuptake, resulting in addiction. If this balance is not restored, addicted individuals, even after significant periods of abstinence, may be incapable of suppressing cravings or quitting through willpower alone, even with the assistance of professional counseling.

Cocaine binds to the dopamine reuptake transporter protein of the pre-synaptic neurons preventing the reuptake and eventual breakdown of dopamine, resulting in enhanced and prolonged stimulation of dopamine on post-synaptic receptors, causing a feeling of prolonged euphoria for the user.

Addiction to cocaine is caused by a neurological process called desensitization. Because the brain senses an unnaturally high level of dopamine, it responds by reducing the amount of dopamine released and the number of dopamine receptors created. Consequently, when the cocaine wears off, the user has a lower amount of dopamine and fewer functioning dopamine receptors, which results in a depressed mood. This desensitization process creates a lowering of mood each time the user takes more of the drug, causing the user to seek additional cocaine to restore normal feelings, and requiring the user to take an increasing amount of cocaine to achieve the same feeling of euphoria as before.

Addiction is a worldwide health problem that affects millions of people and has wide-ranging negative social consequences. According to NIDA, there are no pharmacologic treatments for cocaine addiction currently approved for marketing by the FDA. We believe that other therapies being developed for the treatment of cocaine addiction, but not yet approved for marketing, suffer from the significant limitations discussed earlier which have not been exhibited to date by CPP-109 or CPP-115.

A June 2011 report of the National Center on Addiction and Substance Abuse at Columbia University titled “Adolescent Substance Abuse : America’s #1 Public Health Problem” found that in annual federal, state and local government spending as a result of substance abuse and addiction was at least \$467.7 billion – almost \$1,500 for every man, woman, and child in the United States. A 2009 report from the same group found that for every dollar federal and state governments spent on substance abuse and addiction in 2005, 95.6 cents went to “shoveling up the wreckage” and only 1.9 cents to prevention and treatment, 0.4 cents to research, 1.4 cents to taxation or regulation and 0.7 cents to interdiction.

In 2010, an estimated 22.6 million people in the United States aged 12 or over were current users of illicit drugs (defined as usage in the past month), according to the National Survey on Drug Use and Health, published by SAMHSA, which we refer to as the SAMHSA survey. This represents 8.9% of the total population aged 12 or older. This rate was higher than the rate in 2009 (8.7%), 2008 (8.0%), 2007 (8.0%), 2005 (8.1%) and 2004 (7.9%).

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According to the most recent SAMHSA survey, an estimated 1.5 million people, or 0.6% of the population aged 12 or over, had used cocaine in the month preceding the survey. Additionally, in 2010, approximately 637,000 people aged 12 or over had used cocaine for the first time within the preceding 12 months, an average of approximately 1,700 new users per day. In addition, approximately 699,000 patients received treatment for cocaine abuse in 2010.

According to the same survey, the number and percentage of past-month nonmedical users of stimulants decreased slightly from 1.3 million (0.5%) in 2009 to 1.1 million (0.4%) in 2010, based on a decrease in methamphetamine users, from 502,000 (0.2%) to 353,000 (0.1%). These numbers are similar to those seen in 2008 and represent the resumption of a trend that had seen methamphetamine use fall from 2006 to 2008, but increase in 2009.

In addition, approximately 5.1 million people in 2010, or 2.0% of the population aged 12 or over, took prescription pain relievers for non-medical purposes in the month preceding the survey. This remained substantially unchanged from 2009, when 5.2 million people, or 2.1% of the population aged 12 or over, took prescription pain relievers for non-medical purposes in the month preceding the survey. Further, approximately 16.9 million people aged 12 or over in the United States were classified as heavy drinkers in 2010. Additionally, there are approximately 17.4 million persons aged 12 or over who used marijuana in the month preceding the survey and approximately 1.0 million people sought treatment in 2010. Finally, obsessive-compulsive disorders such as compulsive gambling have been shown to have similar dopamine-related mechanisms of action to drug addiction and affect millions of persons in the United States and around the world.

Addiction is not only a U.S. health problem. In 2009, according to the United Nations Office on Drugs and Crime, there were between 4.3 million and 4.7 million users of cocaine and between 2.5 million and 3.2 million users of amphetamine-type stimulants between the ages of 15 and 64 across Europe who had used these drugs within the past year. We believe that the direct and indirect costs of cocaine and methamphetamine use are indicative of a significant global public health problem, representing a significant unmet medical need for which no adequate pharmaceutical therapies exist.

### *Epilepsy*

Epilepsy is a brain disorder in which clusters of nerve cells, or neurons, in the brain sometimes signal abnormally. In epilepsy, the normal pattern of neuronal activity becomes disturbed, causing strange sensations, emotions, and behavior or sometimes convulsions, muscle spasms, and loss of consciousness. Epilepsy is a disorder with many possible causes. Anything that disturbs the normal pattern of neuron activity — from illness to brain damage to abnormal brain development — can lead to seizures. Epilepsy may develop because of an abnormality in brain wiring, an imbalance of nerve signaling chemicals called neurotransmitters, imbalance of sensitivity to neurotransmitters, or some combination of these factors.

We intend to focus our development efforts for CPP-115 on its use as a treatment for infantile spasms and adult complex partial seizures. Although vigabatrin (CPP-109) is one of the drugs in our development pipeline, we have no plans to develop CPP-109 for the treatment of epilepsy.

An infantile spasm (IS) is a specific type of seizure seen in an epilepsy syndrome of infancy and childhood. The onset of infantile spasms is usually in the first year of life, typically between 4-8 months. The seizures primarily consist of a sudden bending forward of the body with stiffening of the arms and legs; some children arch their backs as they extend their arms and legs. Spasms tend to occur upon awakening or after feeding, and often occur in clusters of up to 100 spasms at a time. Infants may have dozens of clusters and several hundred spasms per day. Infantile spasms usually stop by age five, but may be replaced by other seizure types.

In complex partial seizures, consciousness is altered. Patients may exhibit automatisms (automatic repetitive behavior) such as walking in a circle, sitting and standing, or smacking their lips together. Often accompanying

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these symptoms are the presence of unusual thoughts, such as the feeling of déjà vu, uncontrollable laughing, fear, visual hallucinations, and experiencing unusual unpleasant odors. These symptoms are thought to be caused by abnormal discharges in the temporal lobe.

According to the Epilepsy Foundation, there are about 3 million epilepsy patients in the United States, with approximately 200,000 new cases diagnosed in the U.S. each year. Worldwide, 50 million people are estimated to have epilepsy. The incidence of epilepsy appears to depend somewhat on the age of the individual. The risk of epilepsy from birth through age 20 is approximately 1%. Within this group, incidence is highest during the first year of life and increases somewhat at the onset of puberty. From age 20 to 55 it decreases again, but increases after age 55.

Anti-epileptic drugs work through a variety of mechanisms, including inhibition of sodium ion channels and the enhancement of GABA mechanisms. Although the different types of epilepsy vary greatly, in general, available medications can only control seizures in about two-thirds of patients. CPP-115, like vigabatrin (CPP-109), is a GABA-AT inhibitor, and we are developing it initially for infantile spasms and complex partial seizures. Based on the historic use of vigabatrin in treating epilepsy, we believe that CPP-115 may ultimately work best as an adjunct therapy to existing drugs.

Vigabatrin is used in over 30 countries for the treatment of infantile spasms and for the adjunctive treatment of adult complex partial seizures in patients who have responded inadequately to several alternative treatments. On August 21, 2009, Sabril® was approved for these indications in the United States.

### **Our Clinical Trials**

#### *CPP-109*

In 2007, we initiated a randomized, double-blind, placebo-controlled U.S. Phase II(a) clinical trial evaluating the use of CPP-109 in treating subjects addicted to cocaine. The trial enrolled 186 cocaine addicted patients at 11 addiction treatment research centers and clinical research centers throughout the United States. Patients were treated for a period of 12 weeks, with an additional 12 weeks of follow-up. On May 29, 2009, we announced that the top-line data from this trial showed that CPP-109 did not demonstrate statistical significance in the primary endpoint; which means that it did not demonstrate a significantly larger proportion of CPP-109 treated subjects than placebo-treated subjects were cocaine free during the last two weeks of the treatment period (weeks 11 and 12).

On September 30, 2009, we announced additional results from our U.S. Phase II(a) cocaine clinical trial. Based on post hoc analyses for vigabatrin levels in urine samples collected during the trial, we concluded that less than 40% of the trial subjects were medication compliant. As a result, we now believe that the trial was inadequately powered to properly test the efficacy of CPP-109 for the treatment of patients with cocaine addiction. On the basis of a comprehensive review of the trial data, however, we concluded that: (i) CPP-109 was safe and well tolerated; and (ii) while there were no statistically significant differences between active and placebo groups for the protocol-specified primary and secondary efficacy endpoints, cocaine use as measured by benzoylecgonine (the major metabolite of cocaine) levels in urine collected from subjects were consistently lower in the CPP-109 treatment group during the 12 week treatment period, generally indicating a reduction of cocaine use; and (iii) in those subjects who were compliant with study medication, the differences between CPP-109 and placebo were amplified, which suggests that CPP-109 may facilitate abstinence, reduce overall cocaine use as measured by urine benzoylecgonine levels (an objective measure of daily cocaine usage), and reduce cocaine usage days (an objective measure of dependence severity).

Consistent with previously published addiction trials conducted by other parties, the protocol of our cocaine trial assessed subjects' medication compliance based on self-reporting and on counting the unused medication returned by subjects. The subjects self-reported a compliance level of greater than 85%, which was inconsistent with our urine data. This low medication compliance effectively reduced the power of the study, because not all



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subjects in the treatment group were actually treated. However, analyses of subject responses, corrected for poor medication compliance, makes the response ratios observed in our trial more consistent with the results reported by Dr. Jonathan Brodie et al. in a double-blind, placebo-controlled, 103-patient Phase II trial evaluating vigabatrin for the treatment of cocaine addiction that was completed in Mexico in 2007 (the results of which trial were published in *The American Journal of Psychiatry* in November 2009). See “*Clinical and Pre-Clinical Studies of Our Product Candidates Undertaken by Others*” below.

During June 2008, we initiated a randomized, double-blind, placebo-controlled U.S. Phase II clinical trial evaluating the use of CPP-109 in treating patients with methamphetamine addiction. We had planned to enroll 180 methamphetamine addicted patients at 15 addiction treatment clinical centers in the United States. However, in March 2009, in order to conserve cash, we converted our methamphetamine trial into a proof-of-concept study evaluating the results obtained from the 57 patients who had already been randomized into the trial. The patients we enrolled were treated for a period of 12 weeks and we evaluated data related to endpoints based on abstinence, reductions in methamphetamine use and craving for evidence of potential efficacy.

On September 30, 2009, we announced the top-line results of our proof-of-concept study. The results showed that there was a 2.5 times higher rate of abstinence in the last two weeks of the study in the vigabatrin group versus the placebo group. While we consider this to be an encouraging trend, the results were not statistically significant due to the small sample size. We also believe that medication compliance, similar to our previously discussed cocaine trial, was below expectations.

Based on the results from our Phase II cocaine trial and our methamphetamine proof-of-concept study, we expect that the data from those studies will be treated as supportive of any NDA application that we file.

On April 13, 2010, we signed a Clinical Trial Agreement (CTA) with NIDA to jointly conduct a U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction (the Phase II(b) Trial). As part of the CTA, NIDA, under their agreement with the Veterans Administration Cooperative Studies Program, agreed to provide substantial resources towards the completion of the Phase II(b) Trial. This approximately 200 subject double-blind, placebo-controlled trial is being conducted at twelve leading addiction research facilities across the United States. The Phase II(b) Trial, which is being overseen by us, NIDA and the VA, was initiated in November 2010 and began enrolling patients during the first quarter of 2011. Based on currently available information, we expect to have top-line results from this trial early in the first quarter of 2013. The Phase II(b) Trial is designed to confirm the safety and efficacy of CPP-109 for the treatment of cocaine addiction and if successful, we believe it will qualify as one of the adequate and well controlled trials required to support approval of an NDA for CPP-109.

Pursuant to the CTA, we have provided the study drug (and matching placebo) to the VA Clinical Pharmacy to be packaged suitably for use in the Phase II(b) Trial. In conjunction with NIDA and the VA, we have developed the Phase II(b) Trial protocol and informed consent and have submitted such documents to the FDA for review. We are also responsible for, among other duties, funding patient recruitment activities and advertising for the Phase II(b) Trial, establishing and funding a contract with a vendor capable of decrypting and converting the visual field data obtained from study subjects into a format analyzable by the VA statisticians who will interpret the study data. We have also agreed to fund the treatment costs for up to 25 study subjects. Further, pursuant to the CTA, NIDA has provided input on the protocol and informed consent and, under their agreement with the VA, is funding qualified study sites and investigators. NIDA has also presently contracted to treat more than 200 study subjects. Finally, NIDA, through its agreement with the VA, is providing clinical monitoring of all sites, pursuant to the CTA.

The CTA terminates on April 13, 2015 or upon the completion of the Phase II(b) Trial, whichever comes first, except that the CTA may be extended for two further periods of two years each by agreement of the parties if it is necessary to complete the Phase II(b) Trial. Either party may terminate the CTA upon 60 days’ notice without cause, or upon 30 days’ written notice for cause. Both NIDA and we have continuing rights under the

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CTA if the CTA is terminated. Among other obligations, this includes an obligation of each party to continue their respective obligations under the CTA until all study subjects enrolled in the trial at the time of such termination have completed the trial and continuing duties of confidentiality.

The protocol for the Phase II(b) Trial has been designed to attempt to mitigate compliance issues that were observed in our previous U.S. Phase II(a) cocaine clinical trial and our methamphetamine proof-of-concept study. In the Phase II(b) Trial, subjects are being observed taking their medication on the days that they are at the trial sites for tests and therapy. Urine samples collected from subjects are also being monitored to determine whether trial subjects are taking their medication (CPP-109 or placebo). Further, the subjects are also undergoing therapy once per week and will receive substantially lower compensation for participation than in our previous trials. Finally, the trial is being conducted at 12 addiction treatment oriented centers, and the patient recruitment firm that is working with us on this trial has been directed to target trial subjects more likely to be genuinely interested in seeking treatment to overcome their addiction to cocaine. Although there can be no assurance, we believe that with these modifications we should reduce the medication compliance issues observed in our prior clinical studies.

Lundbeck's exclusivity for Sabril® tablets as an adjunctive therapy to treat refractory complex partial seizures in adults will expire on August 21, 2014. We currently expect to submit a 505(b)(2) application in submitting an NDA for CPP-109. A 505(b)(2) application is one that relies, at least partially, upon data that a company does not own or have right of reference to, including published literature. A 505(b)(2) application can also rely upon the FDA's previous rulings on safety and efficacy for previously approved products. Additional information in a 505(b)(2) application includes data on manufacturing, bioequivalence, and bioavailability, studies to support any change relative to the previously approved product, information with respect to any patents that claim the drug or use of the drug for which approval is sought, and appropriate certification with respect to patents listed for the previously approved drug on which investigations relied upon for NDA approval were conducted or that claim a use of the listed drug. See "*Regulatory Matters — The Hatch Waxman Act*" below. There can be no assurance whether, or to what extent, the FDA will accept any 505(b)(2) NDA that we may submit for CPP-109.

Generally, the process of seeking approval of an NDA requires multiple clinical trials, including two "pivotal" U.S. Phase III clinical trials. In our case, because CPP-109 is intended to treat a serious condition for which there is no approved therapy, there is a possibility that if the data from the Phase II(b) Trial are sufficiently compelling, that the FDA will file an NDA submitted by us for CPP-109 on the basis of this trial, when combined with the data from the previous clinical trials and studies of vigabatrin to treat addiction. However, it is more likely that the FDA will require at least one Phase III trial supported by the safety and efficacy data obtained from our Phase II(b) clinical trial before they will file an NDA submitted by us for CPP-109, even if the data from our currently ongoing Phase II(b) clinical trial are compelling. Further, even if the FDA files an NDA submitted by us for CPP-109 based on the results of our current Phase II(b) trial, it is unlikely that we will be in a position to submit an NDA for CPP-109 until after August 21, 2014. Finally, if the FDA requires more than one Phase III clinical trial, our NDA submission could be delayed even further. There can be no assurance that the data from our ongoing Phase II(b) Trial will be sufficiently compelling or that even if such data are sufficiently compelling, that the FDA will file an NDA submitted by us for CPP-109 based on the results of that trial.

### *CPP-115*

On November 1, 2010 we announced key results for our initial series of safety and efficacy evaluations in a number of animal and in-vitro laboratory studies:

- In visual safety studies of rats exposed for 90 days to either CPP-115, vigabatrin or placebo, CPP-115 caused substantially less retinal damage than vigabatrin at well above the expected therapeutic doses.
- The oral pharmacokinetic behavior of CPP-115 in rats supports further development as an orally delivered pharmacotherapy.
- CPP-115 was found to not inhibit or induce metabolic enzymes and is not itself metabolized. As a result, drug-drug interactions or other metabolism-related side effects are unlikely. Additionally, non-metabolized drugs are advantageous for treating drug addicts, a population that often has impaired liver function.

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- With the exception of its biochemical target, GABA-aminotransferase, CPP-115 did not show any clinically significant binding to 111 of the most prominent receptors, proteins and transporters. Additionally, CPP-115 showed no binding to other GABA-related targets (GABA receptors and transporters). Therefore, CPP-115 is very specific and not likely to induce drug-drug interactions or unintended side effects.
- CPP-115 did not show any interference with the hERG channel and is therefore not likely to induce heart arrhythmias.
- CPP-115 did not show any abnormalities in an in-vitro battery of genotoxicity studies and thus is not likely to be carcinogenic.
- CPP-115 did not show any inhibition of ALT and AST at doses far above the expected therapeutic dosage. This is in contrast to vigabatrin's known inhibition at therapeutic doses of these key liver transaminase enzymes.
- CPP-115, like vigabatrin, was found to significantly reduce seizures in accepted animal models of epilepsy, as evaluated by the National Institutes of Health's Anticonvulsant Screening Program (ASP) at lower doses than vigabatrin.
- CPP-115 was found to eliminate cocaine-conditioned place preference and significantly reduced cocaine-induced dopamine surge, key tests needed to demonstrate a drug's effectiveness as a potential treatment for stimulant addiction. These effects were observed at doses more than 200 times lower than that needed by vigabatrin to achieve the same effect.

During the third quarter of 2011, we completed our IND-enabling studies for CPP-115 and filed an IND for CPP-115 in November 2011. Following the acceptance of our IND, we began enrollment for our Phase I(a) human clinical trial evaluating the safety of CPP-115, and expect to have results from this trial during the second quarter of 2012. Subject to the results of this trial and the availability of funding, we hope to begin other human clinical trials for CPP-115 in early 2013.

### *Clinical and Pre-Clinical Studies of our Product Candidates Undertaken by Others*

The primary focus of our product development efforts is on our clinical trials and pre-clinical studies. However, we have in the past supported and will continue in the future to support pre-clinical studies and clinical trials by academic investigators of the use of vigabatrin for the treatment of addiction and various forms of epilepsy and other central nervous system disorders, including members of our Scientific Advisory Board and the academic institutions with which they are affiliated. In some cases, we may provide unrestricted sponsorship funds for such studies. In other cases, we may provide alternative assistance to the investigator, most typically providing CPP-109 or CPP-115 drug substance or dosage form as well as matching placebo. We expect to continue supporting investigator studies in the future to the extent that they meet criteria acceptable to us. Such criteria include research on the use of vigabatrin and/or CPP-115 to treat addiction, various forms of epilepsy and/or other central nervous system disorders, to assist investigators in designing their studies so that such studies are most appropriately conducted and, to the extent possible, to make sure that these investigator studies potentially complement, and do not adversely impact, our activities.

A study describing the positive results obtained in an investigator-initiated, Phase II, randomized double-blind, placebo-controlled trial conducted in Mexico in 2007 was published in the November 2009 issue of *The American Journal of Psychiatry*, a world leading peer-reviewed medical journal. The paper, entitled "Randomized, Double-Blind, Placebo-Controlled Trial of Vigabatrin for the Treatment of Cocaine Dependence in Mexican Parolees," was authored by Jonathan D. Brodie, M.D., Ph.D., Brady G. Case, M.D., Emilia Figueroa, M.D., Stephen L. Dewey, Ph.D., James A. Robinson, M.Ed., Joseph A. Wanderling, M.A. and Eugene M. Laska, Ph.D. Drs. Dewey, Brodie and Laska are members of our Scientific Advisory Board. The trial provided evidence that vigabatrin may be effective in the treatment of cocaine addiction. One hundred and three (103) community-based, non-hospitalized cocaine addicted individuals participated in this trial conducted at a single site in Mexico City, Mexico. Of the 103 participants, 50 were treated with vigabatrin and 53 received placebo. A total of 53

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subjects completed the 9 week treatment period. Twice-weekly urine screening tests were obtained from each subject in order to objectively evaluate each subject's cocaine use. All subjects were also offered one group counseling session per week. The primary outcome measure of the trial was no self-reported cocaine use or positive urine tests for cocaine use during the last three weeks of the nine-week trial.

Eighteen subjects fulfilled the criteria for the primary outcome measure. Fourteen of the 50 subjects treated with vigabatrin (28.0%) versus four of the 53 subjects treated with placebo (7.5%) met the primary outcome measure. This result was statistically significant with a p-value of 0.009 (A "p-value" represents the probability that, if the test is repeated, a similar observation will be made. In addition, 12 of the abstinent subjects on vigabatrin versus 2 of the abstinent placebo subjects remained abstinent for 4 additional weeks ( $p=0.002$ ). Generally, a "p-value" of less than 0.05 indicates that the different results between treatment groups were unlikely to be random). Additional findings included increased retention and self-reported abstinence from alcohol favoring vigabatrin.

Two of our collaborators have received a \$1.2 million grant from the U. S. Department of Defense to conduct an animal study of the use of vigabatrin in combination with opiates to effectively manage pain while reducing the potential for opiate addiction. This research is being conducted by a research team led by Wynne K. Schiffer, Ph.D. and Stephen L. Dewey, Ph.D. of The Feinstein Institute for Medical Research at North Shore – Long Island Jewish Health System (LIJ) and by Jonathan D. Brodie, M.D., Ph.D. from the Department of Psychiatry at New York University's School of Medicine. Opioid abuse is one of the many substance addiction indications covered under our exclusive license of Brookhaven's vigabatrin use patent portfolio. We are supplying study materials (CPP-109) to facilitate this study.

A team of researchers led by Kyle M. Kampman, M.D., Associate Professor of Psychiatry at the Veteran's Administration Medical Center Department: Psychiatry affiliated with the University of Pennsylvania School of Medicine's Treatment Research Center have initiated a randomized, double-blind placebo-controlled study in 60 cocaine and alcohol co-dependent subjects. Subjects are receiving either CPP-109 (vigabatrin) or matching placebo, in addition to weekly counseling for eight weeks. The primary outcome measures are cocaine abstinence confirmed by twice weekly urine drug screens and alcohol abstinence measured by self-report. Recruitment is targeted to be completed in 12 months. NIDA is providing the majority of funding for this study as part of a pilot trial program included in a P50 center grant. The goal of this pilot project is to rapidly screen medications for the treatment of comorbid alcohol and cocaine dependence in small clinical trials. The program also utilizes state of the art techniques to ensure excellent medication adherence and treatment retention so that reliable results can be obtained rapidly to inform future larger trials. We have provided CPP-109 and matching placebo and financial support to conduct eye-safety examinations to facilitate the study.

An animal study reporting positive pre-clinical efficacy in a "rat multiple hit model" in which the use of CPP-115 was evaluated for the treatment of infantile spasms was reported on at the American Epilepsy Society's 65<sup>th</sup> Annual Meeting held in December 2011. The study was authored by Stephen W. Briggs, Tomonori Ono, MD, PhD, Solomon L. Moshe, MD and Aristeia S. Galanopoulou, MD, PhD of the Saul R. Korey Department of Neurology, Dominick P. Purpura Department of Neuroscience, Laboratory of Developmental Epilepsy, The Comprehensive Epilepsy Center (CEC) at Montefiore Medical Center / Albert Einstein College of Medicine of Yeshiva University, Bronx, New York. The study concluded that (i) CPP-115 suppresses spasms in the multiple-hit model of IS, with onset of effect as early as the day after the first dose; (ii) the therapeutic doses of CPP-115 were well tolerated in developing rat pups; and (iii) CPP-115 showed efficacy for a longer duration at lower doses that were better tolerated than the previously tested therapeutic vigabatrin doses.

CPP-115 is being evaluated by the Anticonvulsant Screening Program (ASP) of the National Institute of Neurological Disorders and Stroke (NINDS), one of the institutes within the National Institutes of Health (NIH). To date, CPP-115 has been tested in about 20 animal models of epilepsy, including maximal electric shock (MES) in both rats and mice, corneal kindling in mice, minimal clonic seizure (6 Hz) model in mice, and subcutaneous picrotoxin (scPIC). CPP-115 was also evaluated for potential efficacy in neuroprotection and

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neuropathic pain models. CPP-115 has shown significant potential in a variety of epilepsy models and NIH is continuing the evaluation of CPP-115 in other models of epilepsy. An evaluation of CPP-115 in additional models for neuropathic pain is also ongoing.

We recently agreed to provide study materials (CPP-109) and financial support for a small proof-of-concept study to be undertaken at an academic institution in the United States to evaluate the use of CPP-109 in treating Tourette Syndrome. This proof-of-concept study is expected to take approximately one year to complete.

### **Competitive Landscape**

#### *Disease Background and Our Market Opportunity*

We are focusing primarily on two market opportunities that can be exploited by pharmacotherapies that inhibit GABA-aminotransferase (GABA-AT); drug addiction and epilepsy.

- Drug Addiction. Research has established that neurochemical signals responsible for craving and addiction can be modulated through a GABA-ergic mechanism. We have been developing CPP-109 for the treatment of drug addiction and will also be evaluating CPP-115 for potential use in the treatment of drug addiction as well. Due to the differing stages of development for these two drugs, we expect CPP-109 to be approved as the first drug to treat cocaine addiction with CPP-115 following later for both epilepsy and then cocaine, methamphetamine and/or other forms of drug addiction.
- Epilepsy. Epilepsy is not a neurological disorder with a single underlying cause, but is instead a complex spectrum of neurological disorders with many neurological origins exhibiting a large variation of severities. As such, there are a large number of therapies spanning many pharmacological mechanisms of actions, several medical devices, and in extreme cases, neurosurgical procedures including up to removal of half of the brain. We will develop a new drug, CPP-115, that reduces neuronal excitability through a GABA-ergic mechanism.

#### *CPP-109*

While there are no currently approved therapies for cocaine addiction, we are aware of certain other therapies that are under development. These can be broadly classified into six groups:

- Cocaine-mimetics. The mechanism of action of these drugs is similar to cocaine. None of these approaches have, to our knowledge, shown any efficacy.
- Cocaine-antagonists. These compounds are intended to prevent a cocaine induced dopamine surge by limiting the release of dopamine (drugs that act on GABA receptors, for example) or drugs that block the effects of a cocaine induced dopamine surge (dopamine receptor antagonists, for example). All of the known drugs in this class, with the exception of the GABA-AT inhibitors (CPP-109 and CPP-115) are receptor active and could require increasing dosing over time. None of these compounds are presently approved for marketing to treat addiction.
- Dopamine  $\beta$ -hydroxylase inhibitors. These compounds block the enzyme that converts dopamine to norepinephrine, which raises dopamine levels in the central nervous system (CNS). We believe that this strategy is designed to address withdrawal, rather than craving and euphoria. This approach, to our knowledge, has yet to show any efficacy.
- Analeptics. These compounds stimulate the central nervous system. None of these compounds are presently approved for marketing to treat addiction, although we believe that one such product is currently undergoing Phase II clinical trials.
- Addiction Vaccines. These vaccines are designed to block cocaine or methamphetamine transport into the brain. They are not broadly immunogenic in humans to date and require several injections. They also may not address issues relating to craving or other behaviors associated with cocaine or methamphetamine

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addiction. We also believe that they can be overwhelmed by increasing dosages of the abuse drug. To date, reported data from clinical trials have not shown that the vaccines are capable of facilitating the attainment and maintenance of abstinence, a key therapeutic goal.

- **D3 Antagonists.** These compounds block the dopamine signal at the subclass of dopamine receptor (D3) thought to be responsible for the reward signals stimulated by drugs of abuse. Glaxo Smith Kline (GSK) developed a D3 antagonist (GSK598809) through Phase I for cocaine addiction, but has halted development of all CNS drugs and announced that it is exiting the CNS drug market segment. GSK is seeking to divest this asset. Abbott Laboratories is currently in Phase II development of ABT-925, another D3 antagonist, for the treatment of schizophrenia. Independent academic investigators are evaluating ABT-925 for the treatment of cocaine addiction and smoking cessation. Other D3 antagonists may also be under development.

On August 21, 2009, the FDA approved two NDAs for Sabril® for the treatment of infantile spasms and as an adjunctive (add-on) therapy for adult patients with refractory complex partial seizures who have responded inadequately to several alternative treatments. The NDAs are for different formulations of Sabril®, and both NDAs are held by Lundbeck. Because of the risks of visual field damage associated with vigabatrin, Sabril® was approved under an FDA-mandated REMS program.

We are not aware of any on-going or planned studies by Lundbeck intended to evaluate Sabril® for any addiction indication, and we believe that any attempted commercialization by Lundbeck of Sabril® for the treatment of cocaine and/or other addictions would violate our licensed patents (and we have advised Lundbeck of our belief in that regard). We would vigorously assert our intellectual property rights if Lundbeck sought to market Sabril® for the treatment of any addictive or obsessive compulsive conditions covered by our patents. There can be no assurance we would be successful in that regard.

### *CPP-115 for Epilepsy*

Epilepsy represents a large and growing market opportunity. Sales of drugs currently marketed for the treatment of epilepsy totaled approximately \$8.9 billion in the United States during 2006, according to IMS Health. These sales included prescriptions of these drugs for both epilepsy and other indications, including neuropathic pain.

The market for epilepsy treatments is highly competitive. Large pharmaceutical companies, including Pfizer (Neurontin®, Lyrica®, Dilantin®, Zarontin®), J&J (Topamax®), UCB (Keppra®), Abbott (Depakote®), GSK (Lamictal®), Roche (Klonopin®), and Novartis (Trileptal®) sell, or are developing, epilepsy therapies. However, as stated earlier, approximately one-third of all epilepsy patients are refractory to treatment with any currently available epilepsy treatments. It is difficult to determine sales of products specifically for epilepsy as many of these products are used in other indications such as neuropathic pain, migraine, dementia, and bipolar disorders.

## **Intellectual Property Rights**

### *Licensing and Patents*

Protection of our intellectual property and proprietary technology is a strategic priority for our business. We rely on a combination of patent, trademark, copyright and trade secret laws along with institutional know-how and continuing technological advancement, to develop and maintain our competitive position. Our ability to protect and use our intellectual property rights in the continued development and commercialization of our technologies and products, operate without infringing the proprietary rights of others, and prevent others from infringing our proprietary rights, is crucial to our continued success. We will be able to protect our products and technologies from unauthorized use by third parties only to the extent that they are covered by valid and enforceable patents, trademarks or copyrights, or are effectively maintained as trade secrets, know-how or other proprietary information. See “*Risk Factors.*”

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### *Brookhaven License Agreement*

We have been granted an exclusive, worldwide license from Brookhaven to eight patents relating to the use of vigabatrin for a range of indications, including the treatment of a wide variety of substance addictions, with expiration dates for the issued patents between 2018 and 2022, with the principal patents expiring in 2018. Additionally, we received approval from the European Union (EU) with respect to one of our principal patents, which has allowed us to seek registration for this patent in eighteen EU member states.

The license agreement, which is dated as of April 30, 2006 and which supersedes a previous license agreement that was entered into in 2002, grants us an exclusive worldwide license, including the right to sublicense, to make, have made, use, and/or sell licensed products and practice the licensed process with respect to the medical application in humans of vigabatrin under certain patent rights. These rights are subject to the United States government's rights to practice the licensed process for its own use. The purpose of this agreement is to permit us to commercialize products upon the receipt of government regulatory approval for the use of vigabatrin for the treatment of human drug addiction and addiction-related behavior. In exchange for such rights, we paid Brookhaven an initial fee of \$50,000 and have agreed to pay a fee of \$100,000 in the year of NDA approval for CPP-109, \$250,000 in each of the second and third years following approval, and \$500,000 per year thereafter until the last patent expires. In addition, upon the filing of an NDA for CPP-109 and the approval of an NDA for CPP-109, we will be obligated to reimburse Brookhaven for certain expenses it incurs in connection with the filing, prosecution and maintenance of all patents and patent applications included in the patent rights we have licensed. We also have the right to enter into sub-license agreements, and if we do a royalty of 20% of any sub-license fees will be payable to Brookhaven.

We have also agreed to consult with Brookhaven on at least a quarterly basis with respect to drug development steps taken and progress made toward the objective of gaining marketing approval from the FDA for any licensed product from the beginning of our agreement through the date the FDA grants us its approval to sell any licensed product. We have also agreed to have in effect and maintain a liability insurance policy in an amount of at least \$1,000,000 to cover claims arising out of the manufacture and use of licensed products and such policy shall designate Brookhaven as an additional insured. We have agreed to increase and maintain, throughout the life of the agreement and for five years after its termination, liability insurance coverage in the amount of at least \$5,000,000 upon acceptance by the FDA of our application to commence Phase III clinical trials involving licensed products. Our agreement with Brookhaven expires simultaneously with the expiration of the last to expire patent it has licensed to us.

During July 2010, we announced that the European Patent Office has granted to Brookhaven a European patent for the use of vigabatrin for the prevention of addiction to opioids (e.g. oxycodone, hydrocodone) used in pain management. By dampening dopamine release and thus, the euphoria associated with opioids, the opioid/vigabatrin combination may lower or prevent addictive liability without adversely affecting pain relief. Further, we announced in December 2010 that the Canadian Intellectual Property Office has granted to Brookhaven a patent for the use of vigabatrin for the prevention of addiction in pain management. The patent is broad and includes the use of vigabatrin/ CPP-109 in combination with opioids (e.g., oxycodone, hydrocodone) for pain management. We license these patents from Brookhaven.

Brookhaven has formally advised us that they believe that the amount due them for patent related expenses as of December 31, 2011 was approximately \$1.3 million. We believe that we are only contingently liable to Brookhaven for approximately \$166,000, and we have advised Brookhaven that we are disputing their determination of patent-related expenses due under the license agreement. There can be no assurance as to the outcome of this matter. In any event, no patent-related expenses are due to Brookhaven under the license agreement until we submit an NDA for CPP-109.

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### *Northwestern University License Agreement*

On August 27, 2009, we entered into a license agreement with Northwestern under which we acquired worldwide rights to commercialize new GABA aminotransferase inhibitors and derivatives of vigabatrin which have been discovered and patented by Northwestern. Under the terms of the license agreement, Northwestern granted us an exclusive worldwide license to certain composition of matter patents related to the new class of inhibitors and a patent application relating to derivatives of vigabatrin. We have designated the lead compound to be developed under this license as CPP-115.

We believe that the newly licensed compounds are the only known GABA aminotransferase inhibitors in existence or in development other than vigabatrin. We also believe, based on our pre-clinical testing to date of CPP-115, that the newly licensed compounds are significantly more potent than vigabatrin with less visual side effects than vigabatrin. We plan to seek to develop these compounds for the treatment of several indications, including epilepsy (specifically, complex partial seizures and infantile spasms) and drug addiction. However, these compounds are at a very early stage of development and there can be no assurance as to whether these new compounds will ever be determined to be safe and effective.

Under our license agreement with Northwestern, we will be responsible for continued research and development of any resulting product candidates. We have the right to terminate the agreement in whole or in part after August 27, 2012, upon written notice. As of December 31, 2011, we have paid Northwestern upfront payments and milestone fees aggregating \$85,000 and maintenance and patent fees aggregating \$42,872, and we are obligated to pay certain additional fees and milestone payments in future years relating to our clinical development activities under this license or payable upon passage of time. The next milestone payment of \$100,000 is due on the earlier of successful completion of the Phase I(a) clinical trial for CPP-115 or August 27, 2013. We are also obligated to pay Northwestern royalties on any products resulting from the license agreement. We also have the right to enter into sub-license agreements, and if we do, a royalty on any sub-license fees will be payable to Northwestern.

We have recently filed an application under the Patent Cooperation Treaty (PCT) seeking to protect CPP-115 in all anticipated non-US markets around the world. Prosecution of this patent is ongoing. There can be no assurance that the claims of this patent will be allowed, or if allowed, that such claims will provide adequate patent protection for CPP-115.

### *Provisional patent application for the use of GABA aminotransferase inhibitors to treat Tourette Syndrome and related license agreement*

We, as a co-inventor, with scientists at New York University and the Feinstein Institute for Medical Research, recently filed a provisional patent application with the U.S. Patent and Trademark Office for the use of GABA aminotransferase inhibitors, including CPP-109 and CPP-115, in the treatment of Tourette Syndrome. We also recently entered into a license agreement with NYU and the Feinstein Institute granting us worldwide rights with respect to such patent. Further, we recently agreed to support an investigator-led proof-of-concept study at an academic institution in the U.S. evaluating the use of CPP-109 for the treatment of Tourette Syndrome. We intend to pursue the development of CPP-109 and/or CPP-115 for this indication and the provisional patent application if the results of this investigator-led proof-of-concept study show potential efficacy.

## **Manufacturing and Supply**

### *CPP-109*

Since the composition of matter patent for vigabatrin has previously expired, we will not, to our knowledge, violate any patents if we commercialize CPP-109. We have entered into a new agreement to formulate and manufacture CPP-109 for use in our future clinical trials. We also intend in the future to manufacture commercial quantities of CPP-109 on a contract basis, if the FDA approves an NDA for CPP-109.



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Our supplier has agreed to manufacture CPP-109 and matching placebo for us in quantities that we believe will be sufficient to conduct our current clinical trial evaluating CPP-109 for the treatment of cocaine addiction. Our contract contains no renewal provisions. Pursuant to our agreement, we have agreed to indemnify our supplier against: (i) costs relating to any potential injury suffered by persons who take CPP-109 that our supplier manufactures; (ii) any losses arising from our negligence in labeling, handling or storing CPP-109; (iii) any specifications which we give them that are incorrect or do not meet FDA-approved standards; (iv) any misrepresentation or breach by us of the agreement; and (v) any patent infringement claims that may result from the use of CPP-109.

Further, our supplier has agreed to indemnify us against any losses related to its negligence or willful misconduct in the manufacture of CPP-109; any misrepresentation by our supplier in the agreement; and any claims by third parties that our supplier infringed or misappropriated any intellectual property in its manufacture of CPP-109.

Any NDA that we file for CPP-109 will require a manufacturing plan. If the manufacturing plan and data are insufficient, the NDA will not be approved. Further, even if we receive approval of an NDA for CPP-109, if our manufacturer does not follow good manufacturing practices (cGMP), in the manufacture of our products, it may delay product launches or our ability to manufacture or ship product, adversely affecting our business.

Since we intend to contract with a third party to manufacture our products, if the FDA approves an NDA for CPP-109, our contract manufacturer will be required to comply with all applicable environmental laws and regulations that affect the manufacturing process. As a result, we do not believe that we will have any significant exposure to environmental issues.

### *CPP-115*

We have entered into a contract to manufacture the active pharmaceutical ingredient (API) sufficient to meet the needs of our ongoing pre-clinical studies and Phase I(a) human safety study of CPP-115. While we have taken steps to insure that the amount of API ordered under this contract is sufficient for our needs, there is no absolute assurance of this.

We have no plans at this time to build or acquire the manufacturing capability needed to prepare either the CPP-115 API or CPP-115 product on a commercial scale. We expect at this time that these materials will be prepared by a contractor with suitable capabilities for these tasks and that we will enter into appropriate supply agreements with these contractors at appropriate times in the development and commercialization of this product. There are no plans at this time to enter into such agreements. Further, the contractors selected would have to be inspected by the FDA and found in substantial compliance with federal regulations in order for an NDA for CPP-115 to be approved and there can be no assurance that the contractors we select in the future would pass such an inspection.

### *Competition*

The biotechnology and pharmaceutical industries are highly competitive. In particular, competition for the development and marketing of therapies to treat addictive substances such as cocaine and methamphetamine and epilepsy is intense and expected to increase. Many of our competitors have substantially greater financial and other resources, larger research and development staffs and more experience developing products, obtaining FDA and other regulatory approval of products, and manufacturing and marketing products. We compete against pharmaceutical companies that are developing or currently marketing therapies for addictive substances. In addition, we compete against biotechnology companies, universities, government agencies, and other research institutions in the development of substance abuse treatments, technologies and processes that are, or in the future may be, the basis for competitive commercial products. While we believe that our product candidates will offer advantages over many of the currently available competing therapies, our business could be negatively impacted if our competitors' present or future offerings are more effective, safer or less expensive than ours, or more readily accepted by regulators, healthcare providers or third-party payers.

## Regulatory Matters

### *Government Regulation and Product Approval*

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, record-keeping, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing. Our drugs must be approved by the FDA through the new drug application, or NDA, process before they may be legally marketed in the United States.

In the United States, drugs are subject to rigorous regulation by the FDA under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations, as well as other federal and state statutes. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of pre-clinical laboratory tests, animal studies and formulation studies according to the FDA's Good Laboratory Practice regulations;
- submission of an investigational new drug application (IND), which must become effective before human clinical trials may begin and which must include approval by an institutional review board (IRB) at each clinical site before the trials are initiated;
- performance of adequate and well-controlled human clinical trials according to the FDA's Good Clinical Practice regulations to establish the safety and efficacy of the proposed drug for its intended use;
- submission to, and acceptance by, the FDA of an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice, or cGMP, regulations to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and
- FDA review and approval of the NDA.

### *United States Drug Development Process*

Once a pharmaceutical candidate is identified for development it enters the pre-clinical testing stage. Pre-clinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. Prior to beginning human clinical trials, an IND sponsor must submit an IND to the FDA. The IND sponsor must submit the results of the pre-clinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some pre-clinical testing may continue even after the IND is submitted. In addition to including the results of the pre-clinical studies, the IND will also include a protocol detailing, among other things, the objectives of the first phase of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the trial. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may, at any time, impose a clinical hold on ongoing clinical trials. If the FDA imposes a clinical hold, clinical trials cannot commence or recommence without FDA authorization and then only under terms authorized by the FDA.

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Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of one or more qualified investigators in accordance with Good Clinical Practice regulations.

Clinical trials must be conducted under protocols detailing the objectives of the trial and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND. Further, an Institutional Review Board (IRB) at each institution participating in the clinical trial must review and approve each protocol before any clinical trial commences at that institution. All research subjects must provide informed consent, and informed consent information must be submitted to the IRB for approval prior to initiation of the trial. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if adverse events or other certain types of other changes occur.

Human clinical trials are typically conducted in three phases. These phases may be sequential, or may overlap or be combined:

- In Phase I, the drug is introduced into healthy human subjects or patients with the disease and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening illnesses, especially where the drug may be too toxic or have other side effects where it would not be deemed safe to give to healthy volunteers, the initial human testing may be conducted in patients.
- Phase II involves studies in a limited patient population to identify potential adverse effects and safety risks, to evaluate, on a preliminary basis, the efficacy of the product, and to determine optimal dosage and dosage tolerance.
- In Phase III, dosage is further evaluated along with safety and efficacy in an expanded patient population. These studies establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

While Phase I, Phase II, and Phase III tests are generally required for approval of an NDA, certain drugs may not require one or more steps in the process depending on other testing and the situation involved. Additionally, the FDA, an IRB, or the sponsor may stop testing at any time if results show patients being exposed to unnecessary health risks or overly dangerous side effects.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other requirements, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

### *United States Review and Approval Process*

FDA approval of an NDA is required before marketing of the product may begin in the United States. The NDA must include the results of product development, pre-clinical studies and clinical studies, together with other detailed information, including information on the chemistry, manufacture and composition of the product. The FDA has 60 days from its receipt of the NDA to review the application to ensure that it is sufficiently complete for substantive review before accepting it for filing. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The submission of an NDA is also subject to the payment of user fees, which currently exceed \$1.8 million; although a waiver of such fees may be obtained under certain limited circumstances. Further, the sponsor of an approved NDA is subject to annual product and

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establishment user fees, which currently exceed \$98,000 and \$520,000, respectively.

Further, the approval process is lengthy and difficult. The FDA has agreed to certain performance goals in the review of NDAs. Currently, most applications for standard review drug products are reviewed within 10 months and most applications for priority review are reviewed in six months. However, we expect the FDA to amend each of these goals to extend them by two months for applications received after September 2012. The FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA may also refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured to determine whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality, purity and stability.

If the FDA's evaluation of the NDA submission or manufacturing facilities is not favorable, the FDA may refuse to approve the NDA or issue a complete response letter. The complete response letter outlines the deficiencies in the submission and often requires additional testing or information in order for the FDA to reconsider the application. Even after submitting this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. With limited exceptions, the FDA may withhold approval of a NDA regardless of prior statements or commitments it may have made to the sponsor.

### *Post-Approval Requirements and Consideration*

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, the FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet. The FDA may also require as a condition of approval for drugs with significant safety issues, implementation of a REMS strategy. Such strategy may include "Black Box" warnings, limitations on promotion and distribution, and periodic testing of patients on the drug to monitor whether administration of the drug continues to be safe and effective for the patient.

Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. 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 IV testing, 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. In addition, quality control as well as drug manufacture, packaging, and labeling procedures must continue to conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA during which the agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

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### *Foreign Regulation*

Any marketing of CPP-109 or CPP-115 outside of the United States will be contingent on the receipt of approval from various regulatory authorities. Foreign regulatory systems, which vary from country to country, generally include risks similar to those associated with FDA regulation in the U.S. Under the European Union regulatory system, applications for drug approval may be submitted either in a centralized or decentralized manner. Under the centralized procedure, a single application to the European Medicines Agency leads to an approval granted by the European Commission which permits marketing of the product throughout the European Union. The decentralized procedure provides for mutual recognition of nationally approved decisions and is used for products that do not comply with requirements for the centralized procedure. Under the decentralized procedure, the holders of national marketing authorization in one of the countries within the European Union may submit further applications to other countries within the European Union, who will be requested to recognize the original authorization based on an assessment report provided by the country in which marketing authorization is held.

As with FDA approval, we may not be able to secure regulatory approvals in certain European countries in a timely manner, if at all. Additionally, as in the U.S., similar post-approval regulatory requirements would likely apply to any products that are approved in Europe, and failure to comply with such obligations could have a material adverse effect on our ability to successfully commercialize any product.

Outside of the European Union, we are subject to widely varying foreign obligations, which may be quite different from those of the FDA, governing clinical studies, product registration and approval and pharmaceutical sales. Whether or not FDA approval has been received, we must obtain separate approval for products by the comparable regulatory authorities of foreign countries prior to the commencement of marketing CPP-109 or CPP-115 in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. In addition, under current U.S. law, there are significant restrictions on the export of products not approved by the FDA, depending on the country involved and the status of the product in that country.

### *The Hatch-Waxman Act*

The approval process described above is premised on the applicant being the owner of, or having obtained a right of reference to, all of the data required to prove the safety and effectiveness of a drug product. This type of marketing application, sometimes referred to as a “full” or “stand-alone” NDA, is governed by Section 505(b)(1) of the FDCA. A Section 505(b)(1) NDA contains full reports of investigations of safety and effectiveness, which includes the results of pre-clinical studies and clinical trials, together with detailed information on the manufacture and composition of the product, in addition to other information.

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant’s product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA’s Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of a 505(b)(2) application or an abbreviated new drug application (ANDA).

Most drug products obtain FDA marketing approval pursuant to an NDA or an ANDA, but a third alternative is a special type of NDA, commonly referred to as a 505(b)(2) NDA, which enables the applicant to rely, in part, on the FDA’s findings of safety and efficacy of an approved product, or published literature, in support of its application. Section 505(b)(2) NDAs often provide an alternative path to FDA approval for new or improved formulations or new uses of previously approved products. A 505(b)(2) application allows the applicant to file an application where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. The

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applicant may rely upon the FDA's findings with respect to particular pre-clinical studies or clinical trials conducted for an approved product, although the FDA may also require companies to perform additional studies or measurements to support the change from the approved product.

Relative to normal regulatory requirements for a 505(b)(1) NDA, a 505(b)(2) applicant may be able to forego costly and time-consuming drug development studies by relying upon the FDA's finding of safety and efficacy for a previously approved drug product. Under some circumstances, the extent of this reliance approaches that permitted under the generic drug approval provisions. This approach is intended to encourage innovation in drug development without requiring duplicative studies to demonstrate what is already known about a drug, while protecting the patent and exclusivity rights for the approved drug.

An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. These applicants are not required to conduct or submit results of pre-clinical or clinical tests to prove the safety or effectiveness of their drug product, other than the requirement for bioequivalence testing. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

The ANDA or 505(b)(2) applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that: (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. A certification that the new product will not infringe the already approved product's listed patents or that such patents are invalid is called a Paragraph 4 certification. If the applicant does not challenge the listed patents, the ANDA or 505(b)(2) application will not be approved until all the listed patents claiming the referenced product have expired.

If the ANDA or 505(b)(2) applicant has provided a Paragraph 4 certification to the FDA, the applicant must also send notice of the Paragraph 4 certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph 4 certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph 4 certification automatically prevents the FDA from approving the ANDA or 505(b)(2) application until the earlier of 30 months, expiration of the patent, settlement of the lawsuit or a decision in the infringement case that is favorable to the ANDA or 505(b)(2) applicant.

The ANDA or 505(b)(2) application also will not be approved until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired. Federal law provides a period of five years of marketing exclusivity following approval of a drug containing no previously approved active ingredients (or salts and esters thereof), during which ANDAs and 505(b)(2) applications of those drugs cannot be submitted unless the submission contains a Paragraph 4 challenge to a listed patent, in which case the submission may be made four years following the original product approval.

Federal law provides for the extension of a patent's expiration date for up to five years if that patent is listed in the FDA's Orange Book, was not previously extended for any other approved product, and if that patent covers a product containing an active ingredient that was not previously approved in any other product. Since the composition of matter patent for Sabril® expired more than ten years ago, this type of extension will not affect our efforts to obtain approval for CPP-109 (vigabatrin). Further, this extension of patent expiration date will not be available to us if we are successful in obtaining approval of CPP-109 because vigabatrin has previously been approved in another product (Sabril®). However, we expect that this extension will be available to us for CPP-115.

Federal law also provides for a five-year extension of marketing exclusivity (often called "new chemical entity exclusivity") where a product is approved for an active ingredient that was not previously approved in any

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other product. In August 2009, the FDA approved Lundbeck's NDAs for Sabril® (vigabatrin) tablets for the treatment of refractory complex partial seizures in patients who have failed several treatments and for sachets for the treatment of infantile spasms. These NDAs were granted the five year exclusivity described above (which will expire on August 21, 2014) and therefore that exclusivity will not be available to CPP-109 upon approval at a later date and will prevent the submission by us of a 505(b)(2) NDA for CPP-109 until after August 21, 2014.

Additionally, federal law provides for a period of three years of exclusivity following approval of a listed drug that contains previously approved active ingredients, but is approved in a new dosage form, route of administration or combination, or for a new use, the approval of which was required to be supported by new clinical trials conducted by or for the sponsor, during which the FDA cannot grant effective approval of an ANDA or a 505(b)(2) NDA based on that listed drug for the same new dosage form, route of administration or combination, or new use. Non-patent exclusivity under the Hatch-Waxman Act does not prevent a competitor from submitting, or the FDA from approving, a full 505(b)(1) NDA. Further, this three year period of exclusivity does not prevent an applicant from filing an ANDA or 505(b)(2) application prior to the expiration of the exclusivity where the applicant is requesting approval after the expiration of this three year period of exclusivity. We expect that CPP-109, if approved, will be eligible for this three year period of exclusivity.

### *Fast-Track Designation*

We have been granted Fast Track status for both CPP-109 and CPP-115 for the treatment of cocaine addiction. Under the fast track program, the sponsor of a new drug candidate intended for the treatment of a serious or life-threatening condition and which demonstrates the potential to address unmet medical needs for the condition may request the FDA to designate the drug candidate as a fast track drug concurrent with or after the filing of the IND for the drug candidate. The FDA must determine if the drug candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request. Once the FDA designates a drug as a fast track product, it is required to facilitate the development and expedite the review of that drug.

Products with fast track status are also eligible for accelerated approval; which is the ability to use surrogate endpoints that are reasonably likely to predict clinical benefits. Fast track status usually provides the opportunity for more interactions with the FDA and the FDA may initiate review of sections of a fast track drug's NDA before the application is complete. This rolling review is available if the applicant provides and the FDA approves a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. Additionally, the fast track designation may be withdrawn by the FDA if it believes that the designation is no longer supported by data emerging in the clinical trial process.

### *Orphan Drug Designation*

On September 15, 2010, CPP-115 was granted orphan drug designation by the FDA for the treatment of infantile spasms. Under the Orphan Drug Act of 1983 (ODA), the FDA incentivizes companies which develop drugs for diseases that affect fewer than 200,000 people in the United States. Among other benefits, upon approval by the FDA of a product intended to treat an orphan disease, the holder of the NDA is granted seven years of marketing exclusivity.

On February 9, 2012, CPP-115 was granted orphan medicinal product designation for the treatment of West Syndrome by the European Commission through the European Medicines Agency's Committee for Orphan Medicinal Products. To qualify as an orphan drug in the EU, a medication must be intended for the treatment of a life-threatening or chronically debilitating condition affecting no more than five in ten thousand people in the EU. There must also either be no satisfactory method to treat the disease or condition, or the new treatment must provide a significant benefit over the method of treatment currently available to those affected by the condition. Orphan drug designation in the EU allows us to obtain reductions in fees, assistance with development protocols, access to a centralized authorization procedure for all markets within the EU, as well as ten years of marketing exclusivity.

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Sabril® was previously granted orphan drug designation by the FDA for the treatment of infantile spasms. Upon approval of its NDA for Sabril® as a treatment of infantile spasms, Lundbeck was granted seven years of marketing exclusivity for Sabril® for the treatment for infantile spasms. Since we do not plan on seeking approval for CPP-109 for the treatment of infantile spasms, the marketing exclusivity granted to Lundbeck for Sabril® will not affect our product development efforts.

### *Priority Review*

Under FDA policies, a drug candidate intended for the treatment, diagnosis or prevention of a serious or life-threatening condition, demonstrating the potential to address an unmet medical need, or providing a significant improvement compared to marketed drugs is eligible for priority review. In a priority review, the FDA's goal is to review a submitted NDA within a six-month time frame from when the complete NDA is submitted.

### ***Anti-Kickback, False Claims Laws & The Prescription Drug Marketing Act***

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain marketing practices in the pharmaceutical industry in recent years. These laws include anti-kickback and false claims statutes. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Violations of the anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payer.

As part of the sales and marketing process, pharmaceutical companies frequently provide samples of approved drugs to physicians. The Prescription Drug Marketing Act, or the PDMA, imposes requirements and limitations upon the provision of drug samples to physicians, as well as prohibits states from licensing distributors of prescription drugs unless the state licensing program meets certain federal guidelines that include minimum standards for storage, handling and record keeping. In addition, the PDMA sets forth civil and criminal penalties for violations.

### **Properties**

We currently operate our business in leased office space in Coral Gables, Florida. We pay annual rent on our office space of approximately \$72,000.

### **Legal Proceedings**

We are not currently a party to any legal proceedings.



## MANAGEMENT

### Our Board of Directors

The following is a list of the members of our Board of Directors serving us as of the date of this prospectus.

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
Patrick J. McEnany	64	Chairman, President and Chief Executive Officer
Philip H. Coelho (2)(3)	67	Director
Hubert E. Huckel, M.D. (1)(2)(3)	80	Director
Charles B. O’Keeffe (2)(3)	72	Lead Independent Director
David S. Tierney, M.D. (1)(2)(3)	48	Director
Milton J. Wallace (1)(3)	76	Director

- (1) Member of the Audit Committee
- (2) Member of the Compensation Committee
- (3) Member of the Nominating and Corporate Governance Committee

**Patrick J. McEnany** is a co-founder of our company and currently serves as our Chairman, President and Chief Executive Officer (“CEO”). Mr. McEnany has been CEO and a director since our formation in January 2002. He became Chairman and President in March 2006. From 1999 to 2002, Mr. McEnany was a consultant to the pharmaceutical industry. From 1991 to 1997, Mr. McEnany was Chairman and CEO of Royce Laboratories, Inc., a generic pharmaceutical manufacturer. From 1997 to 1998, after the merger of Royce into Watson Pharmaceuticals, Inc., Mr. McEnany served as president of the wholly-owned Royce Laboratories subsidiary and vice president of corporate development for Watson Pharmaceuticals, Inc. From 1993 to 1997, he also served as vice chairman and a director of the National Association of Pharmaceutical Manufacturers. He currently serves on the board of directors for ThermoGenesis Corp. and the Jackson Memorial Hospital Foundation, and over the last 30 years has served as a director for numerous other public companies. The Board of Directors believes the characteristics that qualify Mr. McEnany for the Board include his long-term experience in the pharmaceutical industry, leadership experience and judgment and deep knowledge of our company’s business.

**Philip H. Coelho** has been a member of our board of directors since October 2002. Mr. Coelho is currently President and CEO of Synergenesis Inc. a company enabling regenerative cures through the application of innovative engineering and President of PHC Medical, Inc., a company providing consulting services for enterprises in the medical device related cell therapy field. Previously, from October 1986 until 2008, Mr. Coelho founded and was employed by ThermoGenesis Corp., a company focused on the blood processing and hospital/woundcare markets. Mr. Coelho was Chairman and Chief Executive Officer of ThermoGenesis from December 1989 until May 2007 and served as its Chief Technology Architect from June 2007 until May 2008. From October 1986 to September 1989, Mr. Coelho held the position of Vice President and Director of Research, Development and Manufacturing with ThermoGenesis. Prior to his association with ThermoGenesis, from October 1983 to October 1986 Mr. Coelho was President of Castleton, Inc., a company that developed and licensed ultra-rapid heat transfer technology to ThermoGenesis. Mr. Coelho currently serves on the Board of Directors of Medware Information Systems, Inc. and Ampio Pharmaceuticals, Inc. Mr. Coelho holds a Bachelor of Science degree in Mechanical Engineering from the University of California, Davis. The Board of Directors believes the characteristics that qualify Mr. Coelho for the Board include his long-term experience in the biopharmaceutical industry and his leadership experience and judgment.

**Hubert E. Huckel, M.D.** is a co-founder of our company and serves as a member of our board of directors. Dr. Huckel was Chairman of the Board until March 2006. Dr. Huckel spent more than 30 years with The Hoechst Group (now part of Sanofi-Aventis), and was at the time of his retirement in 1992 Executive Chairman of the Board of Hoechst-Roussel Pharmaceuticals, Inc. Dr. Huckel has continued his involvement in the prescription drug industry and currently serves on the boards of directors of Titan Pharmaceuticals, Inc. and Concordia Pharmaceuticals, Inc. Dr. Huckel received his M.D. from the University of Vienna, Austria and is a member of

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the Rockefeller University Council. The Board of Directors believes the characteristics that qualify Dr. Huckel for the Board include his leadership experience and judgment and his long-term pharmaceutical industry experience and knowledge.

**Charles B. O’Keeffe** has served as a member of our board of directors since December 2004 and became our lead independent director in July 2011. Mr. O’Keeffe also served as a consultant to us from December 2004 until June 2011. Mr. O’Keeffe is a Professor in the Departments of Pharmacology, Epidemiology and Community Health at Virginia Commonwealth University (“VCU”), and has served in such capacity since January 1, 2004. Mr. O’Keeffe joined VCU after retiring as President and Chief Executive Officer of Reckitt Benckiser Pharmaceuticals, Inc., a position Mr. O’Keeffe held from 1991 until 2003. As President of Drug Abuse Rehabilitation Services (from 1970 until 1971), he developed the first child-resistant, abuse-resistant vehicle for dispensing methadone. He served as president of Washington Reference Laboratories from 1972 until 1975, which provided toxicology services to the Department of Defense during the Vietnam War. He has served in the White House (from 1970 until 1973 and from 1976 until 1980) for three presidents — as advisor, special assistant for international health and deputy director for international affairs in the Office of Drug Abuse Policy — and has served on U.S. delegations to the World Health Assembly and the U.N. Commission on Narcotic Drugs. Mr. O’Keeffe played a significant role in helping Congress reach consensus on the Drug Addiction Treatment Act of 2000. The Board of Directors believes the characteristics that qualify Mr. O’Keeffe for the Board include his leadership experience and judgment, including his experience in the treatment of addiction.

**David S. Tierney, M.D.** has served as a member of our board of directors since October 2002. Dr. Tierney served as President and Chief Operating Officer (and a member of the board of directors) of Oceana Therapeutics, Inc., a private specialty pharmaceutical company between the organization of that company in 2008 and the sale of that company to Salix Pharmaceuticals, Ltd. in December 2011. Dr. Tierney also served as the President and CEO (and as a member of the board of directors) of Valera Pharmaceuticals, Inc. a specialty pharmaceutical company, between August 2000 and April 2007, when Valera completed a merger with Indevus Pharmaceuticals, Inc. Further, from January 2000 to August 2000, Dr. Tierney served as President of Biovail Technologies, a division of Biovail Corporation, a Canadian drug delivery company, where he was responsible for all of Biovail’s research and development, regulatory and clinical activities. Finally, from March 1997 to January 2000, Dr. Tierney was Senior Vice President of Drug Development at Roberts Pharmaceutical Corporation, where he was responsible for all research and development activities, and for drug development, medical affairs, worldwide regulatory affairs and chemical process development, as well as being part of the executive management team, and from December 1989 to March 1997, Dr. Tierney was employed by Élan Corporation, a pharmaceutical company, in a variety of management positions. Dr. Tierney is also a director of Bioject Medical Technologies, Inc. Dr. Tierney received his medical degree from the Royal College of Surgeons in Dublin, Ireland and was subsequently trained in internal medicine. The Board of Directors believes the characteristics that qualify Dr. Tierney for the Board include his leadership experience and judgment and his pharmaceutical industry experience and knowledge.

**Milton J. Wallace** became a member of our board of directors in October 2002. Mr. Wallace was a practicing attorney in Miami, Florida for over 40 years until 2005, when he retired. Mr. Wallace served as co-founder and chairman of Renex Corporation, a provider of kidney dialysis services, from July 1993 to February 2000, when that company was acquired by National Nephrology Associates, Inc. Mr. Wallace was also the co-founder and a director of Home Intensive Care, Inc., a provider of home infusion and dialysis services, from 1985 to July 1993, when that company was acquired by W.R. Grace & Co. Mr. Wallace currently serves as Chairman of the Board of Directors of Biscayne National Corp., as Vice Chairman of Preferred Care Partners, and as a member of the board of directors of Imperial Industries, Inc. The Board of Directors believes the characteristics that qualify Mr. Wallace for the Board include his leadership experience and judgment and healthcare industry experience and knowledge.

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### Our Executive Officers

The following list reflects our executive officers, as of the date of this prospectus, the capacity in which they serve us, and when they assumed office:

Name	Position(s)	Age	Executive Officer Since
Patrick J. McEnany	Chairman, President and Chief Executive Officer	64	January 2002
Steven R. Miller, Ph.D.	Chief Operating Officer and Chief Scientific Officer	50	April 2007
Alicia Grande, CPA, CMA	Vice President, Treasurer and Chief Financial Officer	41	January 2007
M. Douglas Winship	Vice President of Regulatory Operations	63	July 2006
Richard P. Rieger	Vice President, Commercial Operations	50	November 2011

### Executive Officers' Business Experience

**Patrick J. McEnany.** Biographical information regarding Mr. McEnany is set forth above in “*Our Board of Directors.*”

**Steven R. Miller, Ph.D.,** has served as Chief Operating Officer since January 2011 and as our Chief Scientific Officer since October 2009. Previously, commencing in April 2007, Dr. Miller was our Vice President of Pharmaceutical Development and Project Management. Dr. Miller has worked in the healthcare industry for over 25 years. Prior to joining us, Dr. Miller spent 15 years with various divisions of Watson Laboratories, a subsidiary of Watson Pharmaceuticals, Inc., most recently as Executive Director of R&D Operations. In this capacity, Dr. Miller managed a team of 75 in the testing of all R&D products for clinical trials, including method valuation, stability testing, operation of the R&D pilot plant, and assembly of the CMC section of drug applications, in addition to other responsibilities. Prior to this position, Dr. Miller was Director of Technology Transfer for Watson Laboratories, and Vice President of Research and Product Development for Royce Laboratories, which was subsequently acquired by Watson Laboratories. Prior to joining Royce Laboratories, Dr. Miller was Group Leader and Senior Scientist at Dade Behring. Before joining Dade Behring, Dr. Miller was both a Graduate Teaching Assistant and Research Assistant at the University of Maryland and University of Miami, respectively, and prior to that, served as an Analytical Chemist at the U.S. Food & Drug Administration. Dr. Miller received his Bachelor of Science Degree in Chemistry from the University of Maryland and his Ph.D. from the University of Miami.

**Alicia Grande, CPA, CMA ,** has served as our Vice President, Treasurer and Chief Financial Officer since December 2011 and as our Chief Accounting Officer since January 2007. Prior to joining us, since 2003 Ms. Grande was employed by The Hackett Group, Inc. (formerly known as Answerthink, Inc.), a publicly traded information technology consulting services company. Ms. Grande served in various capacities with The Hackett Group, most recently as Senior Director of Finance, and was responsible for all external and SEC financial reporting. Ms. Grande also served as head of The Hackett Group’s Sarbanes-Oxley Act compliance team. Prior to joining The Hackett Group, Ms. Grande was employed for more than 10 years in capacities from staff to most recently Senior Manager, Audit & Business Consulting, by several public accounting firms including Arthur Andersen LLP. Ms. Grande earned a Bachelor of Science degree in business administration, with majors in accounting and finance, from Syracuse University and a master of accounting degree from Florida International University.

**M. Douglas Winship** joined us in July 2006 as our Vice President of Regulatory Operations. Mr. Winship has worked in regulatory affairs in the healthcare industry for over 30 years. From 2004 to 2005, Mr. Winship was Vice President — Quality Assurance and Regulatory Affairs for Argos Therapeutics, Inc., a biotechnology company developing immunotherapy treatments for cancer, in Durham, North Carolina. Previously, Mr. Winship was employed by CEL-SCI Corp., a biotechnology company developing immune system based treatments, in Vienna, VA, from 1998 to 2002 as Senior Vice President — Regulatory Affairs and Quality Assurance, and from

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1994 through 1998 as Vice President — Regulatory Affairs and Quality Assurance. From 1988 to 1994, Mr. Winship was employed by Curative Technologies, Inc., a health-care company involved in the wound-healing market, first as Director of Regulatory Affairs and Quality Assurance and later as Vice President of Regulatory Affairs and Quality Assurance. Mr. Winship earned his Bachelor of Science in chemistry from Upsala College.

**Richard P. Rieger** joined us in November 2011 as our Vice President, Commercial Operations. Prior to his employment with us, from March 2011 to November 2011, Mr. Rieger served as Vice President, Business Development for PhaseRx, an early stage biotechnology company with a novel drug delivery technology; from January 2006 to March 2011, Mr. Rieger served as Senior Engagement Manager, Life Sciences and Medical Technology for L.E.K. Consulting, where he was a consultant for numerous engagements; from 2004 through 2006, Mr. Rieger served as Vice President, Business Development for Dendreon Corporation; and, from 1996 through 2004, Mr. Rieger served in varying capacities for Abbott Laboratories, including as the company's Director, Licensing and Business Development. Mr. Rieger holds a Bachelor of Science in Electrical Engineering from the University of Notre Dame and an MBA in Finance and Business Policy from the University of Chicago.

### **Our Scientific Advisory Board**

We rely on prominent scientists and physicians to advise us on the development of our drug candidates. All of our advisors are employed by organizations other than ours and may have commitments to or consulting or advisory agreements with other entities that may limit their availability to us. Our Scientific Advisory Board currently consists of the following members:

*Stephen L. Dewey, Ph.D.* serves as Chairman of our Scientific Advisory Board. Dr. Dewey, a former Senior Scientist at Brookhaven, is now the Head of the Center for Behavioral and Molecular Imaging at the Feinstein Institute for Medical Research at the North Shore -LIJ Health System. Dr. Dewey is a recognized authority in positron emission tomography, which uses certain compounds to visualize and quantify biochemical processes as well as the distribution and movement of drugs in the living human and animal body. Dr. Dewey was with Brookhaven since 1986, serving as Assistant Scientist, Associate Scientist, Scientist, Tenured Scientist and Senior Scientist. Dr. Dewey recently moved his entire research program to the Feinstein Institute for Medical Research. Dr. Dewey is a Professor of Molecular Medicine at the Hofstra University School of Medicine as well as a Research Professor of Psychiatry at the New York University School of Medicine and an Adjunct Professor of Neurobiology and Behavior and Cellular and Molecular Pharmacology at Stony Brook University. Dr. Dewey has been developing a novel approach to treating addiction and is devoted to research within this area. Dr. Dewey is a co-inventor of Brookhaven's patents for substance addiction, including Brookhaven's patents covering the use of vigabatrin to treat addiction.

*Jonathan Brodie, Ph.D., M.D.* is Professor of Psychiatry at New York University School of Medicine. Dr. Brodie completed his B.S. in Chemistry as a Ford Foundation Scholar and his Ph.D. in Physiological Chemistry (Organic Chemistry minor) at the University of Wisconsin-Madison. He was an NIH postdoctoral Fellow in Biochemistry at Scripps Clinic and Research Foundation and a tenured associate professor of Biochemistry at the School of Medicine at SUNY at Buffalo. He then received his M.D. at New York University School of Medicine and joined the faculty after completing his residency in psychiatry at NYU/Bellevue Medical Center. He is a former member of the Promotions and Tenure Committee of the School of Medicine as well as a member of the Executive Advisory Committee of the General Clinical Research Center and the Protocol Review Committee of the Center for Advanced Brain Imaging (CABI) of Nathan Kline Institute. For 15 years, he was the NYU Director of the Brookhaven National Laboratory/ NYUSOM collaboration investigating the use of positron emitters and PET in neuroscience and psychiatry. Additionally, Dr. Brodie serves as a psychopharmacology mentor to psychiatry residents. As a clinician, he treats patients in general issues of adult psychiatry including anxiety and depression. Dr. Brodie is a co-inventor of Brookhaven's patents for substance addiction, including Brookhaven's patents covering the use of vigabatrin to treat addiction. He is actively engaged in addiction and pain research as well as other aspects of neuropharmacology.

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*Robert D. Fechtner, M.D.* is Professor of Ophthalmology and Director, Glaucoma Division at the Institute of Ophthalmology and Visual Science UMDNJ — New Jersey Medical School, Newark, New Jersey. Dr. Fechtner received his B.S. in Biomedical Science and his medical degree from the University of Michigan School of Medicine. He completed his residency at Albert Einstein College of Medicine in New York. This was followed by a fellowship in glaucoma at the University of California, San Diego under a National Research Service Award from the National Institutes of Health. After several years on the faculty at University of Louisville, he and his family returned home to New Jersey where he joined the faculty at New Jersey Medical School. Dr. Fechtner has published over 70 articles and chapters and is on the editorial boards of American Journal of Ophthalmology and Journal of Glaucoma.

*Eugene Laska, Ph.D.* is Professor of Psychiatry at the Department of Psychiatry at New York University Medical Center. Dr. Laska received a Ph.D. in Mathematics at New York University, and then completed a PHS Postdoctoral Fellowship at the Department of Statistics at Stanford University. Dr. Laska is the Director of the Statistical Sciences Division of the Nathan Kline Institute for Psychiatric Research. Dr. Laska has also served as a consultant to large and small pharmaceutical companies in the areas of biostatistics and clinical trial design.

*Thomas R. Kosten, M.D.*, is the JH Waggoner Professor of Psychiatry, Pharmacology and Neuroscience, vice-Chair for Psychiatry and Co-director of the Institute for Clinical and Translational Research at Baylor College of Medicine. His other key appointments are Distinguished Professor of Psychiatry at Peking University Medical School and Professor of Epidemiology and of Behavioral Health at MD Anderson Cancer Prevention Center. He is a former Professor at Yale University School of Medicine, the founding Vice Chair for Addiction Psychiatry of the American Board of Psychiatry and Neurology, and Past President of both the American Academy of Addiction Psychiatry and the College on Problems of Drug Dependence. He is a Distinguished Fellow in the American Psychiatric Association and a Fellow of the American College of Neuropsychopharmacology. He has served as a Congressional Fellow in the US House of Representatives and is a long-standing member of various substance abuse commissions for the National Academy of Sciences. Since 2001, he has retained the ongoing distinction as a “Top Doc” in the field of addictions; an annual ranking by U.S. News and World Report. He is on the board of several notable journals in substance abuse. He has also published over 550 papers, books, and reviews describing his medication contributions including vaccines for cocaine, opiates and methamphetamine, and disulfiram as a pharmacogenetic treatment for cocaine dependence.

*Richard A. Rawson, Ph.D.* is a member of the University of California, Los Angeles Department of Psychology and is currently a Professor-in-Residence. He also serves as the Associate Director of the UCLA Integrated Substance Abuse Programs in the UCLA School of Medicine, where he oversees a portfolio of addiction research ranging from brain imaging studies to numerous clinical trials on pharmacological and psychosocial addiction treatments to the study of how new treatments are applied in the treatment system. During the past decade, Dr. Rawson has worked with the US State Department on large substance abuse research and treatment projects, exporting US technology and addiction science to Mexico, Thailand, Israel, Egypt, South Africa and the Palestinian Authority. He also directs the capacity building and training component of the United Nations International Network of Drug Treatment and Rehabilitation Resource Centers, and is currently principal investigator of the Pacific Southwest Addiction Technology Center and the NIDA Methamphetamine Clinical Trials Group. Dr. Rawson has published two books, 20 book chapters and over 175 professional papers. He also conducts more than 50 workshops annually, as well as paper presentations and training sessions. Dr. Rawson earned his Ph.D. in experimental psychology from the University of Vermont.

*Richard B. Silverman, Ph.D.* is the John Evans Professor of Chemistry at Northwestern University. He is the inventor of Pfizer’s \$3.7 billion/year Lyrica® (pregabalin), marketed worldwide for the treatment of epilepsy, neuropathic pain, fibromyalgia, and (in Europe) for generalized anxiety disorder. He has received numerous awards, most recently the 2011 E.B. Hershberg Award for Important Discoveries in Medicinally Active Substances from the American Chemical Society, the 2009 Perkin Medal, from the Society of Chemical Industry, and, in 2009, he was inducted into the American Chemical Society Medicinal Chemistry Hall of Fame; in 2011 he also was named a Fellow of the American Chemical Society. Dr. Silverman holds 44 patents, has published over 290 peer-reviewed articles and has written four books over his 35-year career in academia.

## EXECUTIVE COMPENSATION

### Summary Compensation Table

The following table sets forth information about the compensation earned during 2011, 2010, and 2009 by our Chief Executive Officer, our Chief Financial Officer and our Chief Operating Officer. We refer to these executive officers in this prospectus as the “Named Executive Officers”. Information is also included below about our former Chief Financial Officer, Jack Weinstein. This information is included for historical purposes.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Awards (\$)		Non-Equity Incentive Compensation	All Other Compensation (\$)(3)	Totals (\$)
				Stock (1)	Option (2)			
Patrick J. McEnany Chairman, President and CEO	2011	368,437	11,053	—	79,318	—	—	458,808
	2010	357,706	—	—	56,226	—	—	413,932
	2009	347,224	—	—	87,148	—	—	434,372
Alicia Grande Vice President, Treasurer and CFO	2011	159,650	4,790	—	71,386	—	6,386	242,212
	2010	155,000	—	—	29,987	—	6,200	191,187
	2009	149,202	—	—	46,902	—	5,944	202,048
Steven R. Miller, Chief Operating Officer and Chief Scientific Officer	2011	250,000	27,500	—	71,386	—	10,000	358,886
	2010	230,000	20,000	—	44,981	—	9,200	304,181
	2009	204,321	15,000	—	82,541	—	8,339	310,201
Jack Weinstein (4)	2011	233,929	7,018	—	—	—	8,997	249,944
	2010	227,115	—	—	44,981	—	9,085	281,181
	2009	220,460	—	—	71,977	—	8,783	301,220

- (1) The amounts reported in this column are based on the aggregate grant date fair value computed in accordance with FASB ASC Topic 718 for restricted stock grants to the named executives in the listed fiscal year.
- (2) The amounts reported in this column represent the grant date fair value of stock option awards granted in accordance with FASB ASC Topic 718 for the listed year. For additional information on the valuation assumptions used in the calculation of these amounts, refer to Note 12 to the “Notes to Financial Statements” in our audited financial statements that form a part of this prospectus.
- (3) All other compensation consists of 401(k) employer match.
- (4) Mr. Weinstein served as our Chief Financial Officer, Treasurer and Vice President, Business Development until December 16, 2011.

### Narrative to Summary Compensation Table

#### Overview of compensation structure

Our compensation structure for our CEO and CFO, who together with our COO are sometimes referred to herein as our “Named Executive Officers,” consists of three components — a base salary, discretionary bonuses based on performance and equity compensation. Each of these components is reflected in the Summary Compensation Table set forth above and is also discussed in further detail below.

#### Compensation program objectives and what our compensation program seeks to reward

Our executive compensation program is designed to retain our executive officers and to motivate them to increase stockholder value on both an annual and longer term basis primarily by positioning our business to maximize our product development efforts and over time to turn those efforts into revenues and net income. To that end, compensation packages include significant incentive forms of stock-based compensation to ensure that each executive officer’s interest is aligned with the interests of our stockholders.

### **Why each element of compensation is paid and how the amount of each element is determined**

The following is a brief discussion of each element of our Named Executive Officer compensation. The Compensation Committee intends to pay each of these elements in order to ensure that a desirable overall mix is established between base compensation and incentive compensation, cash and non-cash compensation and annual and long-term compensation. The Compensation Committee also intends to evaluate on a periodic basis the overall competitiveness of our executive compensation packages as compared to packages offered in the marketplace with which we compete for executive talent. Overall, our Compensation Committee believes that our executive compensation packages are currently appropriately balanced and structured to retain and motivate our Named Executive Officers.

**Salaries.** Mr. McEnany has an employment agreement with us, a copy of which is an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2011. Our other Named Executive Officers (Ms. Grande and Dr. Miller) are employees at will. Since 2009, any increases in the salaries of our Named Executive Officers have been made at the discretion of the Compensation Committee. Mr. McEnany, who serves as our Chief Executive Officer, receives no additional compensation for serving on our board of directors.

**Cash Incentive Compensation.** Cash incentive or bonus compensation is discretionary under our employment agreement with Mr. McEnany. All cash incentive compensation grants are intended to be paid in accordance with Section 162(m) of the Internal Revenue Code of 1986, as amended. We paid a bonus of \$20,000, \$20,000, and \$15,000, respectively, to Dr. Miller during 2011, 2010 and 2009 for services performed by Dr. Miller in each of these years. In 2011, we paid a year-end cash bonus of three percent of base salary to each of our employees, including each of our Named Executive Officers. This bonus for 2011 services was awarded on a discretionary basis by the Compensation Committee based on the Compensation Committee's assessment of the employees' performance during 2011.

**Equity Compensation.** Prior to our IPO, we granted stock options to certain of our officers, directors and consultants for their services. These stock options were granted pursuant to written agreements. We have also granted stock options and restricted stock units to our executive officers, directors and consultants under the 2006 Plan, and all future grants are expected to be made under the 2006 Plan. Under the 2006 Plan, unless otherwise determined by the Compensation Committee, equity compensation awards generally vest over a four-year period.

On December 16, 2011, we granted stock options to each of our employees, including our Named Executive Officers. These options were priced at the closing price of our common stock on December 16, 2011 (the grant date). One-third of such options vested immediately, and the remaining options vest in equal parts over a two-year period.

**Perquisites.** We offer health benefits to each of our Named Executive Officers. Such benefits are identical to those received by all of our employees. None of our Named Executive Officers receives any further perquisite benefit.

### **Employment Agreements and Potential Payments Upon Termination or Change in Control**

We have an employment agreement with Patrick J. McEnany, our Chairman, President and Chief Executive Officer, which provides for the payment of a base salary plus bonus compensation based on performance. Mr. McEnany's employment agreement also contains a "change of control" severance arrangement if the employee is not retained in our employment after a change of control. The employment agreement for Mr. McEnany expires on November 8, 2013. After the expiration of his employment agreement, Mr. McEnany becomes an employee-at-will, and he will still be entitled to payments for termination without cause or in the event of a change in control, as set forth below.

Pursuant to the employment agreement that we have with Mr. McEnany, we may terminate his employment at any time for "cause", in which he would have no right to receive compensation or other benefits for any period after termination. Termination for "cause" may also occur when the executive performs dishonest acts intended

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to benefit the executive personally, the executive's willful neglect of the executive's duties, or failure to perform such duties because of gross negligence on the part of the executive, violation of any obligation under the executive's employment agreement not remedied by the executive after ten (10) days notice of such violation, or the executive's arrest for, conviction of or plea of nolo contendere to a crime constituting a felony.

In certain circumstances, Mr. McEnany is entitled to severance pay. These circumstances include (1) his voluntary resignation after a change in control or a demotion, or our failure to perform our material obligations under his employment agreement and our failure to remedy such violation within ten (10) days notice of such violation, (2) his termination without cause, (3) his total and permanent disability, or (4) his death.

A change in control under our employment agreement with Mr. McEnany includes:

- the sale, transfer, assignment or other disposition (including by merger or consolidation, but excluding any sales by stockholders made as part of an underwritten public offering of the common stock of the company), in one transaction or a series of related transactions, of more than fifty percent (50%) of the voting power represented by the then-outstanding capital stock of the Company to one or more Persons (other than to the executive officer or a "group" (as defined under the Securities Exchange Act of 1934) in which the executive officer is a member);
- the sale of substantially all of the assets of the Company (other than a transfer of financial assets made in the ordinary course of business for the purpose of securitization); or
- the liquidation or dissolution of the Company.

Under any of those circumstances, the executive's severance package includes:

- the payment of any accrued but unpaid annual bonus at the time of termination;
- the payment of the executive's base salary for a period of at least twelve (12) months; and
- continuation of the executive's medical benefits (in case of disability), including to his family (in case of death or disability).

Effective December 16, 2011, we entered into a letter agreement with Ms. Grande regarding her continued employment with us. Under such letter agreement, if Ms. Grande is terminated without "cause" (such term is defined in the same manner as set forth above in the description of Mr. McEnany's employment agreement), she will receive twelve (12) months of base salary. Ms. Grande will also receive twelve (12) months of base salary if she resigns from her employment for "good reason." "Good reason" is defined as any material alteration by us of positions, functions, duties, or responsibilities, or a material decrease in base salary not agreed to by Ms. Grande.

The amounts payable to each executive officer with an employment agreement or letter agreement, in the event of termination, death, disability, or retirement, are set forth in the following chart assuming the event occurred on December 31, 2011:

Name	Payment Due Upon Termination either by Company without Cause or Officer for Good Reason (1)	Payment Due Upon the Death or Permanent Disability of Officer (1)	Payment Due Upon a Termination by Company with Cause or Resignation or Retirement by Officer (1)	Payment Due upon a Change of Control
Patrick J. McEnany	\$ 368,437	\$ 430,758	—	\$ 736,874
Alicia Grande	\$ 159,650	—	—	\$ 159,650
Steven R. Miller	—	—	—	\$ 250,000

(1) Under our employment agreement with Mr. McEnany and our letter agreement with Ms. Grande, these amounts would have been payable to Mr. McEnany and Ms. Grande had their employment been terminated on December 31, 2011.



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### Equity Compensation Plan Information

#### Grants of Plan-Based Awards for 2011

The following table provides information relating to options granted during the fiscal year ended December 31, 2011:

Name	Grant Date (1)	Number of Securities Underlying Options (#) (2)	Exercise Price of Option Awards (\$/share)	Grant Date Fair Value of Option Awards
Patrick J. McEnany	12/16/2011	100,000	\$ 1.07	\$ 0.79
Alicia Grande	12/16/2011	90,000	\$ 1.07	\$ 0.79
Steven R. Miller	12/16/2011	90,000	\$ 1.07	\$ 0.79

(1) Options were granted at a meeting of the Compensation Committee on the grant date.

(2) Options vest one-third on the grant date, one-third on the first anniversary of the grant date and one-third on the second anniversary of the grant date.

#### Securities Authorized for Issuance Under Equity Compensation Plans

The following table gives information about our common stock that may be issued upon the exercise of options under all of our existing equity compensation plans as of December 31, 2011:

Plan Category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	Number of securities remaining available for equity compensation plans
Securities issued under the 2006 Plan	2,263,888	\$ 1.21	239,270
Securities issued outside the 2006 Plan	1,459,220	\$ 0.69	—

#### 2006 Stock Incentive Plan

In July 2006, we adopted the 2006 Plan. We have reserved 2,688,828 shares for issuance under the 2006 Plan. At our 2012 annual meeting of stockholders, which is currently scheduled for June 1, 2012, we intend to request that our stockholders approve an increase in the number of shares available for issuance under the 2006 Plan from 2,688,828 to 3,688,828,

To date, options to purchase 2,508,888 shares of our common stock and 55,484 restricted shares of our common stock have been granted under the 2006 Plan. The purpose of the 2006 Plan is to continue to advance our interests by allowing us to attract, retain, reward, and motivate individuals eligible under the 2006 Plan to strive for our continued success by giving them additional opportunities to purchase further equity stakes in our company.

**Administration.** The Compensation Committee of our board of directors administers the 2006 Plan and determines which persons will receive grants of awards and the type of award to be granted to such persons. The Compensation Committee also interprets the provisions of the 2006 Plan and makes all other determinations that it deems necessary or advisable for the administration of the 2006 Plan.

**Eligibility.** All eligible individuals will be able to participate in the 2006 Plan. Eligible individuals include our directors, officers, employees, independent contractors and consultants, as well as individuals who have accepted an offer of employment with us.

**Transferability of awards.** Awards are non-transferable other than by will or by the laws of descent and distribution or as otherwise expressly allowed by the Compensation Committee pursuant to a gift to members of

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an eligible person's immediate family. The gift may be directly or indirectly transferred, by means of a trust, partnership, or otherwise. Stock options and stock appreciation rights may be exercised only by the optionee, any such permitted transferee or a guardian, legal representative or beneficiary.

**Change of control.** If there is a change in control of the company, any award that is not exercisable and vested may become immediately exercisable and vested in the sole and absolute discretion of the Compensation Committee. Vested awards will be deemed earned and payable in full. The Compensation Committee may also terminate the awards, entitling participants to a cash payment. If we are liquidated or dissolved, awards may also be converted into the right to receive liquidation proceeds. In the event that the Compensation Committee does not terminate or convert an award upon a change of control, then the award will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation

**Amendments, modifications and termination.** Our board of directors may, at any time, suspend or terminate the 2006 Plan, but the board may not impair the rights of holders of outstanding awards without the holder's consent. No amendment to the 2006 Plan may be made without consent of our stockholders. In the event that an award is granted to a person residing outside of the United States, the board may, at its discretion, modify the terms of the agreement to comply with the laws of the country of which the eligible individual is a resident. The 2006 Plan will terminate 10 years after its effective date.

### Outstanding Equity Awards at Fiscal Year End

The following table sets forth certain information regarding equity-based awards held by our Named Executive Officers as of December 31, 2011.

Name	OUTSTANDING EQUITY AWARDS AT DECEMBER 31, 2011						Stock Awards			
	Option Awards			Equity Incentive Plan Awards:			Market Value of Shares or Units of Stock that Have Not Vested		Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested	
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Number of Securities underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock that Have Not Vested	Market Value of Shares or Units of Stock that Have Not Vested	That Have Not Vested	That Have Not Vested	
Patrick J. McEnany	364,804	—	—	0.69	07/01/12	—	—	—	—	
	364,804	—	—	0.69	03/04/15	—	—	—	—	
	15,000	—	—	2.49	11/12/13	—	—	—	—	
	150,000	—	—	0.90	10/20/14	—	—	—	—	
	50,000	25,000	—	1.09	11/05/15	—	—	—	—	
	33,333	66,667	—	1.07	12/16/16	—	—	—	—	
Alicia Grande	15,000	—	—	2.49	11/12/13	—	—	—	—	
	90,000	—	—	0.90	10/20/14	—	—	—	—	
	26,666	13,334	—	1.09	11/05/15	—	—	—	—	
	30,000	60,000	—	1.07	12/16/16	—	—	—	—	
Steven R. Miller, Ph.D.	15,000	—	—	2.49	11/12/13	—	—	—	—	
	175,000	—	—	0.90	10/20/14	—	—	—	—	
	40,000	20,000	—	1.09	11/05/15	—	—	—	—	
	30,000	60,000	—	1.07	12/16/16	—	—	—	—	

### Option Exercises

No options have been exercised by any of our Named Executive Officers through December 31, 2011.

**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

As of the date of this prospectus, we had 24,741,520 shares of our common stock outstanding. The following table sets forth, as of the date of this prospectus, certain information regarding the shares of common stock owned of record or beneficially by (i) each person who owns beneficially more than 5% of our outstanding common stock; (ii) each of our directors and Named Executive Officers; and (iii) all directors and executive officers as a group.

Name	Shares Beneficially Owned (1)	
	Number	Percentage
Patrick J. McEnany (2)(3)	4,326,410	16.8
Hubert E. Huckel, M.D. (4)	1,998,742	7.8
Federated Investors, Inc. (5)	3,393,196	13.7
FMR, LLC (6)	1,940,828	7.8
Philip H. Coelho (7)	177,636	*
Charles B. O’Keeffe (8)	255,876	1.0
David S. Tierney (9)	289,401	1.2
Milton J. Wallace (9)(10)	507,084	2.0
Alicia Grande (11)	190,712	*
Steven R. Miller (12)	334,754	1.3
All officers and directors as a group (9 persons)	8,290,409	30.0

\* Less than one percent

- (1) Unless otherwise indicated, each person named in the table has the sole voting and investment power with respect to the shares beneficially owned. Further, unless otherwise noted, the address for each person named in this table is c/o Catalyst Pharmaceutical Partners, Inc.
- (2) Includes 145,922 shares owned by Mr. McEnany’s wife.
- (3) Includes options to purchase 977,941 shares of our common stock, of which 729,608 shares are exercisable at a price of \$0.69 per share, 15,000 shares are exercisable at a price of \$2.49 per share, 150,000 shares are exercisable at a price of \$0.90 per share, 50,000 shares are exercisable at \$1.09 per share and 33,333 shares are exercisable at a price of \$1.07 per share. Excludes unvested stock options to purchase 25,000 shares of our common stock at an exercise price of \$1.09 per share which will vest on November 5, 2012, and 66,667 shares of our common stock at an exercise price of \$1.07 per share, which will vest on the following schedule: (i) 12/16/2012: 33,333 shares, and (ii) 12/16/2013: 33,334 shares.
- (4) Includes options to purchase 819,608 shares of our common stock, of which 729,608 shares are exercisable at a price of \$0.69 per share, 5,000 shares are exercisable at a price of \$3.15 per share, 5,000 shares are exercisable at a price of \$2.55 per share, 30,000 shares are exercisable at a price of \$0.90 per share, 25,000 shares are exercisable at a price of \$1.09 per share, and 25,000 shares are exercisable at a price of \$1.07 per share.
- (5) Reported in a Schedule 13G filed by Federated on February 9, 2012. According to the Schedule 13G, Federated’s address is Federated Investors Tower, Pittsburgh, PA 15222-3779.
- (6) Reported in a Schedule 13G filed by FMR, LLC on February 14, 2012. According to the Schedule 13G, FMR’s address is 82 Devonshire Street, Boston, MA 02109.
- (7) Includes options to purchase 90,000 shares of our common stock, of which 5,000 shares are exercisable at a price of \$3.15 per share, 5,000 shares are exercisable at a price of \$2.55 per share, 30,000 shares are exercisable at a price of \$0.90 per share, 25,000 shares are exercisable at a price of \$1.09 per share, and 25,000 shares are exercisable at a price of \$1.07 per share.
- (8) Includes options to purchase 175,000 shares of our common stock, of which 5,000 shares are exercisable at \$3.15 per share, 5,000 shares are exercisable at \$2.55 per share, 105,000 shares are exercisable at \$0.90 per share, 30,000 shares are exercisable at \$1.09 per share, and 30,000 shares are exercisable at a price of \$1.07 per share.

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- (9) Includes options to purchase 104,000 shares of our common stock, of which 7,000 shares are exercisable at a price of \$3.15 per share, 7,000 shares are exercisable at a price of \$2.55 per share, 30,000 shares are exercisable at a price of \$0.90 per share, 30,000 shares are exercisable at a price of \$1.09 per share, and 30,000 shares are exercisable at a price of \$1.07 per share.
- (10) Includes 349,184 shares owned jointly by Mr. Wallace and his wife, Patricia Wallace and 30,000 shares owned by Mr. Wallace through his Individual Retirement Account.
- (11) Includes options to purchase 161,666 shares of our common stock, of which options to purchase 15,000 shares are exercisable at \$2.49 per share, options to purchase 90,000 shares are exercisable at \$0.90 per share, options to purchase 26,666 shares are exercisable at \$1.09 per share, and options to purchase 30,000 shares are exercisable at a price of \$1.07 per share. Excludes unvested options to purchase 13,334 shares of common stock at an exercise price of \$1.09 per share vesting on 11/5/2012 and 60,000 shares of common stock at an exercise price of \$1.07 per share that will vest on the following schedule: (i) 12/16/2012: 30,000, and (ii) 12/16/2013: 30,000.
- (12) Includes options to purchase 260,000 shares of our common stock, of which options to purchase 15,000 shares are exercisable at \$2.49 per share, options to purchase 175,000 shares are exercisable at \$0.90 per share, options to purchase 40,000 shares are exercisable at \$1.09 per share, and options to purchase 30,000 shares are exercisable at a price of \$1.07 per share. Excludes unvested stock options to purchase 20,000 shares of our common stock at an exercise price of \$1.09 per share vesting on 11/5/2012 and 60,000 shares of our common stock at an exercise price of \$1.07 per share that will vest on the following schedule: (i) 12/16/2012: 30,000, and (ii) 12/16/2013: 30,000.

## GENERAL DESCRIPTION OF OUR COMMON STOCK

The following summary of the material features of our common stock does not purport to be complete and is subject to, and qualified in its entirety by the provisions of our Certificate of Incorporation, our Bylaws and other applicable law. See “*Where You Can Find Additional Information*”.

Our authorized capital currently consists of 100,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. As of the date of this prospectus, we had 24,741,520 shares of our common stock outstanding. There are no shares of preferred stock outstanding.

We are a Delaware corporation, and were incorporated on July 24, 2006. We are the successor by merger to Catalyst Pharmaceutical Partners, Inc., a Florida corporation, which was incorporated in January 2002.

### Common Stock

Each holder of common stock is entitled to one vote for each share held of record on all matters presented to our stockholders, including the election of directors. In the event of our liquidation, dissolution, or winding-up, the holders of common stock are entitled to share ratably and equally in our assets, if any, that remain after paying all debts and liabilities and the liquidation preferences of any outstanding preferred stock. The common stock has no preemptive or cumulative rights and no redemption or conversion provisions.

Holders of our common stock are entitled to receive dividends if, as, and when declared by our Board of Directors out of funds legally available therefor, subject to the dividend and liquidation rights of any preferred stock that may be issued and outstanding, all subject to any dividend restrictions in our credit facilities. No dividend or other distribution (including redemptions and repurchases of shares of capital stock) may be made, if after giving effect to such distribution, we would not be able to pay our debts as they come due in the usual course of business, or if our total assets would be less than the sum of our total liabilities plus the amount that would be needed at the time of a liquidation to satisfy the preferential rights of any holders of preferred stock.

### Provisions of the Certificate and Bylaws

A number of provisions of our certificate of incorporation and bylaws concern matters of corporate governance and the rights of stockholders. Certain of these provisions, as well as the ability of our board of directors to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof, may be deemed to have an anti-takeover effect and may discourage takeover attempts not first approved by the board of directors (including takeovers which certain stockholders may deem to be in their best interests). To the extent takeover attempts are discouraged, temporary fluctuations in the market price of the common stock, which may result from actual or rumored takeover attempts, may be inhibited. These provisions, together with the classified board of directors (which we are proposing to declassify) and the ability of the board to issue preferred stock without further stockholder action, also could delay or frustrate the removal of incumbent directors or the assumption of control by stockholders, even if such removal or assumption would be beneficial to our stockholders. These provisions also could discourage or make more difficult a merger, tender offer or proxy contests, even if they could be favorable to the interests of stockholders, and could potentially depress the market price of the common stock. The board of directors believes that these provisions are appropriate to protect our interest and the interests of our stockholders.

**Issuance of Rights.** On September 20, 2011, the Board of Directors approved the adoption of a stockholder rights plan. The rights plan was implemented through our entry into a rights agreement with Continental Stock Transfer & Trust Company, as rights agent, and the declaration of a non-taxable dividend distribution of one preferred stock purchase right (each, a Right) for each outstanding share of our common stock. The dividend was paid on October 7, 2011 to holders of record as of that date. Each right is attached to and trades with the associated share of common stock. The rights will become exercisable only if a person acquires beneficial ownership of 17.5% or more of our common stock (or, in the case of a person who beneficially owned 17.5% or

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more of our common stock on the date the rights plan was adopted, such person acquires beneficial ownership of any additional shares of our common stock) or after the date of the Rights Agreement, commences a tender offer that, if consummated, would result in beneficial ownership by a person of 17.5% or more of our common stock. The rights will expire on September 20, 2016, unless the rights are earlier redeemed or exchanged.

Meetings of Stockholders. The bylaws provide that a special meeting of stockholders may be called only by the board of directors unless otherwise required by law. The bylaws provide that only those matters set forth in the notice of the special meeting may be considered or acted upon at that special meeting, unless otherwise provided by law. In addition, the bylaws set forth certain advance notice and informational requirements and time limitations on any director nomination or any new business which a stockholder wishes to propose for consideration at an annual meeting of stockholders.

No Stockholder Action by Written Consent. The certificate provides that any action required or permitted to be taken by our stockholders at an annual or special meeting of stockholders must be effected at a duly called meeting and may not be taken or effected by a written consent of stockholders in lieu thereof.

Amendment of the Certificate. The certificate provides that an amendment thereof must first be approved by a majority of the board of directors and (with certain exceptions) thereafter approved by the holders of a majority of the total votes eligible to be cast by holders of voting stock with respect to such amendment or repeal; provided, however, that the affirmative vote of 80% of the total votes eligible to be cast by holders of voting stock, voting together as a single class, is required to amend provisions relating to the establishment of the board of directors and amendments to the certificate.

Amendments of Bylaws. The certificate provides that the board of directors or the stockholders may amend or repeal the bylaws. Such action by the board of directors requires the affirmative vote of a majority of the directors then in office. Such action by the stockholders requires the affirmative vote of the holders of at least two-thirds of the total votes eligible to be cast by holders of voting stock with respect to such amendment or repeal at an annual meeting of stockholders or a special meeting called for such purposes, unless the board of directors recommends that the stockholders approve such amendment or repeal at such meeting, in which case such amendment or repeal shall only require the affirmative vote of a majority of the total votes eligible to be cast by holders of voting stock with respect to such amendment or repeal.

### **Certain Anti-Takeover Matters**

We are subject to the provisions of Section 203 of the Delaware General Corporation Law, or Delaware law, regulating corporate takeovers. In general, these provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholders for a period of three years following the date that the stockholder became an interested stockholder, unless:

- either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder is approved by our board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participates do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after that date, the business combination is approved by our board of directors and authorized at a meeting of stockholders, and not by written consent, by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

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Section 203 defines “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

A Delaware corporation may opt out of this provision either with an express provision in its original certificate of incorporation or in an amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

### **Limitation of Liability and Indemnification Matters**

Our certificate of incorporation limits the liability for monetary damages for breach of fiduciary duty by members of our Board of Directors, except for liability that cannot be eliminated under Delaware law. Under Delaware law, our directors have a fiduciary duty to us which is not eliminated by this provision in our certificate of incorporation. In addition, each of our directors is subject to liability under Delaware law for breach of their duty of loyalty for acts or omissions which are found by a court of competent jurisdiction to be not in good faith or which involve intentional misconduct or knowing violations of law for actions leading to improper personal benefit to the director and for payments of dividends or approval of stock repurchases or redemptions that are prohibited by Delaware law. This provision does not affect our directors’ responsibilities under any other laws, such as federal securities laws.

Delaware law provides that the directors of a company will not be personally liable for monetary damages for breach of their fiduciary duty as directors, except for liability for any of the following:

- any breach of a director’s duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Delaware law provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which our directors and officers may be entitled to under our bylaws, any agreement, a vote of stockholders or otherwise. Our certificate of incorporation and bylaws eliminate the personal liability of directors to the maximum extent permitted by Delaware law. In addition, our certificate of incorporation and bylaws provide that we may fully indemnify any person who is or was a party to or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or

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investigative) by reason of the fact that such person is or was one of our directors, officers, employees or other agents, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding.

**Listing**

Our common stock is listed on the Nasdaq Capital Market and trades under the symbol "CPRX".

**Transfer Agent and Registrar**

Our transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company. They are located at 17 Battery Park, 8<sup>th</sup> Floor, New York, New York 10004. They can be reached via telephone at (212) 509-4000.



## UNDERWRITING

We and the underwriters for this offering named below have entered into an underwriting agreement with respect to the shares of our common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of common stock set forth opposite its name below. Cowen and Company, LLC is the representative of the underwriters.

<u>Underwriter</u>	<u>Number of Shares</u>
Cowen and Company, LLC	
Roth Capital Partners, LLC	
Total	

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares of common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

### Over-allotment option to purchase additional shares

We have granted the underwriters an option to purchase up to an additional \_\_\_\_\_ shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

### Discounts and Commissions

We estimate that the total expenses of the offering, excluding the underwriting discount, will be approximately \$ \_\_\_\_\_ and are payable by us, which includes \$150,000 for reasonable and documented out-of-pocket expenses incurred by the underwriters in connection with the offering.

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us assuming both no exercise and full exercise of the underwriters' over-allotment option.

	<u>Per Share</u>	<u>With Over-allotment</u>	<u>Total</u>	<u>Without over-allotment</u>
<b>Public offering price</b>	\$	\$		\$
<b>Underwriting discount</b>				
<b>Proceeds, before expenses, to us</b>				

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The underwriters propose to offer the shares of common stock to the public at the public offering prices set forth on the cover of this prospectus. The underwriters may offer shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ per share of common stock. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

### **Discretionary Accounts**

The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

### **Stabilization**

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Over-allotment transactions involve sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase pursuant to an over-allotment option. As there is no over-allotment option in this offering, any over-allotment transactions will not involve a covered short position. In a naked short position, the number of shares involved is greater than the number of shares sold to the underwriters. The underwriters may close out any short position by purchasing shares on the open market.
- Syndicate covering transactions involve purchases of shares of common stock in the open market after the distribution has completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the over-allotment option. Because there is no over-allotment option and any over-allotment transaction will result in a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.

These stabilizing transactions and syndicate covering transactions may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

### **Lock-Up Agreements**

Pursuant to certain “lock-up” agreements, we and our executive officers and directors, have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly,

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or make any demand or request or exercise any right with respect to the registration of, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC, for a period of 90 days after the date of the pricing of the offering. The 90-day restricted period will be automatically extended if (i) during the last 17 days of the 90-day restricted period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period, in either of which case the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the public announcement of the material news or the occurrence of the material event, as applicable, unless (i) we meet certain requirements of NASD Rule 2711(f)(4) and the applicable rules under the Securities Act or (ii) Cowen and Company, LLC waives, in writing, such extension.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions to the lock-up for executive officers and directors are: (a) the transfer of shares as a bona fide gift to any member of the immediate family of the executive officer or director or to a trust the beneficiaries of which are exclusively the executive officer or director or member of the executive officer's immediate family; (b) by will or intestate succession upon the death of the executive officer or director; (c) as a bona fide gift to a charity or educational institution; (d) the establishment by the executive officer or director of a trading plan in accordance with Rule 10b5-1(c) under the Exchange Act, provided that no prohibited sale or other disposition under such trading plan may occur during the 90-day restricted period, or (e) the exercise of any of the executive officer's or director's rights to acquire shares of our common stock or other of our securities issued pursuant to any stock option or similar equity incentive or compensation plan approved by our board of directors ("Equity Incentive Grants"), including the delivery to us or forfeiture of any shares of our common stock as payment for exercised shares in any "cashless" exercise or the exercise of any previously granted stock option on a "cashless basis"; provided that such Equity Incentive Grant is already in effect as of the date of the "lock-up" agreement is executed, and provided further that, to the extent the executive officer or director receives shares of our common stock as part of an Equity Incentive Grant, the executive officer or director may offer, sell, contract to sell, or otherwise dispose of, or forfeit to us, up to the number of such shares of our common stock necessary to satisfy withholding tax obligations incurred by the undersigned in connection with the receipt or exercise of such Equity Incentive Grant; each of which is subject to certain conditions set forth in the lock-up agreements with the executive officers and directors. The exceptions to the lock-up for us are: (i) our sale of shares in this offering; (ii) the issuance of common stock or options to acquire common stock to employees, directors and/or consultants pursuant to our employee benefit plans, qualified stock option plans or other employee compensation plans as such plans are in existence on the date of the underwriting agreement; and (iii) the issuance of common stock pursuant to the exercise of options, warrants or rights outstanding on the date of the underwriting agreement; each of which is subject to certain conditions set forth in the underwriting agreement.

### **Foreign Distribution**

*United Kingdom.* Each of the underwriters has represented and agreed that:

- it has not made or will not make an offer of the securities to the public in the United Kingdom within the meaning of section 120B of the Financial Services and Markets Act of 2000 (as amended), or the FSMA, except to legal entities which are authorized or regulated to operate in the financial markets, or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority, or FSA;
- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of

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section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and

- it has complied and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from those or otherwise involving the United Kingdom.

*Switzerland.* The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

*European Economic Area.* In relation to each Member State of the European Economic Area (Iceland, Norway and Lichtenstein in addition to the member states of the European Union) that has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of the securities to the public in that Relevant Member State prior to the publication of a prospectus in relation to the securities that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of the securities to the public in that Relevant Member State at any time:

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts; and
- in any other circumstances which do not require the publication by the issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any securities under, the offer contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with us and each underwriter that:

- it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and
- in the case of any securities acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (1) the securities acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representative of the underwriters has been given to the offer or resale; or (2) where securities have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those securities to it is not treated under the Prospectus Directive as having been made to such persons.

For the purposes of the provisions in the two immediately preceding paragraphs, the expression an “offer of the securities to the public” in relation to the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

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### **Electronic Offer, Sale and Distribution of Securities**

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representative may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

### **Other Relationships**

Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

**DISCLOSURE OF SEC POSITION ON INDEMNIFICATION  
FOR SECURITIES ACT LIABILITIES**

Our certificate of incorporation, as amended, provides that no officer or director shall be personally liable to this corporation or our stockholders for monetary damages except as provided pursuant to Delaware law. Our amended and restated certificate of incorporation and our amended and restated bylaws also provide that we shall indemnify and hold harmless each person who serves at any time as a director, officer, employee or agent of our company from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he is or was a director, officer, employee or agent of our and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. We also have the power to defend such person from all suits or claims in accord with the Delaware law. The rights accruing to any person under our amended and restated certificate of incorporation and our amended and restated bylaws do not exclude any other right to which any such person may lawfully be entitled, and we may indemnify or reimburse such person in any proper case, even though not specifically provided for by our amended and restated certificate of incorporation and our amended and restated bylaws.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act"), may be permitted to our officers, directors and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

**LEGAL MATTERS**

Akerman Senterfitt, Miami, Florida, has rendered an opinion with respect to the validity of the shares of common stock covered by this prospectus. Certain members, employees and of counsel of that firm beneficially own shares or options to acquire shares of our common stock. Legal matters in connection with the offering will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

**EXPERTS**

The financial statements included in this prospectus have been so included in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing in giving said report.

**WHERE YOU CAN FIND ADDITIONAL INFORMATION**

We file annual, quarterly and special reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at (800) SEC-0330 for further information on the operating rules and procedures for the public reference room.

INDEX TO FINANCIAL STATEMENTS

Years ended December 31, 2011, 2010, and 2009

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**REPORT OF INDEPENDENT REGISTERED  
PUBLIC ACCOUNTING FIRM**

Board of Directors and Stockholders  
Catalyst Pharmaceutical Partners, Inc.

We have audited the accompanying balance sheets of Catalyst Pharmaceutical Partners, Inc. (a Development Stage Company) (the "Company") as of December 31, 2011 and 2010, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2011 and the period from January 4, 2002 (date of inception) through 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 audit 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 financial statements referred to above present fairly, in all material respects, the financial position of Catalyst Pharmaceutical Partners, Inc. (a Development Stage Company) as of December 31, 2011 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011 and the period from January 4, 2002 (date of inception) through December 31, 2011 in conformity with accounting principles generally accepted in the United States of America.

/s/ Grant Thornton LLP  
\_\_\_\_\_  
GRANT THORNTON LLP

Miami, Florida  
March 30, 2012



**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
**(a development stage company)**

**BALANCE SHEETS**

	December 31, 2011	December 31, 2010
<b>ASSETS</b>		
Current Assets:		
Cash and cash equivalents	\$ 6,029,067	\$ 5,475,158
Government grant receivable	—	134,025
Prepaid expenses	199,116	166,221
Total current assets	6,228,183	5,775,404
Property and equipment, net	12,186	45,573
Deposits	8,888	10,511
Total assets	<u>\$ 6,249,257</u>	<u>\$ 5,831,488</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current Liabilities:		
Accounts payable	\$ 263,934	\$ 105,933
Accrued expenses and other liabilities	569,867	193,028
Total current liabilities	833,801	298,961
Accrued expenses and other liabilities, non-current	9,518	14,748
Warrants liability, at fair value	1,645,240	—
Total liabilities	2,488,559	313,709
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value, 5,000,000 shares authorized: none issued and outstanding at December 31, 2011 and 2010	—	—
Common stock, \$0.001 par value, 100,000,000 shares authorized; 24,701,420 shares and 19,394,737 shares issued and outstanding at December 31, 2011 and 2010, respectively	24,701	19,395
Additional paid-in capital	41,838,614	37,209,939
Deficit accumulated during the development stage	(38,102,617)	(31,711,555)
Total stockholders' equity	3,760,698	5,517,779
Total liabilities and stockholders' equity	<u>\$ 6,249,257</u>	<u>\$ 5,831,488</u>

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

**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
**(a development stage company)**

**STATEMENTS OF OPERATIONS**

	<u>Year Ended December 31,</u>			<b>Cumulative period from January 4, 2002 (date of inception) through December 31, 2011</b>
	<u>2011</u>	<u>2010</u>	<u>2009</u>	
Revenues – government grant	\$ —	\$ 488,958	\$ —	\$ 488,958
Operating costs and expenses:				
Research and development	3,383,965	2,306,781	5,097,440	25,643,708
General and administrative	2,698,174	2,206,358	2,177,954	14,105,748
Total operating costs and expenses	<u>6,082,139</u>	<u>4,513,139</u>	<u>7,275,394</u>	<u>39,749,456</u>
Loss from operations	(6,082,139)	(4,024,181)	(7,275,394)	(39,260,498)
Interest income	10,985	17,858	33,466	1,477,789
Change in fair value of warrants liability	(319,908)	—	—	(319,908)
Loss before income taxes	(6,391,062)	(4,006,323)	(7,241,928)	(38,102,617)
Provision for income taxes	—	—	—	—
Net loss	<u>\$ (6,391,062)</u>	<u>\$ (4,006,323)</u>	<u>\$ (7,241,928)</u>	<u>\$ (38,102,617)</u>
Net loss per share – basic and diluted	<u>\$ (0.29)</u>	<u>\$ (0.22)</u>	<u>\$ (0.48)</u>	
Weighted average shares outstanding – basic and diluted	<u>21,728,292</u>	<u>18,580,223</u>	<u>15,066,799</u>	

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

**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
(a development stage company)

**STATEMENT OF STOCKHOLDERS' EQUITY**  
for the period from January 4, 2002 (date of inception) through December 31, 2011

	Preferred Stock Series "A"	Preferred Stock Series "B"	Common Stock	Additional Paid-In Capital	Deficit Accumulated During the Development Stage	Total
<b>Balance at January 4, 2002</b> <b>(date of inception)</b>	\$ —	\$ —	\$ 21,888	\$ 78,112	\$ —	\$ 100,000
Issuance of common stock, net	—	—	7,296	117,704	—	125,000
Issuance of stock options for services	—	—	—	75,833	—	75,833
Net loss	—	—	—	—	(255,945)	(255,945)
<b>Balance at December 31, 2002</b>	—	—	29,184	271,649	(255,945)	44,888
Issuance of preferred stock, net	700	—	—	669,757	—	670,457
Issuance of stock options for services	—	—	—	75,833	—	75,833
Net loss	—	—	—	—	(428,615)	(428,615)
<b>Balance at December 31, 2003</b>	700	—	29,184	1,017,239	(684,560)	362,563
Issuance of stock options for services	—	—	—	294,833	—	294,833
Net loss	—	—	—	—	(539,820)	(539,820)
<b>Balance at December 31, 2004</b>	700	—	29,184	1,312,072	(1,224,380)	117,576
Issuance of common stock, net	—	—	39,545	1,006,971	—	1,046,516
Issuance of common stock and stock options for services	—	—	146	1,087,604	—	1,087,750
Net loss	—	—	—	—	(1,805,380)	(1,805,380)
<b>Balance at December 31, 2005</b>	700	—	68,875	3,406,647	(3,029,760)	446,462
Change in par value	(630)	—	(61,988)	62,618	—	—
Issuance of preferred stock Series "B", net	—	8	—	3,225,132	—	3,225,140
Issuance of common stock (IPO), net	—	—	3,350	17,634,670	—	17,638,020
Conversion of preferred stock Series "A" into common stock, upon closing of IPO	(70)	—	1,022	(952)	—	—
Conversion of preferred stock Series "B" into common stock, upon closing of IPO	—	(8)	1,116	(1,108)	—	—
Issuance of common stock and stock options for services	—	—	142	1,266,323	—	1,266,465
Net loss	—	—	—	—	(2,729,454)	(2,729,454)
<b>Balance at December 31, 2006</b>	—	—	12,517	25,593,330	(5,759,214)	19,846,633
Issuance of common stock and stock options for services	—	—	11	579,676	—	579,687
Amortization of restricted stock for services	—	—	—	35,930	—	35,930
Net loss	—	—	—	—	(4,139,493)	(4,139,493)
<b>Balance at December 31, 2007</b>	—	—	12,528	26,208,936	(9,898,707)	16,322,757
Issuance of common stock, net	—	—	1,488	4,086,412	—	4,087,900
Issuance of stock options for services	—	—	—	583,836	—	583,836
Issuance of restricted stock units for services, net	—	—	44	130,275	—	130,319
Net loss	—	—	—	—	(10,564,597)	(10,564,597)
<b>Balance at December 31, 2008</b>	—	—	14,060	31,009,459	(20,463,304)	10,560,215
Issuance of common stock, net	—	—	3,973	3,694,162	—	3,698,135
Issuance of stock options for services	—	—	—	581,286	—	581,286
Issuance of restricted stock units for services, net	—	—	5	20,147	—	20,152
Net loss	—	—	—	—	(7,241,928)	(7,241,928)
<b>Balance at December 31, 2009</b> <b>(carried forward)</b>	—	—	18,038	35,305,054	(27,705,232)	7,617,860

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

**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
**(a development stage company)**  
**STATEMENT OF STOCKHOLDERS' EQUITY**  
**for the period from January 4, 2002 (date of inception) through December 31, 2011**

	Preferred Stock Series "A"	Preferred Stock Series "B"	Common Stock	Additional Paid-In Capital	Deficit Accumulated During the Development Stage	Total
<b>Balance at December 31, 2009</b>						
<b>(brought forward)</b>	\$ —	\$ —	\$18,038	\$35,305,054	\$(27,705,232)	\$ 7,617,860
Issuance of common stock, net	—	—	1,352	1,454,801	—	1,456,153
Issuance of stock options for services	—	—	—	450,089	—	450,089
Issuance of restricted stock units for services, net	—	—	5	(5)	—	—
Net loss	—	—	—	—	(4,006,323)	(4,006,323)
<b>Balance at December 31, 2010</b>	—	—	19,395	37,209,939	(31,711,555)	5,517,779
Issuance of stock options for services	—	—	—	416,735	—	416,735
Issuance of common stock and warrants, net	—	—	5,306	4,211,940	—	4,217,246
Net loss	—	—	—	—	(6,391,062)	(6,391,062)
<b>Balance at December 31, 2011</b>	<u>\$ —</u>	<u>\$ —</u>	<u>\$24,701</u>	<u>\$41,838,614</u>	<u>\$(38,102,617)</u>	<u>\$ 3,760,698</u>

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

**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
**(a development stage company)**

**STATEMENTS OF CASH FLOWS**

	Year Ended December 31,			Cumulative period from January 4, 2002 (date of inception) through December 31, 2011
	2011	2010	2009	
<b>Operating Activities:</b>				
Net loss	\$ (6,391,062)	\$ (4,006,323)	\$ (7,241,928)	\$ (38,102,617)
Reconciliation of net loss to net cash used in operating activities:				
Depreciation and amortization	42,835	25,741	30,227	153,989
Stock-based compensation	416,735	450,089	601,438	5,622,161
Change in fair value of warrants liability	319,908	—	—	319,908
(Increase) decrease in:				
Interest receivable	—	—	12,153	—
Government grant receivable	134,025	(134,025)	—	—
Prepaid expenses and deposits	(31,272)	(58,074)	39,152	(208,004)
Increase (decrease) in:				
Accounts payable	158,001	(143,702)	(83,072)	263,934
Accrued expenses and other liabilities	365,781	108,889	(1,041,159)	516,033
Net cash used in operating activities	<u>(4,985,049)</u>	<u>(3,757,405)</u>	<u>(7,683,189)</u>	<u>(31,434,596)</u>
<b>Investing Activities:</b>				
Capital expenditures	(3,620)	(2,867)	(2,298)	(102,826)
Net cash used in investing activities	<u>(3,620)</u>	<u>(2,867)</u>	<u>(2,298)</u>	<u>(102,826)</u>
<b>Financing Activities:</b>				
Proceeds from issuance of common stock and warrants, net	5,542,578	1,456,153	3,698,135	33,574,302
Proceeds from issuance of preferred stock, net	—	—	—	3,895,597
Payment of employee withholding tax related to restricted stock units	—	—	—	(3,410)
Net cash provided by financing activities	<u>5,542,578</u>	<u>1,456,153</u>	<u>3,698,135</u>	<u>37,466,489</u>
Net increase (decrease) in cash and cash equivalents	553,909	(2,304,119)	(3,987,352)	5,929,067
Cash and cash equivalents – beginning of period	5,475,158	7,779,277	11,766,629	100,000
Cash and cash equivalents – end of period	<u>\$ 6,029,067</u>	<u>\$ 5,475,158</u>	<u>\$ 7,779,277</u>	<u>\$ 6,029,067</u>
<b>Non-cash investing and financing activities:</b>				
Non-cash incentive received from lessor	\$ —	\$ —	\$ —	\$ 52,320

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

**CATALYST PHARMACEUTICAL PARTNERS, INC.**  
**(a development stage company)**

**NOTES TO FINANCIAL STATEMENTS**

**1. Organization and Description of Business**

Catalyst Pharmaceutical Partners, Inc. (the “Company”) is a development-stage specialty pharmaceutical company focused on the development and commercialization of prescription drugs targeting diseases and disorders of the central nervous system with a focus on the treatment of addiction and epilepsy. The Company was incorporated in Delaware in July 2006. It is the successor by merger to Catalyst Pharmaceutical Partners, Inc., a Florida corporation (“CPP-Florida”), which commenced operations in January 2002.

The Company has incurred operating losses in each period from inception through December 31, 2011. The Company has been able to fund its cash needs to date through an initial funding from its founders, four private placements, an initial public offering (“IPO”), a government grant and five registered direct offerings via shelf registration statements to institutional investors. See Note 11.

***Merger***

On September 7, 2006, the Company completed a merger with CPP-Florida in which CPP-Florida was merged with and into the Company and all of CPP-Florida’s assets, liabilities and attributes were transferred to the Company by operation of law. Prior to the merger, the Company was a wholly-owned subsidiary of CPP-Florida. The merger was effected to reincorporate the Company in Delaware.

After the merger, holders of CPP-Florida common stock held an equal number of shares of the Company’s common stock, holders of CPP-Florida Series A preferred stock held an equal number of shares of the Company’s Series A Preferred Stock and holders of CPP-Florida Series B Preferred Stock held an equal number of shares of the Company’s Series B Preferred Stock.

Shares of CPP-Florida common and preferred stock had a par value of \$0.01 per share. Shares of the Company’s common and preferred stock have a par value of \$0.001 per share. An adjustment was made to capital stock and additional paid-in capital during 2006 to reflect this change. Upon closing of the IPO, all the outstanding shares of preferred stock were converted into shares of common stock.

***Capital Resources***

In June 2008, the Company filed a registration statement on Form S-3 (the 2008 Shelf Registration Statement) in order to be able to sell up to \$30,000,000 of its authorized but unissued common stock through future offerings. During September 2008, the Company sold 1,488,332 shares of its common stock under the 2008 Shelf Registration Statement at a price of \$3.00 per share and received gross proceeds of approximately \$4.5 million before commissions and incurred expenses of approximately \$377,000. During October 2009, the Company sold 3,973,000 shares of its common stock under the 2008 Shelf Registration Statement at a price of \$1.00 per share and received gross proceeds of approximately \$4.0 million before underwriting commissions and incurred expenses of approximately \$275,000. During August 2010, the Company sold 1,351,352 shares of its common stock under the 2008 Shelf Registration Statement at a price of \$1.11 per share and received gross proceeds of approximately \$1.5 million before incurred expenses of approximately \$44,000. The 2008 Shelf Registration Statement expired on June 26, 2011, and the Company can no longer sell any shares under this shelf registration statement.

In December 2010, the Company filed a registration statement on Form S-3 (the 2010 Shelf Registration Statement) in order to be able to sell up to \$30,000,000 of its authorized but unissued common stock and warrants to purchase common stock through future offerings. During March 2011, the Company sold 2,259,943 shares of its common stock under the 2010 Shelf Registration Statement at a price of \$1.12 per share and

## 1. Organization and Description of Business (continued)

received gross proceeds of approximately \$2.5 million before underwriting commissions and incurred expenses of approximately \$300,000. During October 2011, the Company sold 3,046,740 shares of the Company's common stock together with common stock purchase warrants to purchase 1,523,370 shares of the Company's common stock at a price of \$1.15 per share and corresponding warrant and received gross proceeds of approximately \$3.5 million before underwriting commissions and other expenses totaling approximately \$305,000. The Company has approximately \$21.3 million of authorized but unissued common stock and common stock purchase warrants available for future offerings under the 2010 Shelf Registration Statement. See Note 11.

In November 2010, the Company was notified that it had been certified to receive a cash grant aggregating \$488,958 under the Qualifying Therapeutic Discovery Projects Program (section 48D of the Internal Revenue Code). The grant related to two qualifying therapeutic projects, CPP-109 for the treatment of stimulant dependence and CPP-115 for the treatment of epilepsy and stimulant dependence. Of these funds, \$354,933 were received in November 2010 and \$134,025 were received in February 2011.

While there can be no assurance, the Company currently believes that it has sufficient resources to complete its currently ongoing clinical studies and trials and to support its operations through the first quarter of 2013. The Company will require additional capital to fund additional clinical and pre-clinical studies of CPP-109 and CPP-115 that may be required to file New Drug Applications ("NDA") with the U.S. Food and Drug Administration ("FDA") and to support the Company's operations in periods after the first quarter of 2013.

In addition to the filing of the above described shelf registration statements, the Company may raise the additional funds required through public or private equity offerings, debt financings, corporate collaborations, governmental research grants or other means. The Company may also seek to raise new capital to fund additional product development efforts, even if it has sufficient funds for its planned operations. Any sale by the Company of additional equity or convertible debt securities could result in dilution to the Company's current stockholders. There can be no assurance that any such required additional funding will be available to the Company at all or available on terms acceptable to the Company. Further, to the extent that the Company raises additional funds through collaborative arrangements, it may be necessary to relinquish some rights to the Company's technologies or grant sublicenses on terms that are not favorable to the Company. If the Company is not able to secure additional funding when needed, the Company may have to delay, reduce the scope of, or eliminate one or more research and development programs, which could have an adverse effect on the Company's business.

## 2. Basis of Presentation and Significant Accounting Policies

- a. **DEVELOPMENT STAGE COMPANY.** Since inception, the Company has devoted substantially all of its efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Accordingly, the Company is considered to be in the development stage and the Company's financial statements are presented in that manner in accordance with U.S. generally accepted accounting principles. The Company's primary focus is on the development and commercialization of its product candidates CPP-109 and CPP-115.
- b. **USE OF ESTIMATES.** The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.
- c. **CASH AND CASH EQUIVALENTS.** The Company considers all highly liquid instruments, purchased with an original maturity of three months or less to be cash equivalents. Cash equivalents consist mainly of U.S. Treasury bills and money market funds. The Company has substantially all of its cash and cash equivalents deposited with one financial institution.

**2. Basis of Presentation and Significant Accounting Policies (continued)**

- d. GOVERNMENT GRANT RECEIVABLE.** The government grant receivable consists of a grant receivable from the U.S. government for a portion of the cash grants awarded to the Company under the Qualifying Therapeutic Discovery Project Program during November 2010. Such funds were received in February 2011. The Company recognizes U.S. government cash grants in the period in which the Company is notified of such awards.
- e. PREPAID EXPENSES.** Prepaid expenses consist primarily of prepaid insurance, prepaid offering costs, prepaid subscription fees and prepaid research fees. Prepaid research fees consist of advances for our product development activities, including drug manufacturing, contracts for pre-clinical studies, clinical trials, regulatory affairs and consulting. Such advances are recorded as expense as the related goods are received or the related services are performed.
- f. PROPERTY AND EQUIPMENT.** Property and equipment are recorded at cost. Depreciation is calculated to amortize the depreciable assets over their useful lives using the straight-line method and commences when the asset is placed in service. Leasehold improvements are amortized on a straight-line basis over the term of the lease or the estimated life of the improvement, whichever is shorter. Useful lives generally range from three years for computer equipment to three to six years for furniture and equipment and leasehold improvements. Expenditures for repairs and maintenance are charged to expenses as incurred.
- g. OPERATING LEASES.** The Company recognizes lease expense on a straight-line basis over the initial lease term. For leases that contain rent holidays, escalation clauses or tenant improvement allowances, the Company recognizes rent expense on a straight-line basis and records the difference between the rent expense and rental amount payable as deferred rent. As of December 31, 2011 and 2010, the Company had \$9,518 and \$29,601, respectively, of deferred rent and lease incentive in accrued expenses and other liabilities.
- h. FAIR VALUE OF FINANCIAL INSTRUMENTS.** The Company's financial instruments consist of cash and cash equivalents, accounts payable and accrued expenses and other liabilities. At December 31, 2011, the fair value of these instruments approximated their carrying value.
- i. FAIR VALUE MEASUREMENTS.** Current Financial Accounting Standards Board (FASB) fair value guidance emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, current FASB guidance establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumptions that market participants assumptions would use in pricing assets or liabilities (unobservable inputs classified within Level 3 of the hierarchy).

Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at measurement date. Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs may include quoted prices for similar assets and liabilities in active markets, as well as inputs that are observable for the asset or liability (other than quoted prices), such as interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals. Level 3 inputs are unobservable inputs for the asset or liability, which are typically based on an entity's own assumptions, as there is little, if any, related market activity. In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.



**2. Basis of Presentation and Significant Accounting Policies (continued)**

- j. RESEARCH AND DEVELOPMENT.** Costs incurred in connection with research and development activities are expensed as incurred. These costs consist of direct and indirect costs associated with specific projects as well as fees paid to various entities that perform research-related services for the Company.
- k. STOCK-BASED COMPENSATION.** The Company recognizes expense in the statement of operations for the fair value of all share-based payments to employees, directors, consultants and scientific advisors, including grants of stock options and other share-based awards. For stock options, the Company uses the Black-Scholes option valuation model, the single-option award approach, and the straight-line attribution method. Using this approach, compensation cost is amortized on a straight-line basis over the vesting period of each respective stock option, generally three to five years. The Company estimates forfeitures and adjusts this estimate periodically based on actual forfeitures.

For the years ended December 31, 2011, 2010 and 2009, the Company recorded stock-based compensation expense as follows:

	2011	2010	2009
<b>Research and development</b>	<b>\$ 111,283</b>	<b>\$ 179,737</b>	<b>\$ 272,184</b>
<b>General and administrative</b>	<b>305,452</b>	<b>270,352</b>	<b>329,254</b>
<b>Total stock-based compensation</b>	<b><u>\$ 416,735</u></b>	<b><u>\$ 450,089</u></b>	<b><u>\$ 601,438</u></b>

- l. CONCENTRATION OF CREDIT RISK.** The financial instruments that potentially subject the Company to concentration of credit risk are cash equivalents (i.e. money market funds). The Company places its cash equivalents with a high-credit quality financial institution. These amounts at times may exceed federally insured limits. The Company has not experienced any credit losses in these accounts.
- m. INCOME TAXES.** The Company utilizes the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

The Company is subject to income taxes in the U.S. federal jurisdiction and various state jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. The Company is not subject to U.S. federal, state and local tax examinations by tax authorities for years before 2009. If the Company were to subsequently record an unrecognized tax benefit, associated penalties and tax related interest expense would be reported as a component of income tax expense.

- n. COMPREHENSIVE INCOME (LOSS).** U.S. generally accepted accounting principles require that all components of comprehensive income (loss) be reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is net income (loss), plus certain other items that are recorded directly into stockholders' equity. For all periods presented, the Company's net loss equals comprehensive loss, since the Company has no items which are considered other comprehensive income (loss).

**2. Basis of Presentation and Significant Accounting Policies (continued)**

- o. NET INCOME (LOSS) PER SHARE.** Basic income (loss) per share is computed by dividing net income (loss) for the period by the weighted average number of common shares outstanding during the period. Diluted income (loss) per share is computed by dividing net income (loss) for the period by the weighted average number of common shares outstanding during the period, plus the dilutive effect of common stock equivalents such as convertible preferred stock, stock options and restricted stock units. For all periods presented, common stock equivalents were excluded because their inclusion would have been anti-dilutive. The potential shares, which are excluded from the determination of basic and diluted net loss per share as their effect is anti-dilutive, are as follows:

	2011	2010	2009
<b>Options to purchase common stock</b>	<b>3,723,108</b>	<b>3,135,619</b>	<b>2,962,461</b>
<b>Warrants to purchase common stock</b>	<b>1,523,370</b>	—	—
<b>Unvested shares of restricted common stock</b>	—	—	<b>5,000</b>
<b>Potential equivalent common stock excluded</b>	<b><u>5,246,478</u></b>	<b><u>3,135,619</u></b>	<b><u>2,967,461</u></b>

Potentially dilutive options to purchase common stock as of December 31, 2011, 2010 and 2009 have exercise prices ranging from \$0.62 to \$6.00. Potentially dilutive warrants to purchase common stock as of December 31, 2011 have an exercise price of \$1.30.

- p. SEGMENT INFORMATION.** Management has determined that the Company operates in one reportable segment, which is the development and commercialization of pharmaceutical products.
- q. RECENT ACCOUNTING PRONOUNCEMENTS.** In June 2011, the FASB issued changes to the presentation of comprehensive income. These changes give an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The option to present components of other comprehensive income as part of the statement of changes in stockholders' equity was eliminated. The items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income were not changed. These changes become effective for fiscal years beginning after December 15, 2011, except for the reclassification adjustments out of accumulated other comprehensive income that become effective for fiscal years ending after December 15, 2012. The adoption of these changes will not have a material effect on the Company's financial statements.
- r. WARRANTS LIABILITY.** In October 2011, the Company issued warrants to purchase shares of the Company's common stock in connection with a registered direct offering under a shelf registration statement. The Company accounted for these warrants as a liability measured at fair value due to a provision included in the warrant agreement that provides the warrant holders with an option to require the Company (or its successor) to purchase their warrants for cash in an amount equal to their Black-Scholes Option Pricing Model (Black-Scholes Model) value, in the event that certain fundamental transactions, as defined, occur. The fair value of the warrant liability is estimated using the Black-Scholes Model which requires inputs such as the expected term of the warrants, share price volatility and risk-free interest rate. These assumptions are reviewed on a quarterly basis and changes in the estimated fair value of the outstanding warrants are recognized each reporting period in the "Change in fair value of warrants liability" line in the statement of operations.
- s. RECLASSIFICATIONS.** Certain prior year amounts in the financial statements have been reclassified to conform to the current year presentation.

### 3. Fair Value Measurements

The Company's financial assets and liabilities measured at fair value are classified within the fair value hierarchy which is defined as follows:

- *Level 1*—Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- *Level 2*—Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly.
- *Level 3*—Inputs that are unobservable for the asset or liability.

#### Warrants

The Company allocated approximately \$1.3 million of proceeds from its October 2011 registered direct offering to the fair value of common stock purchase warrants issued in connection with the offering that are classified as a liability. The valuation of the warrants is determined using the Black-Scholes Model. This model uses inputs such as the underlying price of the shares issued when the warrant is exercised, volatility, risk free interest rate and expected life of the instrument. The Company has determined that the warrants liability should be classified within Level 3 of the fair value hierarchy by evaluating each input for the Black-Scholes Model against the fair value hierarchy criteria and using the lowest level of input as the basis for the fair value classification. There are six inputs: closing price of the Company's common stock on the day of evaluation; the exercise price of the warrants; the remaining term of the warrants; the volatility of the Company's common stock; annual rate of dividends; and the risk free rate of return. Of those inputs, the exercise price of the warrants and the remaining term are readily observable in the warrants agreement. The annual rate of dividends is based on the Company's historical practice of not granting dividends. The closing price of the Company's common stock would fall under Level 1 of the fair value hierarchy as it is a quoted price in an active market. The risk free rate of return is a Level 2 input, while the historical volatility is a Level 3 input in accordance with the fair value accounting guidance. Since the lowest level input is a Level 3, the Company determined the warrants liability is most appropriately classified within Level 3 of the fair value hierarchy. This liability is subject to fair value mark-to-market adjustment each period. The assumptions used for the October 2011 warrants liability valuation were an expected life of 5.5 years, expected annual volatility of 121% and a risk free rate of 1.28%. The assumptions used for the December 31, 2011 warrants liability valuation were an expected life of 5.34 years, expected annual volatility of 119% and a risk free rate of 0.92%. As a result, the Company recognized the change in the fair value of the warrants liability as a non-operating expense of approximately \$320,000 for the year ended December 31, 2011. The resulting fair value of the warrants liability at December 31, 2011 was approximately \$1.6 million.

### 4. Prepaid Expenses

Prepaid expenses consist of the following as of December 31:

	<u>2011</u>	<u>2010</u>
<b>Prepaid insurance</b>	<b>\$ 178,536</b>	<b>\$ 71,215</b>
<b>Prepaid offering costs</b>	<b>—</b>	<b>42,369</b>
<b>Prepaid research fees</b>	<b>—</b>	<b>38,719</b>
<b>Prepaid subscriptions fees</b>	<b>9,942</b>	<b>3,756</b>
<b>Prepaid rent</b>	<b>2,267</b>	<b>3,251</b>
<b>Other</b>	<b>8,371</b>	<b>6,911</b>
<b>Total prepaid expenses</b>	<b><u>\$ 199,116</u></b>	<b><u>\$ 166,221</u></b>

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### 5. Property and Equipment

Property and equipment, net consists of the following as of December 31:

	2011	2010
<b>Computer equipment</b>	<b>\$ 26,791</b>	<b>\$ 32,376</b>
<b>Furniture and equipment</b>	<b>44,469</b>	<b>44,175</b>
<b>Leasehold improvements</b>	<b>—</b>	<b>80,176</b>
	<u>71,260</u>	<u>156,727</u>
<b>Less: Accumulated depreciation</b>	<b>(59,074)</b>	<b>(111,154)</b>
<b>Total property and equipment, net</b>	<b><u>\$ 12,186</u></b>	<b><u>\$ 45,573</u></b>

Depreciation expense was \$42,835, \$25,741 and \$30,227, respectively, for the years ended December 31, 2011, 2010 and 2009. During June 2011, in connection with the renewal of the corporate office lease, the Company entered into the first amendment to the lease. The amendment extends the original lease term for five years and relocates the Company into another space within the same building. Upon relocation of the corporate office, in November 2011 the Company wrote-off the asset value and related accumulated depreciation of leasehold improvements pertaining to the previous space, substantially all of which were fully depreciated at that time.

### 6. Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consist of the following as of December 31:

	2011	2010
<b>Accrued compensation and benefits</b>	<b>\$ 239,442</b>	<b>\$ —</b>
<b>Accrued professional fees</b>	<b>111,920</b>	<b>87,212</b>
<b>Accrued pre-clinical and clinical trial expenses</b>	<b>101,568</b>	<b>35,678</b>
<b>Accrued license fees</b>	<b>102,500</b>	<b>50,186</b>
<b>Deferred rent and lease incentive</b>	<b>—</b>	<b>14,853</b>
<b>Other</b>	<b>14,437</b>	<b>5,099</b>
<b>Current accrued expenses and other liabilities</b>	<b><u>569,867</u></b>	<b><u>193,028</u></b>
<b>Deferred rent and lease incentive- non-current</b>	<b>9,518</b>	<b>14,748</b>
<b>Non-current accrued expenses and other liabilities</b>	<b><u>9,518</u></b>	<b><u>14,748</u></b>
<b>Total accrued expenses and other liabilities</b>	<b><u>\$ 579,385</u></b>	<b><u>\$ 207,776</u></b>

During December 2011, in connection with the separation agreement with one of the Company's officers, the Company accrued severance to be paid over the next year to such officer. As of December 31, 2011, approximately \$233,000 of such amount was included in accrued compensation and benefits in the table above.

### 7. Commitments

The Company has entered into agreements with contract manufacturers for the manufacture of drug and study placebo for the Company's trials and studies, with contract research organizations (CRO) to conduct and monitor the Company's trials and studies and with various entities for laboratories and other testing related to the Company's trials and studies. The contractual terms of the agreements vary, but most require certain advances as well as payments based on the achievement of milestones. Further, these agreements are cancellable at any time, but obligate the Company to reimburse the providers for any time or costs incurred through the date of termination.

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### 7. Commitments (continued)

The Company has committed to pay severance benefits to certain executive employees if they are terminated without cause or upon a change in control.

The Company has executed noncancellable operating lease agreements for its office. Certain of these leases have free and escalating rent payment provisions. The Company recognizes rent expense under such leases on a straight-line basis over the term of the lease. As of December 31, 2011, future minimum lease payments under the operating lease agreements are as follows:

2012	\$ 53,666
2013	66,228
2014	68,054
2015	70,096
2016	72,198
Thereafter	67,827
	<u>\$ 398,069</u>

During June 2011, in connection with the renewal of the corporate office lease, the Company entered into the first amendment to the lease. The amendment extends the original lease term for five years and relocates the Company into another space within the same building. The corporate office lease is cancellable upon the payment of an early termination penalty during 2015. The relocation occurred in November 2011. The lease provides for fixed increases in minimum annual rent payments, as well as rent free periods. The total amount of rental payments due over the lease term is being charged to rent expense on the straight-line method over the term of the lease. The differences between rent expense recorded and the amount paid is credited or charged to accrued expenses and other liabilities in the accompanying balance sheets. Rent expense was \$61,653, \$65,781 and \$69,030, respectively, for the years ended December 31, 2011, 2010 and 2009. The Company's leases expire on various dates through November 2017.

Obligations under capital leases are not significant.

For commitments related to the Company's license agreements with Brookhaven (defined below), and Northwestern (defined below), see Note 8.

### 8. Agreements

- a. **LICENSE AGREEMENT WITH BROOKHAVEN.** The Company has entered into a license agreement with Brookhaven Science Associates, LLC, as operator of Brookhaven National Laboratory under contract with the United States Department of Energy ("Brookhaven"), whereby the Company has obtained an exclusive license for several patents and patent applications in the U.S. and outside the U.S. relating to the use of vigabatrin as a treatment for cocaine, other addictions and obsessive-compulsive disorders. This license agreement runs concurrently with the term of the last to expire of the licensed patents, the last of which currently expires in 2023. The Company paid a fee to obtain the license in the amount of \$50,000. Under the license agreement, the Company has agreed to pay Brookhaven a fee of \$100,000 in the year of NDA approval of CPP-109, \$250,000 in each of the second and third years following approval and \$500,000 per year thereafter until the license agreement expires. The Company is also obligated to reimburse Brookhaven for certain of their patent related expenses. The Company believes that as of December 31, 2011 it had a contingent liability of approximately \$166,000 related to this obligation. Of these costs, approximately \$69,000 will become payable in six equal monthly installments at the time the Company submits an NDA to the U.S. Food and Drug Administration ("FDA"), and the remaining \$97,000 will become payable commencing

**8. Agreements (continued)**

within 60 days of obtaining FDA regulatory approval to sell any product. The Company also has the right to enter into sub-license agreements, and if it does, a royalty of 20% of any sub-license fees will be payable to Brookhaven.

Brookhaven has formally advised the Company that they believe that the amount potentially due from the Company to Brookhaven for reimbursement of patent related expenses as of December 31, 2011 was approximately \$1.3 million. The Company has advised Brookhaven that it disputes their determination of patent-related expenses due under the license agreement. There can be no assurance as to the outcome of this matter. In any event, no patent-related expenses are due to Brookhaven under the license agreement until the submission by the Company of an NDA for CPP-109. As the Company has not yet filed an NDA for CPP-109, no amounts relating to this matter are accrued in the accompanying December 31, 2011 and 2010 balance sheets.

- b. LICENSE AGREEMENT WITH NORTHWESTERN UNIVERSITY.** On August 27, 2009, the Company entered into a license agreement with Northwestern University (Northwestern), under which it acquired worldwide rights to commercialize new GABA aminotransferase inhibitors and derivatives of vigabatrin that have been discovered by Northwestern. Under the terms of the license agreement, Northwestern granted the Company an exclusive worldwide license to certain composition of matter patents related to the new class of inhibitors and a patent application relating to derivatives of vigabatrin. The Company has identified and designated the lead compound under this license as CPP-115.

Under the license agreement with Northwestern, the Company will be responsible for continued research and development of any resulting product candidates. As of December 31, 2011, the Company has paid Northwestern \$127,872 in connection with the license, and has accrued license fees of \$102,500 in the accompanying December 31, 2011 balance sheet for expenses, maintenance fees and milestones. In addition, the Company is obligated to pay certain milestone payments in future years relating to clinical development activities with respect to CPP-115, and royalties on any products resulting from the license agreement. The next milestone payment of \$100,000 is due on the earlier of successful completion of the first Phase I clinical trial for CPP-115 or August 27, 2013.

- c. LICENSE AGREEMENT WITH NEW YORK UNIVERSITY AND THE FEINSTEIN INSTITUTE FOR MEDICAL RESEARCH.** On December 13, 2011, the Company entered into a license agreement with New York University (NYU) and the Feinstein Institute for Medical Research (FIMR) under which it acquired worldwide rights to commercialize GABA aminotransferase inhibitors in the treatment for Tourette's Syndrome. The Company is obligated to pay certain milestone payments in future years relating to clinical development activities and royalties on any products resulting from the license agreement.

- d. AGREEMENT WITH NIDA.** On April 13, 2010, the Company signed a definitive Clinical Trial Agreement (CTA) with the National Institute on Drug Abuse (NIDA) to jointly conduct a U.S. Phase II(b) clinical trial evaluating CPP-109 for the treatment of cocaine addiction (the Phase II(b) Trial). As part of the CTA, NIDA, under their agreement with the Veteran's Administration Cooperative Studies Program (VA), has agreed to provide substantial resources towards the completion of the Phase II(b) Trial. This approximately 200 subject double-blind, placebo-controlled trial is being conducted at twelve leading addiction research facilities across the United States. The Phase II(b) Trial, which is being overseen by the VA, was initiated in November 2010, and the Company expects to have top-line data from the Phase II(b) Trial early in the first quarter of 2013. The Phase II(b) Trial is designed to confirm the safety and efficacy of CPP-109 for the treatment of cocaine addiction and if successful, the Company believes that it will qualify to be one of the adequate and well controlled trials required to support approval of an NDA for CPP-109.

## **8. Agreements (continued)**

Pursuant to the CTA, the Company has provided the study drug (and matching placebo) for the Phase II(b) Trial and materials required to package them suitably for use in the Phase II(b) Trial. In conjunction with NIDA, the Company has developed the Phase II(b) Trial protocol and informed consent and has submitted such documents to the FDA for review. The Company is also responsible for, among other duties, funding patient recruitment activities and advertising for the Phase II(b) Trial, establishing and funding a contract with a vendor capable of decrypting and converting the visual field data obtained from study subjects into a format analyzable by the VA statisticians who will interpret the study data, and, if requested, funding the treatment costs of up to 25 study subjects. Further, pursuant to the CTA, NIDA has provided input on the protocol and informed consent and, under their agreement with the VA, is funding qualified study sites and investigators. NIDA has also presently contracted to treat more than 200 study subjects. Finally, NIDA, through its agreement with the VA, is providing clinical monitoring for all sites.

The CTA terminates on April 13, 2015 or upon the completion of the Phase II(b) Trial, whichever comes first, except that the CTA may be extended for two further periods of two years each by agreement of the parties if it is necessary to complete the Phase II(b) Trial. Either party may terminate the CTA upon 60 days' notice without cause, or upon 30 days' written notice for cause. Both NIDA and the Company have continuing rights under the CTA if the CTA is terminated. Among other obligations, this includes an obligation of each party to continue their respective obligations under the CTA until all study subjects enrolled in the trial at the time of such termination have completed the study and continuing duties of confidentiality.

As of December 31, 2011, the Company estimates that it will pay approximately \$1.4 million of direct costs in connection with contracts related to the Phase II(b) Trial. As of December 31, 2011, the Company had paid approximately \$1.0 million of this amount and had accounts payable of approximately \$55,000 and accrued expenses of approximately \$75,000 in the accompanying December 31, 2011 balance sheet related to these contracts. These amounts exclude internal costs, such as salaries, benefits and other costs of the Company's personnel working on the Phase II(b) Trial.

## **9. Related Party Transactions**

Since its inception in 2002, the Company has entered into various consulting agreements with non-employee officers, directors and members of the Company's Scientific Advisory Board, a portion of which were with related parties under common ownership and control. During the years ended December 31, 2011, 2010 and 2009, the Company paid approximately \$93,000, \$79,000 and \$64,000, respectively, in consulting fees to related parties.

The Company has an employment agreement with Patrick J. McEnany, its principal stockholder, Chairman, President and Chief Executive Officer. Under this agreement, Mr. McEnany will receive an annual base salary of approximately \$387,000 in 2012, and may earn bonus compensation based on performance. This agreement expires in November 2013.

## **10. Income Taxes**

As of December 31, 2011 and 2010, the Company had deferred tax assets of approximately \$13,440,000 and \$11,428,000, respectively, of which approximately \$11,934,000 and \$10,080,000 represent United States federal and state net operating loss carryforwards and start-up costs. The remaining temporary differences represent non-deductible stock option and equity expense. The related deferred tax asset has a 100% valuation allowance as of December 31, 2011 and 2010, as the Company believes it is more likely than not that the deferred tax asset will not be realized. The change in valuation allowance was approximately \$2,012,000, \$1,510,000 and \$2,742,000 in 2011, 2010 and 2009, respectively. There are no other significant temporary differences. The net operating loss carry-forwards of approximately \$19,980,000 as of December 31, 2011 will expire at various dates beginning in 2023 and ending in 2031. If an ownership change, as defined under Internal Revenue Code

## 10. Income Taxes (continued)

Section 382, occurs, the use of these carry-forwards may be subject to limitation. The effective tax rate of 0% in all periods presented differs from the statutory rate of 35% due to the valuation allowance and because the Company had no taxable income.

## 11. Stockholders' Equity

### *Stock split*

On October 3, 2006, the Company's board of directors approved an approximate 1.4592-to-one stock split (effected in the form of a stock dividend). All stock value, common shares outstanding and per share amounts set forth in these financial statements for periods prior to this date, were adjusted retroactively to reflect this split.

### *Private Placements*

In November 2002, the Company completed a private placement in which it raised gross proceeds of \$125,000 through the sale of 729,609 shares of its common stock.

In April 2003, the Company completed a private placement in which it raised net proceeds of \$670,457 through the sale of 70,000 shares of its Series A Preferred Stock.

In March 2005, the Company completed a private placement in which it raised net proceeds of \$1,046,516 through the sale of 3,954,483 shares of its common stock.

On July 24, 2006, the Company completed a private placement in which it raised net proceeds of \$3,225,140 through the sale of 7,644 shares of its Series B Preferred Stock.

### *Common Stock*

The Company has 100,000,000 shares of authorized common stock with a par value of \$0.001 per share. At December 31, 2011 and 2010, 24,701,420 and 19,394,737 shares, respectively, of common stock were issued and outstanding. Each holder of common stock is entitled to one vote for each share of common stock held of record on all matters on which stockholders generally are entitled to vote.

On November 13, 2006, the Company closed its IPO. In the IPO, the Company sold 3,350,000 shares of its common stock at an initial public offering price of \$6.00 per share. The Company received net proceeds from the offering of approximately \$17,638,000 (gross proceeds of \$20,100,000 less a 7% underwriting discount aggregating \$1,407,000 and offering expenses of approximately \$1,055,000). At the closing of the IPO, all of the Company's then outstanding Series A Preferred Stock and Series B Preferred Stock automatically converted into an aggregate of 2,136,860 shares of the Company's common stock. Costs related to the IPO were charged to paid-in-capital at the successful completion of the IPO.

On June 2, 2008 the Company filed two registration statements on Form S-8 to register: (i) shares of restricted common stock and shares of common stock underlying stock options issued under its 2006 Stock Incentive Plan, and (ii) shares of common stock underlying the stock options granted by the Company prior to its IPO.

In addition, on June 2, 2008 the Company filed a shelf registration statement on Form S-3 (the 2008 Shelf Registration Statement) with the SEC to sell up to \$30 million of common stock. This shelf registration (file no. 333-151368) was declared effective by the SEC on June 26, 2008. On September 2008 the Company filed a prospectus supplement and offered for sale to institutional investors 1,488,332 shares of its common stock at \$3.00 per share under the 2008 Registration Statement and received gross proceeds of approximately \$4.5 million



## **11. Stockholders' Equity (continued)**

before underwriting commissions and expenses of approximately \$377,000. On October 2009 the Company filed a prospectus supplement and offered for sale to institutional investors 3,973,000 shares of its common stock at \$1.00 per share under the 2008 Registration Statement and received gross proceeds of approximately \$4.0 million before underwriting commissions and expenses of approximately \$275,000. On August 2010, the Company filed a prospectus supplement and sold an additional 1,351,352 shares of its common stock at \$1.11 per share to an institutional investor under the 2008 Shelf Registration Statement and received gross proceeds of approximately \$1.5 million before expenses of approximately \$44,000. The 2008 Shelf Registration Statement expired on June 26, 2011 and the Company can no longer sell shares under the 2008 Shelf Registration Statement.

Further, on December 3, 2010, the Company filed a second shelf registration statement on Form S-3 (the 2010 Shelf Registration Statement) with the SEC to sell up to \$30 million of common stock and common stock purchase warrants. This shelf registration statement (file No. 333-170945) was declared effective by the SEC on December 15, 2010. On March 2011 the Company filed a prospectus supplement and offered to sell to institutional investors 2,259,943 shares of its common stock under the 2010 Shelf Registration Statement at a price of \$1.12 per share and received gross proceeds of approximately \$2.5 million before underwriting commissions and incurred expenses of approximately \$300,000. During October 2011, the Company filed a prospectus supplement and offered to sell to institutional investors 3,046,740 shares of its common stock together with common stock purchase warrants to purchase 1,523,370 shares of the Company's common stock under the 2010 Shelf Registration Statement at a price of \$1.15 per share and corresponding warrant and received gross proceeds of approximately \$3.5 million before underwriting commissions and other expenses totaling approximately \$305,000. See Note 1.

The number of shares that the Company can sell and the amount of the gross proceeds that the Company can raise (in the aggregate) under its currently outstanding shelf registration statements is limited to 20% of the number of shares of outstanding common stock and 33% of the Company's public float, respectively, pursuant to applicable NASDAQ marketplace and SEC rules.

### ***Nasdaq Listing***

The Company's common stock currently trades on the Nasdaq Capital Market. On November 13, 2009, the Nasdaq Stock Market ("Nasdaq") informed the Company that, as a result of the Company's common stock no longer meeting the requirement that it trade at a bid price of at least \$1.00 per share, the Company's common stock would be delisted from the Nasdaq Capital Market if, by May 12, 2010, the Company did not regain compliance with the requirement by the common stock trading at a bid price of at least \$1.00 per share for a period of at least ten consecutive trading days. On April 26, 2010, the Company received notice from Nasdaq confirming that the Company had regained compliance with the \$1.00 minimum bid price requirement for continued listing on The Nasdaq Capital Market, as a result of the Company's common stock closing with a bid price of at least \$1.00 for at least ten consecutive trading days.

### ***Preferred Stock***

The Company has 5,000,000 shares of authorized preferred stock, \$0.001 par value per share at December 31, 2011 and 2010. No shares of preferred stock were outstanding at December 31, 2011 and 2010.

### ***Stockholder Rights Plan***

On September 20, 2011, the Board of Directors approved the Company's adoption of a Stockholder Rights Plan. Under the Plan, a dividend of one preferred share purchase right (a Right) was declared for each share of common stock of the Company that was outstanding on October 7, 2011. Each Right entitles the holder to purchase from the Company one one-hundredth of a share of Series A Junior Preferred Stock at a purchase price of \$7.80, subject to adjustment.

## **11. Stockholders' Equity (continued)**

The Rights will trade automatically with the common stock and will not be exercisable until a person or group has become an "acquiring person" by acquiring 17.5% or more of the Company's outstanding common stock, or a person or group commences, or publicly announces a tender offer that will result in such a person or group owning 17.5% or more of the Company's outstanding common stock. Upon announcement that any person or group has become an acquiring person, each Right will entitle all rightholders (other than the acquiring person) to purchase, for the exercise price of \$7.80, a number of shares of the Company's common stock having a market value equal to twice the exercise price. Rightholders would also be entitled to purchase common stock of the acquiring person having a value of twice the exercise price if, after a person had become an acquiring person, the Company were to enter into certain mergers or other transactions. If any person becomes an acquiring person, the Board of Directors may, at its option and subject to certain limitations, exchange one share of common stock for each Right.

The Rights have certain anti-takeover effects, in that they would cause substantial dilution to a person or group that attempts to acquire a significant interest in the Company on terms not approved by the Board of Directors. In the event that the Board of Directors determines a transaction to be in the best interests of the Company and its stockholders, the Board of Directors may redeem the Rights for \$0.001 per share at any time prior to a person or group becoming an acquiring person. The Rights will expire on September 20, 2016, unless earlier redeemed or exchanged.

## **12. Stock Compensation Plans**

The Company issues options, restricted stock, stock appreciation rights and restricted stock units (collectively, the Awards) to employees, directors, consultants and scientific advisors of the Company under the 2006 Stock Incentive Plan (the Plan). See Note 2. Prior to July 2006, the Company granted options pursuant to written agreements to purchase an aggregate of 2,352,254 shares of common stock. Under the Plan, 2,688,828 shares of the Company's common stock are reserved for issuance. At December 31, 2011, 239,270 of these shares remained available for future issuance under the Plan.

### ***Stock Options***

The Company has granted stock options to employees, officers, directors, scientific advisors and consultants generally at exercise prices equal to the quoted market price of the common stock at grant date. Share awards generally vest over a period of 2 to 4 years of continuous service and have contractual terms from 5 to 10 years. Certain awards provide for accelerated vesting if there is a change in control. The Company issues new shares as shares are required to be delivered upon exercise of outstanding stock options. No stock options have been exercised through December 31, 2011.

During the years ended December 31, 2011, 2010 and 2009, the Company recorded non-cash stock-based compensation expense related to stock options totaling \$416,735, \$450,089 and \$581,286, respectively.

During the years ended December 31, 2011 and 2010, the Company granted five-year options to purchase an aggregate of 625,000 shares and 465,000 shares, respectively, of the Company's common stock to certain of the Company's officers, employees, directors and consultants.

**12. Stock Compensation Plans (continued)**

Stock option activity under the Company's written stock option agreements and the Plan for the year ended December 31, 2011 is summarized as follows:

	<u>Number of Options</u>	<u>Weighted Average Exercise Price</u>
<b>Outstanding at beginning of year</b>	<b>3,135,619</b>	<b>\$ 1.00</b>
Granted	625,000	1.06
Exercised	—	—
Forfeited, expired or cancelled	(37,511)	1.22
<b>Outstanding at end of year</b>	<b>3,723,108</b>	<b>\$ 1.01</b>
<b>Exercisable at end of year</b>	<b>3,303,108</b>	<b>\$ 1.00</b>

The aggregate intrinsic value of outstanding options and exercisable options at December 31, 2011 was \$1.5 million and \$1.4 million, respectively. The weighted-average grant-date fair value of stock options granted during 2011, 2010 and 2009 was \$0.79, \$0.75 and \$0.55, respectively. The total fair value of vested stock options during 2011, 2010 and 2009 was \$438,139, \$346,270 and \$634,807, respectively.

The following table summarizes information about the Company's stock options outstanding at December 31, 2011:

Range of Exercise Prices	Options Outstanding			Options Exercisable		
	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
<b>\$0.62- \$0.69</b>	<b>1,489,220</b>	<b>1.85</b>	<b>\$ 0.68</b>	<b>1,489,220</b>	<b>1.85</b>	<b>\$ 0.68</b>
<b>\$0.90</b>	<b>935,000</b>	<b>2.80</b>	<b>\$ 0.90</b>	<b>935,000</b>	<b>2.80</b>	<b>\$ 0.90</b>
<b>\$1.01- \$1.09</b>	<b>1,070,000</b>	<b>4.49</b>	<b>\$ 1.07</b>	<b>650,000</b>	<b>4.34</b>	<b>\$ 1.08</b>
<b>\$2.49- \$2.55</b>	<b>124,000</b>	<b>1.92</b>	<b>\$ 2.51</b>	<b>124,000</b>	<b>1.92</b>	<b>\$ 2.51</b>
<b>\$3.15- \$6.00</b>	<b>104,888</b>	<b>0.93</b>	<b>\$ 4.08</b>	<b>104,888</b>	<b>0.93</b>	<b>\$ 4.08</b>
	<b>3,723,108</b>	<b>2.83</b>	<b>\$ 1.01</b>	<b>3,303,108</b>	<b>2.58</b>	<b>\$ 1.00</b>

As of December 31, 2011, there was approximately \$312,000 of unrecognized compensation expense related to non-vested stock option awards granted under the Plan. That cost is expected to be recognized over a weighted average period of approximately 2.00 years.

The Company utilizes the Black-Scholes option-pricing model to determine the fair value of stock options on the date of grant. This model derives the fair value of stock options based on certain assumptions related to the expected stock price volatility, expected option life, risk-free interest rate and dividend yield. The 2011 expected volatility is based on reviews of historical volatility of the Company's common stock. For 2010 and prior, the Company's expected volatility was based on the historical volatility of other publicly traded companies in the same industry, due to the Company's short history as a public entity. The estimated expected option life is based upon estimated employee exercise patterns and considers whether and the extent to which the options are in-the-money. During 2011, the Company estimated the expected option life for options granted to employees and directors based upon the simplified method. Under this method, the expected life is presumed to be the mid-point between the vesting date and the end of the contractual term. The Company will continue to use the simplified method until it has sufficient historical exercise data to estimate the expected life of the options. The risk-free interest rate assumption is based upon the U.S. Treasury yield curve appropriate for the estimated life of the stock options awards. The expected dividend rate is zero. Stock-based compensation expense also includes an estimate, which the Company makes at grant date, of the number of awards that are expected to be forfeited. The Company revises this estimate in subsequent periods if actual forfeitures differ from those estimates.

## 12. Stock Compensation Plans (continued)

Assumptions used were as follows:

	Year ended December 31,		
	2011	2010	2009
Risk free interest rate	0.29% to 1.55%	0.81% to 2.44%	1.26% to 2.60%
Expected term	3 to 5 years	4 to 5 years	4 to 5 years
Expected volatility	130%	100%	90%
Expected dividend yield	— %	— %	— %
Expected forfeiture rate	— %	— %	— %

### Restricted Stock Units

Under the Plan, participants may be granted restricted stock units, each of which represents a conditional right to receive shares of common stock in the future. The restricted stock units granted under this plan generally vest ratably over a three to four-year period. Upon vesting, the restricted stock units will convert into an equivalent number of shares of common stock. The amount of expense relating to the restricted stock units is based on the closing market price of the Company's common stock on the date of grant and is amortized on a straight-line basis over the requisite service period. There was no restricted stock unit activity during 2011.

During the years ended December 31, 2011, 2010 and 2009, the Company recorded non-cash stock-based compensation expense related to restricted stock units totaling \$0, \$0 and \$20,152, respectively.

## 13. Benefit Plan

During 2007, the Company established an employee savings plan pursuant to Section 401(k) of the Internal Revenue Code. Subject to certain dollar limits, all eligible employees may contribute up to 15% of their pre-tax annual compensation to the plan. Commencing in 2008, the Company has elected to make discretionary matching contributions of employee contributions up to 4% of an employee's gross salary. For the years ended December 31, 2011, 2010 and 2009 the Company's matching contributions were approximately \$34,000, \$33,000 and \$34,000, respectively.

The following table presents unaudited supplemental quarterly financial information for the years ended December 31, 2011 and December 31, 2010:

	Quarter Ended			
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011
<b>Revenues</b>	\$ —	\$ —	\$ —	\$ —
<b>Loss from operations</b>	(1,519,250)	(1,397,463)	(1,131,010)	(2,034,416)
<b>Net loss</b>	(1,517,136)	(1,394,151)	(1,127,841)	(2,351,934)
<b>Loss per share — basic and diluted</b>	\$ (0.08)	\$ (0.06)	\$ (0.05)	\$ (0.10)

  

	Quarter Ended			
	March 31, 2010	June 30, 2010	September 30, 2010	December 31, 2010
<b>Revenues — government grant</b>	\$ —	\$ —	\$ —	\$ 488,958
<b>Loss from operations</b>	(1,050,412)	(1,333,132)	(908,465)	(732,172)
<b>Net loss</b>	(1,045,043)	(1,328,541)	(903,985)	(728,754)
<b>Loss per share — basic and diluted</b>	\$ (0.06)	\$ (0.07)	\$ (0.05)	\$ (0.04)

Quarterly basic and diluted net loss per common share were computed independently for each quarter and do not necessarily total to the full year basic and diluted net loss per common share.



**Shares  
Common Stock**

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**Prospectus**

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**Cowen and Company**  
*Sole Book-Running Manager*

**Roth Capital Partners**

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, 2012

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**PART II**  
**INFORMATION NOT REQUIRED IN THIS PROSPECTUS**

**ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

The following table sets forth all expenses to be paid by the registrant, other than underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the registration fee.

SEC registration fee	\$ 1,317.90
FINRA filing fee	1,650.00
Legal fees and expenses	
Accounting fees and expenses	
Miscellaneous expenses	
Total	<u>\$</u>

**ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS**

Section 145 of the Delaware General Corporation Law provides for the indemnification of officers, directors, and other corporate agents in terms sufficiently broad to indemnify such persons under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. The registrant's Restated Certificate of Incorporation and the registrant's Amended and Restated Bylaws provide for indemnification of the registrant's directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law. The registrant has also entered into agreements with its directors and officers that will require the registrant, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers to the fullest extent not prohibited by law.

**ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES**

None.

**ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES****(a) Exhibits**

Exhibit No.	Description of Exhibit
1.1	Form of Underwriting Agreement*
2.1	Agreement and Plan of Merger, dated August 14, 2006, between the Company and Catalyst Pharmaceutical Partners, Inc., a Florida corporation(1)
3.1	Certificate of Incorporation(1)
3.2	Amendment to Certificate of Incorporation(1)
3.3	By-laws(1)
4.1	Specimen stock certificate for common stock(1)
4.2	Rights Agreement between the Company and Continental Stock Transfer and Trust Company(10)
4.3	Form of Warrant to Purchase Common Stock(11)
5.1	Opinion of Akerman Senterfitt***
10.1+	Employment Agreement between the Company and Patrick J. McEnany(2)
10.2+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(3)
10.3+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(5)

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<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.4+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(9)
10.5+	Stock Option Agreement between the Company and Patrick J. McEnany(1)
10.6+	Stock Option Agreement between the Company and Hubert Huckel(1)
10.7+	Agreement between the Company and Charles Gorodetzky(1)
10.8+	2006 Stock Incentive Plan(1)
10.9+	Amendment No. 1 to 2006 Stock Incentive Plan(7)
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### Notes to List of Exhibits

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- \* Filed herewith
- \*\* Previously filed as part of this Form S-1
- \*\*\* To be filed by amendment
- \*\*\*\* Pursuant to Rule 406 of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability.
- + Management contract or compensatory plan

### **ITEM 17. UNDERTAKINGS**

(a) The undersigned registrant hereby undertakes:

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

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");

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

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

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

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

(4) That, for the purpose of determining liability under the Securities Act to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.



**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this Amendment No. 1 to Registration Statement to be signed on behalf of the undersigned, thereunto authorized, in the city of Coral Gables, State of Florida, on the 24<sup>th</sup> day of April, 2012.

**CATALYST PHARMACEUTICAL PARTNERS, INC.**

By:           /s/ Patrick J. McEnany            
 Patrick J. McEnany  
 Chairman, President and CEO

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons, in the capacities and on the dates indicated.

Signature	Title	Date
<u>          /s/ Patrick J. McEnany          </u> Patrick J. McEnany	Chairman of the Board of Directors, President and Chief Executive Officer (Principal Executive Officer)	April 24, 2012
<u>          /s/ Alicia Grande          </u> Alicia Grande	Vice President, Treasurer and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 24, 2012
<u>          *          </u> Hubert E. Huckel, M.D.	Director	April 24, 2012
<u>          *          </u> Charles B. O’Keeffe	Director	April 24, 2012
<u>          *          </u> Philip H. Coelho	Director	April 24, 2012
<u>          *          </u> David S. Tierney, M.D.	Director	April 24, 2012
<u>          *          </u> Milton J. Wallace	Director	April 24, 2012
<u>          /s/ Patrick J. McEnany          </u> Patrick J. McEnany as attorney-in-fact		

**INDEX OF EXHIBITS TO REGISTRATION STATEMENT**

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
1.1	Form of Underwriting Agreement*
2.1	Agreement and Plan of Merger, dated August 14, 2006, between the Company and Catalyst Pharmaceutical Partners, Inc., a Florida corporation(1)
3.1	Certificate of Incorporation(1)
3.2	Amendment to Certificate of Incorporation(1)
3.3	By-laws(1)
4.1	Specimen stock certificate for common stock(1)
4.2	Rights Agreement between the Company and Continental Stock Transfer and Trust Company(10)
4.3	Form of Warrant to Purchase Common Stock(11)
5.1	Opinion of Akerman Senterfitt***
10.1+	Employment Agreement between the Company and Patrick J. McEnany(2)
10.2+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(3)
10.3+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(5)
10.4+	Amendment to Employment Agreement between the Company and Patrick J. McEnany(9)
10.5+	Stock Option Agreement between the Company and Patrick J. McEnany(1)
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[\_\_\_\_\_] Shares

Catalyst Pharmaceutical Partners, Inc.

Common Stock

## UNDERWRITING AGREEMENT

April [\_\_], 2012

COWEN AND COMPANY, LLC

As Representative of the several Underwriters

599 Lexington Avenue

New York, New York 10022

Dear Sirs:

1. INTRODUCTORY. Catalyst Pharmaceutical Partners, Inc., a Delaware corporation (the "Company"), proposes to sell, pursuant to the terms of this Agreement, to the several underwriters named in Schedule I hereto (the "Underwriters," or, each, an "Underwriter"), an aggregate of [\_\_\_\_\_] shares (the "Firm Stock") of the Company's common stock, par value \$0.001 per share (the "Common Stock"). The Company also proposes to sell to the Underwriters, upon the terms and conditions set forth in Section 3 hereof, up to an additional [\_\_\_\_\_] shares of Common Stock (the "Optional Stock"). The Firm Stock and the Optional Stock are hereinafter collectively referred to as the "Stock". Cowen and Company, LLC is acting as representative of the several Underwriters and in such capacity is hereinafter referred to as the "Representative."

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants to the several Underwriters, as of the date hereof and as of each Closing Date (as defined below), and agrees with the several Underwriters that:

(a) A registration statement of the Company on Form S-1 (File No. 333-180617) (including all pre-effective amendments thereto, the "Initial Registration Statement") in respect of the Stock has been filed with the Securities and Exchange Commission (the "Commission") in accordance with the Securities Act of 1933, as amended (the "Securities Act"), and the rules and regulations of the Commission thereunder (the "Rules and Regulations"). The Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, have been declared effective by the Commission in such form and meet the requirements of the Securities Act and the Rules and Regulations. Other than (i) a registration statement, if any, increasing the size of the offering filed pursuant to Rule 462(b) under the Securities Act and the Rules and Regulations (a "Rule 462(b) Registration Statement") and (ii) the Prospectus (as defined below) contemplated by this Agreement to be filed pursuant to Rule 424(b) of the Rules and Regulations in accordance with Section 4(a) hereof and (iii) any Issuer Free Writing Prospectus (as defined below), no other document with respect to the offer and sale of the Stock has heretofore been filed with the Commission. No stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose or pursuant to Section 8A of the Securities Act has been initiated or, to the Company's Knowledge (as defined below), threatened by the Commission (any preliminary prospectus included in the Initial Registration Statement or filed with the Commission pursuant to Rule 424(a) of the Rules and Regulations with respect to the offer and sale of the Stock is hereinafter called a "Preliminary Prospectus"). The various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, in each case including all exhibits thereto and including (i) the information contained in

the Prospectus filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations and deemed by virtue of Rule 430A under the Securities Act to be part of the Initial Registration Statement at the time it became effective and (ii) the documents incorporated by reference in the Rule 462(b) Registration Statement at the time the Rule 462(b) Registration Statement became effective, are hereinafter collectively called the “Registration Statements.” The final prospectus in the form filed pursuant to and within the time limits described in Rule 424(b) under the Rules and Regulations, is hereinafter called the “Prospectus.” Any reference herein to any Registration Statement, Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein. Any reference to any amendment or supplement to any Registration Statement, Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any documents filed after the date of such Preliminary Prospectus or the Prospectus under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and incorporated by reference in such Preliminary Prospectus or Prospectus, as the case may be.

(b) As of the Applicable Time (as defined below) and as of the Closing Date or the Option Closing Date (each as defined below), as the case may be, neither (i) the General Use Free Writing Prospectus(es) (as defined below) issued at or prior to the Applicable Time, and the Pricing Prospectus (as defined below) and the information included on Schedule II hereto, all considered together (collectively, the “General Disclosure Package”), (ii) any individual Limited Use Free Writing Prospectus (as defined below), nor (iii) the bona fide electronic road show (as defined in Rule 433(h)(5) of the Rules and Regulations that has been made available without restriction to any person), when considered together with the General Disclosure Package, included or will include any untrue statement of a material fact or omitted or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from the Pricing Prospectus or any Issuer Free Writing Prospectus, in reliance upon, and in conformity with, written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter’s Information as defined in Section 17. As used in this paragraph (b) and elsewhere in this Agreement:

“Applicable Time” means [\_\_\_\_\_:\_\_\_\_\_] [a.m.][p.m.], New York time, on the date of this Agreement or such other time as agreed to by the Company and the Representative.

“Pricing Prospectus” means the Preliminary Prospectus relating to the Stock that is included in the Registration Statement immediately prior to the Applicable Time, including any document incorporated by reference therein.

“Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 of the Rules and Regulations relating to the Stock in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) of the Rules and Regulations.

“General Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is identified on Schedule II to this Agreement.

“Limited Use Free Writing Prospectuses” means any Issuer Free Writing Prospectus that is not a General Use Free Writing Prospectus.

(c) No order preventing or suspending the use of any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus relating to the proposed offering of the Stock has been issued by the Commission, and no proceeding for that purpose or pursuant to Section 8A of the Securities Act has been instituted or, to the Company's Knowledge, threatened by the Commission, and each Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Securities Act and the Rules and Regulations, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from any Preliminary Prospectus, in reliance upon, and in conformity with, written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter's Information as defined in Section 17.

(d) At the respective times the Registration Statements and any amendments thereto became or become effective, at the date of this Agreement and at each Closing Date, each Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and the Prospectus and any amendments or supplements thereto, at the time the Prospectus or any amendment or supplement thereto was issued and at each Closing Date, conformed and will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that the foregoing representations and warranties in this paragraph (d) shall not apply to information contained in or omitted from the Registration Statements or the Prospectus, or any amendment or supplement thereto, in reliance upon, and in conformity with, written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter's Information (as defined in Section 17). The Prospectus contains or will contain all required information under Rule 430A.

(e) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Stock or until any earlier date that the Company notified or notifies the Representative as described in Section 4(c), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, Pricing Prospectus or the Prospectus, or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances prevailing at the subsequent time, not misleading. The foregoing representation and warranty in this paragraph (e) shall not apply to information contained in or omitted from an Issuer Free Writing Prospectus in reliance upon, and in conformity with, written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter's Information (as defined in Section 17).

(f) The Company has not, directly or indirectly, distributed and will not distribute any offering material in connection with the offering and sale of the Stock other than any Preliminary Prospectus, the Prospectus and other materials, if any, permitted under the Securities Act and consistent with Section 4(b) below. The Company will file with the Commission all Issuer Free Writing Prospectuses in the time and manner required under Rules 163(b)(2) and 433(d) of the Rules and Regulations.

(g) At the time of filing the Initial Registration Statement, any 462(b) Registration Statement and any post-effective amendments thereto, and at the date hereof, the Company was not, and the Company currently is not, an “ineligible issuer,” as defined in Rule 405 of the Rules and Regulations.

(h) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation. The Company is duly qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which its ownership or lease of property or the conduct of its businesses requires such qualification and has all power and authority (corporate or other) necessary to own or hold its properties and to conduct the businesses in which it is engaged, except where the failure to so qualify or have such power or authority would not (i) have, in the aggregate, a material adverse effect on the condition (financial or otherwise), results of operations, assets, business or prospects of the Company, or (ii) impair in any material respect the ability of the Company to perform its obligations under this Agreement or to consummate any transactions contemplated by this Agreement, the General Disclosure Package or the Prospectus (any such effect as described in clauses (i) or (ii), a “Material Adverse Effect”). The Company does not own or control, directly or indirectly, any interest in any corporation, partnership, limited liability partnership, limited liability corporation, association or other entity.

(i) This Agreement has been duly authorized, executed and delivered by the Company.

(j) The Stock to be issued and sold by the Company to the Underwriters hereunder has been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued, fully paid and nonassessable and free of any preemptive or similar rights and will conform to the description thereof contained in the General Disclosure Package and the Prospectus.

(k) The Company has an authorized capitalization as set forth under the heading “General Description of our Common Stock” in the Pricing Prospectus, and all of the issued shares of capital stock of the Company, have been duly and validly authorized and issued, are fully paid and non-assessable, have been issued in compliance with federal and state securities laws, and conform to the description thereof contained in the General Disclosure Package and the Prospectus. As of April 6, 2012, there were 24,741,520 shares of Common Stock issued and outstanding and no shares of preferred stock, par value \$0.001 per share, of the Company issued and outstanding and 5,002,478 shares of Common Stock were issuable upon the exercise of all options, warrants and convertible securities outstanding as of such date. Since such date, the Company has not issued any securities.

(l) All of the Company’s options, warrants and other rights to purchase or exchange any securities for shares of the Company’s capital stock have been duly authorized and validly issued and were issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding shares of capital stock, options, warrants or rights of first refusal to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company other than those described above or accurately described in the General Disclosure Package; and there are no preemptive rights, or other rights, granted by the Company to purchase Stock in the offering contemplated by this Agreement which have not been waived by the holders of such rights. The description of the Company’s stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, as described in the General Disclosure Package and the Prospectus, accurately and fairly present the information required to be shown with respect to such plans, arrangements, options and rights.

(m) The execution, delivery and performance of this Agreement by the Company, the issue and sale of the Stock by the Company and the consummation of the transactions contemplated hereby will not (with or without notice or lapse of time or both) conflict with or result in a breach or violation of any of the terms or provisions of, constitute a default or a Debt Repayment Triggering Event (as defined below) under, give rise to any right of termination or other right or the cancellation or acceleration of any right or obligation or loss of a benefit under, or give rise to the creation or imposition of any lien, encumbrance, security interest, claim or charge upon any property or assets of the Company pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, nor will such actions result in any violation of the provisions of the charter or by-laws of the Company or any law, statute, rule, regulation, judgment, order or decree of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Company or any of its properties or assets, which, in the case of the foregoing, in the aggregate, if determined adversely to the Company, could reasonably be expected to have a Material Adverse Effect. A “Debt Repayment Triggering Event” means any event or condition that gives, or with the giving of notice or lapse of time would give the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder’s behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company.

(n) Except for the registration of the Stock under the Securities Act and applicable state securities laws, the Financial Industry Regulatory Authority (“FINRA”) and the NASDAQ Capital Market in connection with the purchase and distribution of the Stock by the Underwriters and the listing of the Stock on the NASDAQ Capital Market, no consent, approval, authorization or order of, or filing, qualification or registration (each an “Authorization”) with, any court, governmental or non-governmental agency or body, foreign or domestic, which has not been made, obtained or taken and is not in full force and effect, is required for the execution, delivery and performance of this Agreement by the Company, the offer or sale of the Stock or the consummation of the transactions contemplated hereby; and no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, suspension, termination or invalidation of any such Authorization or any other impairment of the rights of the holder or maker of any such Authorization. All corporate approvals (including those of stockholders) necessary for the Company to consummate the transactions contemplated by this Agreement have been obtained and are in effect.

(o) Grant Thornton LLP, who have certified certain financial statements and related schedules included in the Registration Statements, the General Disclosure Package and the Prospectus, is an independent registered public accounting firm within the meaning of Article 2-01 of Regulation S-X and the Public Company Accounting Oversight Board (United States) (the “PCAOB”).

(p) The financial statements, together with the related notes and schedules, included in the General Disclosure Package, the Prospectus and in each Registration Statement fairly present the financial position and the results of operations and changes in financial position of the Company at the respective dates or for the respective periods therein specified. Such statements and related notes and schedules have been prepared in accordance with the generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods involved except as may be set forth in the related notes included in the General Disclosure Package. The financial statements, together with the related notes and schedules, included in the General Disclosure Package and the Prospectus comply in all material respects with Regulation S-X. No other financial statements or supporting schedules or exhibits are required by Regulation S-X to be described, or included in the Registration Statements, the General Disclosure Package or the Prospectus. There is no pro forma or as adjusted financial information which is required to be included in the Registration Statements, the General Disclosure Package, or and the Prospectus or a document incorporated by reference therein in accordance with Regulation S-X which has not been included or incorporated as so required. The summary and selected financial data included in the



General Disclosure Package, the Prospectus and each Registration Statement fairly present the information shown therein as at the respective dates and for the respective periods specified and are derived from the consolidated financial statements set forth in the Registration Statement, the Pricing Prospectus and the Prospectus and other financial information. All information contained in the Registration Statement, the General Disclosure Package and the Prospectus regarding “non-GAAP financial measures” (as defined in Regulation G) complies with Regulation G and Item 10 of Regulations S-K, to the extent applicable.

(q) The Company has not sustained, since the date of the latest audited financial statements included in the General Disclosure Package, any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the General Disclosure Package; and, since such date, there has not been any change in the capital stock or long-term debt of the Company, or any material adverse changes, or any development involving a prospective material adverse change, in or affecting the business, assets, general affairs, management, financial position, prospects, stockholders’ equity or results of operations of the Company, otherwise than as set forth or contemplated in the General Disclosure Package.

(r) Except as set forth in the General Disclosure Package, there is no legal or governmental proceeding pending to which the Company is a party or of which any property or assets of the Company is the subject which is required to be described in the Registration Statements, the General Disclosure Package or the Prospectus and is not described therein, or which, in the aggregate, if determined adversely to the Company, could reasonably be expected to have a Material Adverse Effect; and to the best of the Company’s knowledge after reasonable investigation (“Knowledge”), no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

(s) The Company is not (i) in violation of its charter or by-laws (or analogous governing instrument, as applicable), (ii) in default in any respect, and no event has occurred which, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it is bound or to which any of its property or assets is subject or (iii) is in violation in any respect of any law, ordinance, governmental rule, regulation or court order, decree or judgment to which it or its property or assets may be subject except, in the case of clauses (ii) and (iii) of this paragraph (s), for any violations or defaults which, in the aggregate, would not have a Material Adverse Effect.

(t) The Company possesses all licenses, certificates, authorizations and permits issued by, and has made all declarations and filings with, the appropriate local, state, federal or foreign regulatory agencies or bodies which are necessary or desirable for the ownership of their respective properties or the conduct of their respective businesses as described in the General Disclosure Package and the Prospectus (collectively, the “Governmental Permits”) except where any failures to possess or make the same, in the aggregate, would not have a Material Adverse Effect. The Company is in material compliance with all such Governmental Permits; all such Governmental Permits are valid and in full force and effect, except where the validity or failure to be in full force and effect would not, in the aggregate, have a Material Adverse Effect. All such Governmental Permits are free and clear of any restriction or condition that are in addition to, or materially different from those normally applicable to similar licenses, certificates, authorizations and permits. The Company has not received notification of any revocation, modification, suspension, termination or invalidation (or proceedings related thereto) of any such Governmental Permit and to the Knowledge of the Company, no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, modification, suspension, termination or invalidation (or proceedings related thereto) of any such Governmental Permit and the Company has no reason to believe that any such Governmental Permit will not be renewed.

(u) The Company is not, and, after giving effect to the offering of the Stock and the application of the proceeds thereof as described in the General Disclosure Package and the Prospectus, will not become an “investment company” within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

(v) Neither the Company nor any of its officers, directors or affiliates has taken or will take, directly or indirectly, any action designed or intended to stabilize or manipulate the price of any security of the Company, or which caused or resulted in, or which might in the future reasonably be expected to cause or result in, stabilization or manipulation of the price of any security of the Company.

(w) The Company owns or possesses the valid right to use all (i) valid and enforceable patents, patent applications, trademarks, trademark registrations, service marks, service mark registrations, Internet domain name registrations, copyrights, copyright registrations, licenses, trade secret rights (“Intellectual Property Rights”) and (ii) inventions, software, works of authorships, trademarks, service marks, trade names, databases, formulae, know how, Internet domain names and other intellectual property (including trade secrets and other unpatented and/or unpatentable proprietary confidential information, systems, or procedures) (collectively, “Intellectual Property Assets”) necessary to conduct its businesses as currently conducted, and as proposed to be conducted and described in the General Disclosure Package and the Prospectus. The Company has not received any opinion from its legal counsel concluding that any activities of their respective businesses infringe, misappropriate, or otherwise violate, valid and enforceable Intellectual Property Rights of any other person, and have not received written notice of any challenge, which is to its Knowledge still pending, by any other person to the rights of the Company with respect to any Intellectual Property Rights or Intellectual Property Assets owned or used by the Company. To the Knowledge of the Company, the Company business as now conducted does not give rise to any infringement of, any misappropriation of, or other violation of, any valid and enforceable Intellectual Property Rights of any other person. All licenses for the use of the Intellectual Property Rights described in the General Disclosure Package and the Prospectus are valid, binding upon, and enforceable by or against the parties thereto in accordance to its terms. The Company has complied in all material respects with, and is not in breach nor has received any asserted or threatened claim of breach of any Intellectual Property license, and the Company has no knowledge of any breach or anticipated breach by any other person to any Intellectual Property license. Except as described in the General Disclosure Package, no claim has been made against the Company alleging the infringement by the Company of any patent, trademark, service mark, trade name, copyright, trade secret, license in or other intellectual property right or franchise right of any person. The Company has taken all commercially reasonable steps to protect, maintain and safeguard its Intellectual Property Rights, including the execution of appropriate nondisclosure and confidentiality agreements. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company’s right to own, use, or hold for use any of the Intellectual Property Rights as owned, used or held for use in the conduct of the business as currently conducted. With respect to the use of the software in the Company’s business as it is currently conducted, the Company has not experienced any material defects in such software including any material error or omission in the processing of any transactions other than defects which have been corrected, and to the knowledge of the Company, no such software contains any device or feature designed to disrupt, disable, or otherwise impair the functioning of any software or is subject to the terms of any “open source” or other similar license that provides for the source code of the software to be publicly distributed or dedicated to the public. The Company has at all times complied with all material applicable laws relating to privacy, data protection, and the collection and use of personal information collected, used, or held for use by the Company in the conduct of the Company’s business. No claims have been asserted or, to the Company’s Knowledge, threatened against the Company alleging a violation of any person’s privacy or personal information or data rights and the consummation of the transactions contemplated hereby will not breach or otherwise cause any violation of any law related to privacy, data protection, or the collection and use of personal

information collected, used, or held for use by the Company in the conduct of the Company's business. The Company takes reasonable measures to ensure that such information is protected against unauthorized access, use, modification, or other misuse. The Company has taken all commercially reasonable actions to obtain ownership of all works of authorship and inventions made by its employees, consultants and contractors during the time they were employed by or under contract with the Company and which relate to the Company's business.

(x) The Company has good and marketable title in fee simple to, or has valid rights to lease or otherwise use, all items of real or personal property which are material to the business of the Company, in each case free and clear of all liens, encumbrances, security interests, claims and defects that do not, in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company; and all of the leases and subleases material to the business of the Company and under which the Company holds properties described in the General Disclosure Package and the Prospectus, are in full force and effect, and the Company has not received any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company to the continued possession of the leased or subleased premises under any such lease or sublease.

(y) There is (A) no significant unfair labor practice complaint pending against the Company, nor to the Knowledge of the Company, threatened against it, before the National Labor Relations Board, any state or local labor relation board or any foreign labor relations board, and no significant grievance or significant arbitration proceeding arising out of or under any collective bargaining agreement is so pending against the Company, or, to the Knowledge of the Company, threatened against it and (B) no labor disturbance by the employees of the Company exists or, to the Company's Knowledge, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers, customers or contractors, that could reasonably be expected, in the aggregate, to have a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company plans to terminate employment with the Company.

(z) No "prohibited transaction" (as defined in Section 406 of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"), or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the "Code")) or "accumulated funding deficiency" (as defined in Section 302 of ERISA) or any of the events set forth in Section 4043(b) of ERISA (other than events with respect to which the thirty (30)-day notice requirement under Section 4043 of ERISA has been waived) has occurred or could reasonably be expected to occur with respect to any employee benefit plan of the Company which could, in the aggregate, have a Material Adverse Effect. Each employee benefit plan of the Company is in compliance in all material respects with applicable law, including ERISA and the Code. The Company has not incurred and could not reasonably be expected to incur liability under Title IV of ERISA with respect to the termination of, or withdrawal from, any pension plan (as defined in ERISA). Each pension plan for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which could, in the aggregate, cause the loss of such qualification.

(aa) The Company is in material compliance with all foreign, federal, state and local rules, laws and regulations relating to the use, treatment, storage and disposal of hazardous or toxic substances or waste and protection of health and safety or the environment which are applicable to their businesses (“**Environmental Laws**”). There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other wastes or other hazardous substances by, due to, or caused by the Company (or, to the Company’s Knowledge, any other entity for whose acts or omissions the Company is or may otherwise be liable) upon any of the property now or previously owned or leased by the Company, or upon any other property, in violation of any law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability; and there has been no disposal, discharge, emission or other release of any kind onto such property or into the environment surrounding such property of any toxic or other wastes or other hazardous substances with respect to which the Company has knowledge. In the ordinary course of business, the Company conducts periodic reviews of the effect of Environmental Laws on their business and assets, in the course of which they identify and evaluate associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or Governmental Permits issued thereunder, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such reviews, the Company has reasonably concluded that such associated costs and liabilities would not have, in the aggregate, a Material Adverse Effect.

(bb) The Company (i) has timely filed all necessary federal, state, local and foreign tax returns (or filed timely extensions with respect to such returns), and all such filed returns were true, complete and correct, (ii) has paid all federal, state, local and foreign taxes, assessments, governmental or other charges due and payable for which it is currently liable, including, without limitation, all sales and use taxes and all taxes which the Company is obligated to withhold from amounts owing to employees, creditors and third parties, other than amounts as to which in good faith it disputes owing, and (iii) does not have any tax deficiency or claims outstanding or assessed or, to its Knowledge, proposed against it, except those, in each of the cases described in clauses (i), (ii) and (iii) of this paragraph (bb), that would not, in the aggregate, have a Material Adverse Effect. The Company has not engaged in any transaction which is a corporate tax shelter or which could be characterized as such by the Internal Revenue Service or any other taxing authority. The accruals and reserves on the books and records of the Company in respect of tax liabilities for any taxable period not yet finally determined are adequate to meet any assessments and related liabilities for any such period, and since December 31, 2011, the Company has not incurred any liability for taxes other than in the ordinary course.

(cc) The Company carries, or is covered by, insurance in such amounts and covering such risks as is adequate for the conduct of its businesses and the value of its properties and as is commercially reasonable for companies engaged in similar businesses in similar industries. The Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect. All policies of insurance owned by the Company are, to the Company’s Knowledge, in full force and effect and the Company is in compliance with the terms of such policies. The Company has not received written notice from any insurer, agent of such insurer or the broker of the Company that any material capital improvements or any other material expenditures (other than premium payments) are required or necessary to be made in order to continue such insurance. The Company does not insure risk of loss through any captive insurance, risk retention group, reciprocal group or by means of any fund or pool of assets specifically set aside for contingent liabilities other than as described in the General Disclosure Package.

(dd) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15 of the General Rules and Regulations under the Exchange Act (the “Exchange Act Rules”)) that complies with the requirements of the Exchange Act and has been designed by the Company’s principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurances that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company’s internal control over financial reporting is effective. Except as described in the General Disclosure Package, since the end of the Company’s most recent audited fiscal year, there has been (A) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (B) no change in the Company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. The Company’s internal control over financial reporting is, or upon consummation of the offering of the Stock will be, overseen by the Audit Committee of the Board of Directors of the Company (the “Audit Committee”) in accordance with the Exchange Act Rules. The Company has not publicly disclosed or reported to the Audit Committee or to the Board, and within the next 90 days the Company does not reasonably expect to publicly disclose or report to the Audit Committee or the Board, a significant deficiency, material weakness, change in internal control over financial reporting or fraud involving management or other employees who have a significant role in the internal control over financial reporting (each an “Internal Control Event”), any violation of, or failure to comply with, federal securities laws, or any matter which if determined adversely, would have a Material Adverse Effect.

(ee) The Company has received a certificate from the Chairman of the Audit Committee confirming that, except as set forth in the General Disclosure Package, the Audit Committee is not reviewing or investigating, and neither the Company’s independent auditors nor its internal auditors have recommended that the Audit Committee review or investigate, (i) adding to, deleting, changing the application of or changing the Company’s disclosure with respect to, any of the Company’s material accounting policies, (ii) any matter which could result in a restatement of the Company’s financial statements for any annual or interim period during the current or prior three fiscal years, or (iii) any Internal Control Event.

(ff) The Company has made and keeps books, records and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company in all material respects.

(gg) The Company maintains disclosure controls and procedures (as such is defined in Rule 13a-15 of the Exchange Act Rules) that comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that information required to be disclosed by the Company is accumulated and communicated to the Company’s management, including the Company’s principal executive officer and principal financial officer by others within the Company, and such disclosure controls and procedures are effective.

(hh) The minute books of the Company been made available to the Underwriters and counsel for the Underwriters, and such books (i) contain a complete summary of all meetings and actions of the board of directors (including each board committee) and stockholders of the Company (or analogous governing bodies and interest holders, as applicable) since January 1, 2009, and (ii) accurately, in all material respects, reflect all transactions referred to in such minutes.

(ii) There is no franchise agreement, lease, contract, or other agreement or document required by the Securities Act or by the Rules and Regulations to be described in the General Disclosure Package and in the Prospectus or to be filed as an exhibit to the Registration Statements which is not so described or filed therein as required; and all descriptions of any such franchise agreements, leases, contracts, or other agreements or documents contained in the General Disclosure Package and in the Prospectus are accurate and complete descriptions of such documents in all material respects. Other than as described in the General Disclosure Package, no such franchise agreement, lease, contract or other agreement has been suspended or terminated for convenience or default by the Company or any of the other parties thereto, and the Company has not received notice of and the Company does not have Knowledge of any such pending or threatened suspension or termination.

(jj) No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors or officers of the Company or any of their affiliates, on the other hand, which is required to be described in the General Disclosure Package and the Prospectus and which is not so described.

(kk) No person or entity has the right to require registration of shares of Common Stock or other securities of the Company because of the filing or effectiveness of the Registration Statements, except for persons and entities who have expressly waived such right in writing or who have been given timely and proper written notice and have failed to exercise such right within the time or times required under the terms and conditions of such right. Except as described in the General Disclosure Package or in agreements filed as exhibits to the Initial Registration Statement, there are no persons with registration rights or similar rights to have any securities registered by the Company under the Securities Act.

(ll) The Company does not own any "margin securities" as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"), and none of the proceeds of the sale of the Stock will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the Stock to be considered a "purpose credit" within the meanings of Regulation T, U or X of the Federal Reserve Board.

(mm) Except as otherwise contemplated by this Agreement, the Company is not a party to any contract, agreement or understanding with any person that would give rise to a valid claim against the Company or the Underwriters for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Stock or any transaction contemplated by this Agreement, the Registration Statements, the General Disclosure Package or the Prospectus.

(nn) The exercise price of each option issued under the Company's stock option or other employee benefit plans has been no less than the fair market value of a share of common stock as determined on the date of grant of such option. All grants of options were validly issued and properly approved by the board of directors of the Company (or a duly authorized committee thereof) in material compliance with all applicable laws and regulations and recorded in the Company's financial statements in accordance with GAAP and, to the Company's Knowledge, no such grants involved "back dating," "forward dating" or similar practice with respect to the effective date of grant.

(oo) Since the date as of which information is given in the General Disclosure Package and the Prospectus through the date hereof, and except as set forth in the Pricing Prospectus, the Company has not (i) issued or granted any securities other than options to purchase common stock pursuant to the Company's stock option plan, (ii) incurred any material liability or obligation, direct or contingent, other than liabilities and obligations which were incurred in the ordinary course of business, (iii) entered into any material transaction other than in the ordinary course of business or (iv) declared or paid any dividend on its capital stock.

(pp) All of the information provided to the Underwriters or to counsel for the Underwriters by the Company and, to the Company's Knowledge, by its officers and directors, in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rules 5110, 5121 and 5190, is true, correct and complete.

(qq) The Company is not a Passive Foreign Investment Company ("PFIC") within the meaning of Section 1296 of the United States Internal Revenue Code of 1966, and the Company is not likely to become a PFIC.

(rr) No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in either the General Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(ss) The Company does not do business with the government of Cuba or with any person or affiliate located in Cuba within the meaning of Florida Statutes Section 517.075.

(tt) The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is traded on the NASDAQ Capital Market, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the NASDAQ Capital Market, nor has the Company received any notification that the Commission or FINRA is contemplating terminating such registration or listing. The Company has filed with the NASDAQ Capital Market a notification of the listing of the Stock on the NASDAQ Capital Market.

(uu) The Company is in compliance with all applicable provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act").

(vv) The Company is in compliance with all applicable corporate governance requirements, if any, set forth in the rules of the NASDAQ Capital Market that are then in effect.

(ww) Neither the Company nor, to the Company's Knowledge, any employee or agent of the Company, has (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds, (iii) violated any provision of the Foreign Corrupt Practices Act of 1977, as amended or (iv) made any other unlawful payment.

(xx) There are no transactions, arrangements or other relationships between and/or among the Company, any of its affiliates (as such term is defined in Rule 405 of the Rules and Regulations) and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity, that could reasonably be expected to materially affect the Company's liquidity or the availability of or requirements for its capital resources required to be described in the General Disclosure Package and the Prospectus which have not been described as required.

(yy) There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any

of the officers or directors of the Company or any of their respective family members, except as disclosed in the Registration Statements, the General Disclosure Package and the Prospectus. All transactions by the Company with office holders or control persons of the Company have been duly approved by the board of directors of the Company, or duly appointed committees or officers thereof, if and to the extent required under U.S. law.

(zz) The statistical and market related data included in the Registration Statement, the General Disclosure Package and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate, and such data agree with the sources from which they are derived.

(aaa) The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Money Laundering Laws is pending, or to the Company's Knowledge, threatened.

(bbb) Neither the Company nor, to the Company's Knowledge, any director, officer, agent, employee or affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(ccc) The Company is not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur on the applicable Closing Date, will not be Insolvent (as defined below). For purposes of this paragraph (ccc), "Insolvent" means, with respect to any Person, (i) the present fair saleable value of such Person's assets is less than the amount required to pay such Person's total Indebtedness, (ii) such Person is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) such Person intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) such Person has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(ddd) Neither the Company nor, to the Knowledge of the Company, any of its affiliates (within the meaning of FINRA Rule 5121(f)(1)), directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA.

(eee) Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company: (A) is and at all times during the past three years has been in material compliance with all applicable statutes, rules or regulations of the United States Food and Drug Administration of the U.S. Department of Health and Human Services ("FDA") and other comparable regulatory authorities ("Governmental Authority") relating to the ownership, testing, development, manufacture, packaging, use, distribution, labeling, storage, import, export or disposal of any product under clinical development or manufactured by or on behalf of the Company ("Applicable Laws"), including but not limited to international standards of Good Clinical Practice and Good Manufacturing Practices; (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any Governmental Authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations");



(C) possesses all required material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any Governmental Authority or third party alleging that any product, operation or activity is in material violation of any Applicable Laws or Authorizations; (E) has not received notice that the FDA or any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission). To the Knowledge of the Company, all third parties that are collaborating with the Company with respect to its clinical development activities are in material compliance with all Applicable Laws and possess all required material Authorizations relating to such activities.

(fff) The studies, tests and preclinical and clinical trials conducted by or, to the Company's Knowledge, on behalf of the Company were and, if still ongoing, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to all Authorizations and Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder (collectively, "FFDCA"); the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the General Disclosure Package and the Prospectus are, to the Company's knowledge, accurate and complete in all material respects and fairly present in all material respects the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes would have an adverse effect on the development of the Company's product candidates in the Registration Statement, the General Disclosure Package and the Prospectus; and, except to the extent disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company and, to the Company's knowledge, its directors, officers, employees, and agents (while acting in such capacity on the Company's behalf) are, and at all times since January 1, 2009, have been, in material compliance with, all health care laws applicable to the Company or any of its products or activities, including, but not limited to, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the Anti-Inducement Law (42 U.S.C. § 1320a-7a(a)(5)), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)), the Stark law (42 U.S.C. §1395nn), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. §§ 1320d et seq.) as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the exclusion laws (42 U.S.C. § 1320a-7), the Federal Food Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.), the Controlled Substances Act (21 U.S.C. §§ 801 et seq.), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), the regulations promulgated pursuant to such laws, and any other state or federal law, accreditation standards, regulation, memorandum, opinion letter, or other issuance which imposes requirements on the manufacturing, development, testing, labeling, marketing or distribution of pharmaceutical products, kickbacks, patient or program charges, recordkeeping, claims process, documentation requirements, medical necessity, referrals, the hiring of employees or acquisition of services or supplies from those who have been excluded from government health care programs, quality, safety, privacy, security, licensure, accreditation or any other aspect of providing health care or pharmaceutical services (collectively, "Health Care Laws").

Any certificate signed by or on behalf of the Company and delivered to the Representative or to counsel for the Underwriters shall be deemed to be a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

3. PURCHASE, SALE AND DELIVERY OF OFFERED STOCK. On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to sell to the Underwriters, and the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of shares of Firm Stock set forth opposite the names of the Underwriters in Schedule I hereto.

The purchase price per share to be paid by the Underwriters to the Company for the Stock will be \$[\_\_\_\_\_] per share (the "Purchase Price").

The Company will deliver the Firm Stock to the Representative for the respective accounts of the several Underwriters through the facilities of The Depository Trust Company, issued in such names and in such denominations as the Representative may direct by notice in writing to the Company given at or prior to 12:00 Noon, New York time, on the second (2nd) full business day preceding the Closing Date, against payment of the aggregate Purchase Price therefor by wire transfer in federal (same day) funds to an account at a bank acceptable to the Representative payable to the order of the Company at the offices of Goodwin Procter LLP, The New York Times Building, 620 Eighth Avenue, New York, New York. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligations of each Underwriter hereunder. The time and date of the delivery and closing shall be at 10:00 a.m., New York time, on April [\_\_\_], 2012, in accordance with Rule 15c6 1 of the Exchange Act. The time and date of such payment and delivery are herein referred to as the "Closing Date". The Closing Date and the location of delivery of, and the form of payment for, the Firm Stock may be varied by agreement between the Company and the Representative.

For the purpose of covering any over allotments in connection with the distribution and sale of the Firm Stock as contemplated by the Prospectus, the Underwriters may purchase all or less than all of the Optional Stock, provided that such shares of Optional Stock shall be purchased from the Company for the account of each Underwriter in the same proportion as the number of shares of Firm Stock set forth opposite such Underwriter's name on Schedule I bears to the total number of shares of Firm Stock (subject to adjustment by the Representative to eliminate fractions). The price per share to be paid for the Optional Stock shall be the Purchase Price. The Company agrees to sell to the Underwriters the number of shares of Optional Stock specified in the written notice delivered by the Representative to the Company described below and the Underwriters agree, severally and not jointly, to purchase such shares of Optional Stock. The option granted hereby may be exercised as to all or any part of the Optional Stock (subject to the proviso in the first sentence of this paragraph) at any time, and from time to time, not more than thirty (30) days subsequent to the date of this Agreement. No Optional Stock shall be sold and delivered unless the Firm Stock previously has been, or simultaneously is, sold and delivered. The right to purchase the Optional Stock or any portion thereof may be surrendered and terminated at any time prior to the exercise of such right upon notice by the Representative to the Company.

The option granted hereby may be exercised by written notice being given to the Company by the Representative setting forth the number of shares of the Optional Stock to be purchased by the Underwriters and the date and time for delivery of and payment for the Optional Stock. Each date and time for delivery of and payment for the Optional Stock (which may be the Closing Date, but not earlier) is herein called the "Option Closing Date" and shall in no event be earlier than two (2) business days nor later than five (5) business days after written notice is given. The Option Closing Date and the Closing Date are herein called the "Closing Dates."

The Company will deliver the Optional Stock to the Representative for the respective accounts of the several Underwriters through the facilities of The Depository Trust Company or, at the election of the Representative, issued in such names and in such denominations as the Representative may direct by notice

in writing to the Company given at or prior to 12:00 Noon, New York time, on the second (2nd) full business day preceding the Option Closing Date against payment of the aggregate Purchase Price therefor by wire transfer in federal (same day) funds to an account at a bank acceptable to the Representative payable to the order of the Company at the offices of Goodwin Procter LLP, The New York Times Building, 620 Eighth Avenue, New York, New York. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligations of each Underwriter hereunder. The Option Closing Date and the location of delivery of, and the form of payment for, the Optional Stock may be varied by agreement between the Company and the Representative. The several Underwriters propose to offer the Stock for sale upon the terms and conditions set forth in the Prospectus.

4. FURTHER AGREEMENTS OF THE COMPANY. The Company agrees with the several Underwriters:

(a) To prepare the Rule 462(b) Registration Statement, if necessary and agreed to by the Company, in a form reasonable acceptable to the Representative and the Company and file such Rule 462(b) Registration Statement with the Commission by 10:00 p.m., New York time, on the date hereof, and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111(b) under the Rules and Regulations; to prepare the Prospectus in a form acceptable to the Representative and the Company containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A of the Rules and Regulations and to file such Prospectus pursuant to Rule 424(b) of the Rules and Regulations not later than the second (2nd) business day following the execution and delivery of this Agreement or, if applicable, such earlier time as may be required by Rule 430A of the Rules and Regulations; to notify the Representative promptly of the Company's intention to file or prepare any supplement or amendment to any Registration Statement or to the Prospectus and to make no amendment or supplement to the Registration Statements, the General Disclosure Package or to the Prospectus without providing the Representative with a reasonable time to review and comment upon such filing; to advise the Representative, promptly after it receives notice thereof, of the time when any amendment to any Registration Statement has been filed or becomes effective or any supplement to the General Disclosure Package or the Prospectus or any amended Prospectus has been filed and to furnish the Underwriters with copies thereof; to file promptly all material required to be filed by the Company with the Commission pursuant to Rules 433(d) or 163(b)(2) of the Rules and Regulations, as the case may be; to advise the Representative, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus, of the suspension of the qualification of the Stock for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statements, the General Disclosure Package or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus or suspending any such qualification, and promptly to use its best efforts to obtain the withdrawal of such order.

(b) The Company represents and agrees that, unless it obtains the prior consent of the Representative it has not made and will not, make any offer relating to the Stock that would constitute a "free writing prospectus" as defined in Rule 405 of the Rules and Regulations unless the prior written consent of the Representative has been received (each, a "Permitted Free Writing Prospectus"); provided that the prior written consent of the Representative hereto shall be deemed to have been given in respect of the Issuer Free Writing Prospectus included in Schedule II hereto. The Company represents that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus, comply with the requirements of Rules 164 and 433 of the Rules and Regulations applicable to any Issuer Free Writing Prospectus, including the requirements relating to timely filing with the

Commission, legending and record keeping and will not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) of the Rules and Regulations a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder.

(c) If at any time prior to the expiration of nine (9) months after the later of (i) the latest effective date of the Registration Statement or (ii) the date of the Prospectus, when a prospectus relating to the Stock is required to be delivered (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules and Regulations) any event occurs or condition exists as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact, or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made when the Prospectus is delivered (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules and Regulations), not misleading, or if it is necessary at any time to amend or supplement any Registration Statement or the Prospectus to comply with the Securities Act, that the Company will promptly notify the Representative thereof and upon their request will prepare an appropriate amendment or supplement or upon their request make an appropriate filing pursuant to Section 13 or 14 of the Exchange Act in form and substance satisfactory to the Representative which will correct such statement or omission or effect such compliance, and will use its best efforts to have any amendment to any Registration Statement declared effective as soon as possible. The Company will furnish without charge to each Underwriter and to any dealer in securities as many copies as the Representative may from time to time reasonably request of such amendment or supplement. In case any Underwriter is required to deliver a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules and Regulations) relating to the Stock nine (9) months or more after the later of (i) the latest effective date of the Registration Statement or (ii) the date of the Prospectus, the Company upon the request of the Representative will prepare promptly an amended or supplemented Prospectus as may be necessary to permit compliance with the requirements of Section 10(a)(3) of the Securities Act and deliver to such Underwriter as many copies as such Underwriter may reasonably request of such amended or supplemented Prospectus complying with Section 10(a)(3) of the Securities Act. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 4(c)) by reason of the Company filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Exchange Act, the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the Commission no later than the next business day after the Exchange Act report which created the requirement for the Company to amend or supplement such Registration Statement was filed.

(d) If the General Disclosure Package is being used to solicit offers to buy the Stock at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, it becomes necessary to amend or supplement the General Disclosure Package in order to make the statements therein, in the light of the circumstances then prevailing, not misleading, or to make the statements therein not conflict with the information contained in the Registration Statement then on file and not superseded or modified, or if it is necessary at any time to amend or supplement the General Disclosure Package to comply with any law, the Company promptly will either prepare, file with the Commission (if required) and furnish to the Underwriters and any dealers an appropriate amendment or supplement to the General Disclosure Package.

(e) If at any time following issuance of an Issuer Free Writing Prospectus, there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or will conflict with the information contained in the Registration Statement, Pricing Prospectus or Prospectus, including any document incorporated by reference therein and not superseded or modified or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances prevailing at the subsequent time, not misleading, the Company has promptly notified or will promptly notify the Representative so that any use of the Issuer Free Writing Prospectus may cease until it is amended or supplemented and has promptly amended or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(f) To furnish promptly to the Representative and to counsel for the Underwriters a signed copy of each of the Registration Statements as originally filed with the Commission, and of each amendment thereto filed with the Commission, including all consents and exhibits filed therewith.

(g) To deliver promptly to the Representative in New York City such number of the following documents as the Representative shall reasonably request: (i) conformed copies of the Registration Statements as originally filed with the Commission (in each case excluding exhibits), (ii) each Preliminary Prospectus, (iii) any Issuer Free Writing Prospectus, (iv) the Prospectus (the delivery of the documents referred to in clauses (i), (ii), (iii) and (iv) of this paragraph (g) to be made not later than 10:00 a.m., New York time, on the business day following the execution and delivery of this Agreement), (v) conformed copies of any amendment to the Registration Statement (excluding exhibits), and (vi) any amendment or supplement to the General Disclosure Package or the Prospectus (the delivery of the documents referred to in clauses (v) and (vi) of this paragraph (g) to be made not later than 10:00 a.m., New York time, on the business day following the date of such amendment or supplement).

(h) To make generally available to its stockholders as soon as practicable, but in any event not later than sixteen (16) months after the effective date of each Registration Statement (as defined in Rule 158(c) of the Rules and Regulations), an earnings statement of the Company (which need not be audited) complying with Section 11(a) of the Securities Act and the Rules and Regulations (including, at the option of the Company, Rule 158);

(i) To take promptly from time to time such actions as the Representative may reasonably request to qualify the Stock for offering and sale under the securities or Blue Sky laws of such jurisdictions (domestic or foreign) as the Representative may designate and to continue such qualifications in effect, and to comply with such laws, for so long as required to permit the offer and sale of Stock in such jurisdictions; provided that the Company shall not be obligated to qualify as a foreign corporation in any jurisdiction in which they are not so qualified or to file a general consent to service of process in any jurisdiction.

(j) Upon request, during the period of five (5) years from the date hereof, to deliver to each of the Underwriters, (i) as soon as they are available, copies of all reports or other communications furnished to stockholders, and (ii) as soon as they are available, copies of any reports and financial statements furnished or filed with the Commission or the NASDAQ Capital Market or any national securities exchange on which the Stock is listed. However, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act and is timely filing reports with the Commission on its Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"), it is not required to furnish such reports or statements to the Underwriters.

(k) That the Company will not, for a period of ninety (90) days from the date of this Agreement, (the “Lock-Up Period”) without the prior written consent of the Representative, directly or indirectly offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, other than (i) the Company’s sale of the Stock pursuant to this Agreement, and (ii) the issuance of Common Stock or options to acquire Common Stock to employees, directors and/or consultants pursuant to the Company’s employee benefit plans, qualified stock option plans or other employee compensation plans as such plans are in existence on the date hereof, and (iii) the issuance of Common Stock pursuant to the valid exercises of options, warrants or rights outstanding on the date hereof. The Company will cause each officer and director listed in Schedule III to furnish to the Representative, prior to the Closing Date, a letter, substantially in the form of Exhibit A hereto, pursuant to which each such person shall agree, among other things, not to directly or indirectly offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, or announce the intention to otherwise dispose of, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, not to engage in any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, directly or indirectly, the economic risk of ownership of Common Stock or any such securities and not to engage in any short selling of any Common Stock or any such securities, during the Lock-Up Period, without the prior written consent of the Representative. The Company also agrees that during such period, other than for the sale of the Stock hereunder, the Company will not file any registration statement, preliminary prospectus or prospectus, or any amendment or supplement thereto, under the Securities Act for any such transaction or which registers, or offers for sale, Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, except for a registration statement on Form S-8 relating to employee benefit plans and except for updating amendments or supplements to registration statements or prospectuses that became effective prior to the date of this Agreement and that do not register any additional securities. The Company hereby agrees that (i) if it issues an earnings release or material news, or if a material event relating to the Company occurs, during the last seventeen (17) days of the Lock-Up Period, or (ii) if prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the sixteen (16)-day period beginning on the last day of the Lock-Up Period, the restrictions imposed by this paragraph (k) or the letter shall continue to apply until the expiration of the eighteen (18)-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. The Company will provide the Representative and any co-managers and each stockholder subject to the Lock-Up Period with prior notice (in accordance with Section 14 herein) of any such announcement that gives rise to an extension of the Lock-Up Period.

(l) To supply the Underwriters with copies of all correspondence to and from, and all documents issued to and by, the Commission in connection with the registration of the Stock under the Securities Act or any of the Registration Statements, any Preliminary Prospectus or the Prospectus, or any amendment or supplement thereto or document incorporated by reference therein.

(m) Prior to the latest of the Closing Dates, not to issue any press release or other communication directly or indirectly or hold any press conference with respect to the Company, its condition, financial or otherwise, or earnings, business affairs or business prospects (except for routine oral marketing communications in the ordinary course of business and consistent with the past practices of the Company and of which the Representative are notified), without the prior written consent of the Representative, unless in the judgment of the Company and its counsel, and after notification to the Representative, such press release or communication is required by law.

(n) Until the Representative shall have notified the Company of the completion of the resale of the Stock, that the Company will not, and will cause its affiliated purchasers (as defined in Regulation M under the Exchange Act) not to, either alone or with one or more other persons, bid for or purchase, for any account in which it or any of its affiliated purchasers has a beneficial interest, any shares of Common Stock,

or attempt to induce any person to purchase any shares of Common Stock; and not to, and to cause its affiliated purchasers not to, make bids or purchase for the purpose of creating actual, or apparent, active trading in or of raising the price of the Common Stock.

(o) Not to take any action prior to latest of the Closing Dates which would require the Prospectus to be amended or supplemented pursuant to Section 4(c).

(p) To at all times comply with all applicable provisions of the Sarbanes-Oxley Act in effect from time to time.

(q) To apply the net proceeds from the sale of the Stock as set forth in the Registration Statement, the General Disclosure Package and the Prospectus under the heading "Use of Proceeds," and except as disclosed in the General Disclosure Package, the Company does not intend to use any of the proceeds from the sale of the Stock hereunder to repay any outstanding debt owed to any affiliate of any Underwriter. The Company shall manage its affairs and investments in such a manner as not to be or become an "investment company" within the meaning of the Investment Company Act and the rules and regulations thereunder.

(r) To use commercially reasonable efforts to maintain the listing of the Common Stock on the NASDAQ Capital Market.

(s) To use commercially reasonable efforts to do and perform all things required to be done or performed under this Agreement by the Company prior to each Closing Date and to satisfy all conditions precedent to the delivery of the Stock.

(t) Upon request of any Underwriter, to furnish, or cause to be furnished, to such Underwriter an electronic version of the Company's trademarks, service marks and corporate logo for use on the website, if any, operated by such Underwriter for the purpose of facilitating the on-line offering of the Stock (the "License"); provided, however that the License shall be used solely for the purpose described above, is granted without any fee and may not be assigned or transferred.

5. PAYMENT OF EXPENSES. The Company agrees to pay, or reimburse if paid by any Underwriter, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated: (a) the costs incident to the authorization, issuance, sale, preparation and delivery of the Stock and any taxes payable in that connection; (b) the costs incident to the registration of the Stock under the Securities Act; (c) the costs incident to the preparation, printing and distribution of the Registration Statements, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the General Disclosure Package, the Prospectus, any amendments, supplements and exhibits thereto and the costs of printing, reproducing and distributing the "Agreement Among Underwriters" between the Representative and the Underwriters, the Master Selected Dealers' Agreement, the Underwriters' Questionnaire, this Agreement and any closing documents by mail, telex or other means of communications; (d) the fees and expenses (including related fees and expenses of counsel for the Underwriters) incurred in connection with securing any required review by FINRA of the terms of the sale of the Stock and any filings made with FINRA; (e) any applicable listing or other fees; (f) the fees and expenses (including related fees and expenses of counsel to the Underwriters) of qualifying the Stock under the securities laws of the several jurisdictions as provided in Section 4(i)) and of preparing, printing and distributing wrappers, Blue Sky Memoranda and Legal Investment Surveys; (g) the cost of preparing and printing stock certificates; (h) all fees and expenses of the registrar and transfer agent of the Stock; (i) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with the legal or contractual liability) associated with the reforming of any contracts for sale of the Stock made by the Underwriters caused by a breach of the representations contained in Section 2; (j) the costs and expenses of the Company relating to investor

presentations on any “road show” undertaken in connection with the marketing of the offering of the Stock, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the officers of the Company and such consultants, including the cost of any aircraft chartered in connection with the road show; (k) the out-of-pocket expenses of the Underwriters arising out of the offering contemplated by this Agreement and not otherwise provided in this Section 5, in an amount not to exceed \$25,000; (l) the fees and disbursements of counsel to the Underwriters (excluding the fees of counsel to the Underwriters under subsections (d) and (f)), in an amount not to exceed \$125,000; and (m) all other costs and expenses incident to the offering of the Stock or the performance of the obligations of the Company under this Agreement (including, without limitation, the fees and expenses of the Company’s counsel and the Company’s independent accountants).

6. CONDITIONS OF UNDERWRITERS’ OBLIGATIONS. The respective obligations of the several Underwriters hereunder are subject to the accuracy, when made and as of the Applicable Time and on each such Closing Date, of the representations and warranties of the Company contained herein, to the accuracy of the statements of the Company made in any certificates pursuant to the provisions hereof, to the performance by the Company of its obligations hereunder, and to each of the following additional terms and conditions:

(a) The Registration Statements have become effective under the Securities Act, and no stop order suspending the effectiveness of any Registration Statement or any part thereof, preventing or suspending the use of any Preliminary Prospectus, the Prospectus or any Permitted Free Writing Prospectus or any part thereof shall have been issued and no proceedings for that purpose or pursuant to Section 8A under the Securities Act shall have been initiated or threatened by the Commission, and all requests for additional information on the part of the Commission (to be included in the Registration Statements or the Prospectus or otherwise) shall have been complied with to the reasonable satisfaction of the Representative; the Rule 462(b) Registration Statement, if any, each Issuer Free Writing Prospectus and the Prospectus shall have been filed with the Commission within the applicable time period prescribed for such filing by, and in compliance with, the Rules and Regulations and in accordance with Section 4(a), and the Rule 462(b) Registration Statement, if any, shall have become effective immediately upon its filing with the Commission; and FINRA shall have raised no objection to the fairness and reasonableness of the terms of this Agreement or the transactions contemplated hereby.

(b) None of the Underwriters shall have discovered and disclosed to the Company on or prior to such Closing Date that any Registration Statement, as amended by any amendment or supplement thereto, contains an untrue statement of a fact which, in the opinion of counsel for the Underwriters, is material or omits to state any fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading, or that the General Disclosure Package, any Issuer Free Writing Prospectus or the Prospectus or any amendment or supplement thereto contains an untrue statement of fact which, in the opinion of such counsel, is material or omits to state any fact which, in the opinion of such counsel, is material and is necessary in order to make the statements, in the light of the circumstances in which they were made, not misleading.

(c) All corporate proceedings and other legal matters incident to the authorization, form and validity of each of this Agreement, the Stock, the Registration Statements, the General Disclosure Package, each Issuer Free Writing Prospectus and the Prospectus and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Underwriters, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.



(d) Akerman Senterfitt, corporate counsel to the Company, shall have furnished to the Representative such counsel's written opinion addressed to the Underwriters and dated each such Closing Date, in form and substance reasonably satisfactory to the Representative. Roetzel & Andress, special intellectual property counsel to the Company, shall have furnished to the Representative such counsel's written opinion addressed to the Underwriters and dated each such Closing Date, in form and substance reasonably satisfactory to the Representative. Hyman, Phelps & McNamara, P.C., special regulatory counsel to the Company, shall have furnished to the Representative such counsel's written opinion addressed to the Underwriters and dated each such Closing Date, in form and substance reasonably satisfactory to the Representative.

(e) Goodwin Procter LLP, counsel for the Underwriters, shall have furnished to the Representative such counsel's written opinion, addressed to the Underwriters and dated each such Closing Date, in form and substance reasonably satisfactory to the Representative, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(f) At the time of the execution of this Agreement, the Representative shall have received from Grant Thornton LLP a letter, addressed to the Underwriters, executed and dated such date, in form and substance satisfactory to the Representative (i) confirming that they are an independent registered accounting firm with respect to the Company within the meaning of the Securities Act and the Rules and Regulations and PCAOB and (ii) stating the conclusions and findings of such firm, of the type ordinarily included in accountants' "comfort letters" to underwriters, with respect to the financial statements and certain financial information contained or incorporated by reference in the Registration Statements, the General Disclosure Package and the Prospectus.

(g) On the effective date of any post-effective amendment to any Registration Statement and on each such Closing Date, the Representative shall have received a letter (the "bring-down letter") from Grant Thornton LLP addressed to the Underwriters and dated each such Closing Date confirming, as of the date of the bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the General Disclosure Package and the Prospectus, as the case may be, as of a date not more than three (3) business days prior to the date of the bring-down letter), the conclusions and findings of such firm, of the type ordinarily included in accountants' "comfort letters" to underwriters, with respect to the financial information and other matters covered by its letter delivered to the Representative concurrently with the execution of this Agreement pursuant to paragraph (f) of this Section 6.

(h) The Company shall have furnished to the Representative a certificate, dated such Closing Date, of its Chief Executive Officer or President and its Chief Financial Officer stating that (i) such officers have carefully examined the Registration Statement, the General Disclosure Package, any Permitted Free Writing Prospectus and the Prospectus and, in their opinion, the Registration Statements and each amendment thereto, as of their respective effective dates, the date of first use of the Prospectus, as of the date of this Agreement and as of such Closing Date did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the General Disclosure Package, as of the Applicable Time and as of such Closing Date, any Permitted Free Writing Prospectus as of its date and as of such Closing Date, the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of such Closing Date, did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading, (ii) since the effective date of the Initial Registration Statement, no event has occurred which should have been set forth in a supplement or amendment to the Registration Statements, the General Disclosure Package or the Prospectus, (iii) to the best of their knowledge after reasonable investigation, as of such Closing Date, the representations and warranties of the Company in this

Agreement are true and correct and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to such Closing Date, and (iv) there has not been, subsequent to the date of the most recent audited financial statements included in the General Disclosure Package, any material adverse change in the financial position or results of operations of the Company, or any change or development that, in the aggregate, would involve a material adverse change or a prospective material adverse change, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company, except as set forth in the Prospectus.

(i) Since the date of the latest audited financial statements included in the General Disclosure Package, (i) the Company shall not have sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth in the General Disclosure Package, and (ii) there shall not have been any change in the capital stock or long-term debt of the Company, or any change, or any development involving a prospective change, in or affecting the business, general affairs, management, financial position, stockholders' equity or results of operations of the Company, otherwise than as set forth in the General Disclosure Package, the effect of which, in any such case described in clause (i) or (ii) of this paragraph (i), is, in the judgment of the Representative, so material and adverse as to make it impracticable or inadvisable to proceed with the sale or delivery of the Stock on the terms and in the manner contemplated in the General Disclosure Package.

(j) No action shall have been taken and no law, statute, rule, regulation or order shall have been enacted, adopted or issued by any governmental agency or body which would prevent the issuance or sale of the Stock or materially and adversely affect or potentially materially and adversely affect the business or operations of the Company; and no injunction, restraining order or order of any other nature by any federal or state court of competent jurisdiction shall have been issued which would prevent the issuance or sale of the Stock or materially and adversely affect or potentially materially and adversely affect the business or operations of the Company.

(k) Subsequent to the execution and delivery of this Agreement (i) no downgrading shall have occurred in the Company's corporate credit rating or the rating accorded the Company's debt securities by any "nationally recognized statistical rating organization," as that term is defined by the Commission for purposes of Rule 436(g)(2) of the Rules and Regulations and (ii) no such organization shall have publicly announced that it has under surveillance or review (other than an announcement with positive implications of a possible upgrading), the Company's corporate credit rating or the rating of any of the Company's debt securities.

(l) Subsequent to the execution and delivery of this Agreement there shall not have occurred any of the following: (i) trading in securities generally on the New York Stock Exchange, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the NYSE Amex or in the over-the-counter market, or trading in any securities of the Company on any exchange or in the over-the-counter market, shall have been suspended or materially limited, or minimum or maximum prices or maximum range for prices shall have been established on any such exchange or such market by the Commission, by such exchange or market or by any other regulatory body or governmental authority having jurisdiction, (ii) a banking moratorium shall have been declared by Federal or state authorities or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, (iii) the United States shall have become engaged in hostilities, or the subject of an act of terrorism, or there shall have been an outbreak of or escalation in hostilities involving the United States, or there shall have been a declaration of a national emergency or war by the United States resulting in a disruption of the securities markets or (iv) there shall have occurred such a material adverse change in general economic, political or financial conditions (or the effect of international conditions on the financial markets in the United States shall be such) as to make it, in the judgment of the Representative, impracticable or inadvisable to proceed with the sale or delivery of the Stock on the terms and in the manner contemplated in the General Disclosure Package and the Prospectus.

(m) The Company shall have filed a Notification: Listing of Additional Shares with the NASDAQ Capital Market and shall have received no objection thereto from the NASDAQ Capital Market.

(n) The Representative shall have received on and as of such Closing Date satisfactory evidence of the good standing of the Company in its jurisdiction of organization and its good standing as foreign entities in such other jurisdictions as the Representative may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate Governmental Authorities of such jurisdictions.

(o) The Representative shall have received the written agreements, substantially in the form of Exhibit A hereto, of the officers, directors, stockholders, option holders and warrant holders of the Company listed in Schedule III to this Agreement.

(p) The Representative shall have received on such Closing Date a certificate of the Secretary of the Company.

(q) On or prior to such Closing Date, the Company shall have furnished to the Representative such further certificates and documents as the Representative may reasonably request.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriters.

## 7. INDEMNIFICATION AND CONTRIBUTION.

(a) The Company shall indemnify and hold harmless each Underwriter, its directors, officers, managers, members, employees, representatives and agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively the "Underwriter Indemnified Parties," and each an "Underwriter Indemnified Party") against any loss, claim, damage, expense or liability whatsoever (or any action, investigation or proceeding in respect thereof), joint or several, to which such Underwriter Indemnified Party may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, expense, liability, action, investigation or proceeding arises out of or is based upon (A) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, any Issuer Free Writing Prospectus, any "issuer information" filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations, any Registration Statement or the Prospectus, or in any amendment or supplement thereto or (B) the omission or alleged omission to state in any Preliminary Prospectus, any Issuer Free Writing Prospectus, any "issuer information" filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, a material fact required to be stated therein or necessary to make the statements therein not misleading, and shall reimburse each Underwriter Indemnified Party promptly upon demand for any legal fees or other expenses reasonably incurred by that Underwriter Indemnified Party in connection with investigating, or preparing to defend, or defending against, or appearing as a third party witness in respect of, or otherwise incurred in connection with, any such loss, claim, damage, expense, liability, action, investigation or proceeding, as such fees and expenses are incurred; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, expense or liability arises out of or is based upon an untrue statement or alleged untrue statement in, or omission or alleged omission from any Preliminary Prospectus, any Registration Statement or the Prospectus, or any such amendment or supplement thereto, or any Issuer

Free Writing Prospectus made in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for use therein, which information the parties hereto agree is limited to the Underwriter's Information (as defined in Section 17).

The indemnity agreement in this Section 7(a) is not exclusive and is in addition to each other liability which the Company might have under this Agreement or otherwise, and shall not limit any rights or remedies which may otherwise be available under this Agreement, at law or in equity to any Underwriter Indemnified Party.

(b) Each Underwriter, severally and not jointly, shall indemnify and hold harmless the Company and its directors, its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively the "Company Indemnified Parties" and each a "Company Indemnified Party") against any loss, claim, damage, expense or liability whatsoever (or any action, investigation or proceeding in respect thereof), joint or several, to which such Company Indemnified Party may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, expense, liability, action, investigation or proceeding arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, any Issuer Free Writing Prospectus, any "issuer information" filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, or (ii) the omission or alleged omission to state in any Preliminary Prospectus, any Issuer Free Writing Prospectus, any "issuer information" filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, a material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of that Underwriter specifically for use therein, which information the parties hereto agree is limited to the Underwriter's Information as defined in Section 17, and shall reimburse the Company Indemnified Parties for any legal or other expenses reasonably incurred by such party in connection with investigating or preparing to defend or defending against or appearing as third party witness in connection with any such loss, claim, damage, liability, action, investigation or proceeding, as such fees and expenses are incurred. This indemnity agreement is not exclusive and will be in addition to any liability which the Underwriters might otherwise have and shall not limit any rights or remedies which may otherwise be available under this Agreement, at law or in equity to the Company Indemnified Parties.

(c) Promptly after receipt by an indemnified party under this Section 7 of notice of the commencement of any action, the indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party under this Section 7, notify such indemnifying party in writing of the commencement of that action; provided, however, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have under this Section 7 except to the extent it has been materially prejudiced by such failure; and, provided, further, that the failure to notify an indemnifying party shall not relieve it from any liability which it may have to an indemnified party otherwise than under this Section 7. If any such action shall be brought against an indemnified party, and it shall notify the indemnifying party thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense of such action with counsel reasonably satisfactory to the indemnified party (which counsel shall not, except with the written consent of the indemnified party, be counsel to the indemnifying party). After notice from the indemnifying party to the indemnified party of its election to assume the defense of such action, except as provided herein, the indemnifying party shall not be liable to the indemnified party under Section 7 for any legal or other expenses subsequently incurred by the indemnified party in connection with the defense of such action other than reasonable costs of investigation; provided, however, that any indemnified party shall have the

right to employ separate counsel in any such action and to participate in the defense of such action but the fees and expenses of such counsel (other than reasonable costs of investigation) shall be at the expense of such indemnified party unless (i) the employment thereof has been specifically authorized in writing by the Company in the case of a claim for indemnification under Section 7(a) or the Representative in the case of a claim for indemnification under Section 7(b), (ii) such indemnified party shall have been advised by its counsel that there may be one or more legal defenses available to it which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party has failed to assume the defense of such action and employ counsel reasonably satisfactory to the indemnified party within a reasonable period of time after notice of the commencement of the action or the indemnifying party does not diligently defend the action after assumption of the defense, in which case, if such indemnified party notifies the indemnifying party in writing that it elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of (or, in the case of a failure to diligently defend the action after assumption of the defense, to continue to defend) such action on behalf of such indemnified party and the indemnifying party shall be responsible for legal or other expenses subsequently incurred by such indemnified party in connection with the defense of such action; provided, however, that the indemnifying party shall not, in connection with any one such action or separate but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys at any time for all such indemnified parties (in addition to any local counsel), which firm shall be designated in writing by the Representative if the indemnified parties under this Section 7 consist of any Underwriter Indemnified Party or by the Company if the indemnified parties under this Section 7 consist of any Company Indemnified Parties. Subject to this Section 7(c), the amount payable by an indemnifying party under Section 7 shall include, but not be limited to, (x) reasonable legal fees and expenses of counsel to the indemnified party and any other expenses in investigating, or preparing to defend or defending against, or appearing as a third party witness in respect of, or otherwise incurred in connection with, any action, investigation, proceeding or claim, and (y) all amounts paid in settlement of any of the foregoing. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of judgment with respect to any pending or threatened action or any claim whatsoever, in respect of which indemnification or contribution could be sought under this Section 7 (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party in form and substance reasonably satisfactory to such indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party. Subject to the provisions of the following sentence, no indemnifying party shall be liable for settlement of any pending or threatened action or any claim whatsoever that is effected without its written consent (which consent shall not be unreasonably withheld or delayed), but if settled with its written consent, if its consent has been unreasonably withheld or delayed or if there be a judgment for the plaintiff in any such matter, the indemnifying party agrees to indemnify and hold harmless any indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, if at any time an indemnified party shall have requested that an indemnifying party reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 7(a) effected without its written consent if (i) such settlement is entered into more than forty-five (45) days after receipt by such indemnifying party of the request for reimbursement, (ii) such indemnifying party shall have received notice of the terms of such settlement at least thirty (30) days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

(d) If the indemnification provided for in this Section 7 is unavailable or insufficient to hold harmless an indemnified party under Section 7(a) or 7(b), then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid, payable or otherwise incurred by such

indemnified party as a result of such loss, claim, damage, expense or liability (or any action, investigation or proceeding in respect thereof), as incurred, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Stock, or (ii) if the allocation provided by clause (i) of this Section 7(d) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) of this Section 7(d) but also the relative fault of the Company on the one hand and the Underwriters on the other with respect to the statements, omissions, acts or failures to act which resulted in such loss, claim, damage, expense or liability (or any action, investigation or proceeding in respect thereof) as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other with respect to such offering shall be deemed to be in the same proportion as the total net proceeds from the offering of the Stock purchased under this Agreement (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters with respect to the Stock purchased under this Agreement, in each case as set forth in the table on the cover page of the Prospectus. The relative fault of the Company on the one hand and the Underwriters on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement, omission, act or failure to act; provided that the parties hereto agree that the written information furnished to the Company through the Representative by or on behalf of the Underwriters for use in the Preliminary Prospectus, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, consists solely of the Underwriter's Information as defined in Section 17.

(e) The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to Section 7(d) above were to be determined by pro rata allocation or by any other method of allocation which does not take into account the equitable considerations referred to Section 7(d) above. The amount paid or payable by an indemnified party as a result of the loss, claim, damage, expense, liability, action, investigation or proceeding referred to in Section 7(d) above shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating, preparing to defend or defending against or appearing as a third party witness in respect of, or otherwise incurred in connection with, any such loss, claim, damage, expense, liability, action, investigation or proceeding. Notwithstanding the provisions of this Section 7, no Underwriters shall be required to contribute any amount in excess of the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Stock exceeds the amount of any damages which the Underwriter has otherwise paid or become liable to pay by reason of any untrue or alleged untrue statement, omission or alleged omission, act or alleged act or failure to act or alleged failure to act. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute as provided in this Section 7 are several in proportion to their respective underwriting obligations and not joint.

8. **TERMINATION.** The obligations of the Underwriters hereunder may be terminated by the Representative, in its absolute discretion by notice given to the Company prior to delivery of and payment for the Firm Stock if, prior to that time, any of the events described in Sections 6(i), 6(k) or 6(l) have occurred or if the Underwriters shall decline to purchase the Stock for any reason permitted under this Agreement.

9. **REIMBURSEMENT OF UNDERWRITERS' EXPENSES.** Notwithstanding anything to the contrary in this Agreement, if (a) this Agreement shall have been terminated pursuant to Section 8 or 10, (b) the Company shall fail to tender the Stock for delivery to the Underwriters for any reason not permitted

under this Agreement, (c) the Underwriters shall decline to purchase the Stock for any reason permitted under this Agreement or (d) the sale of the Stock is not consummated because any condition to the obligations of the Underwriters set forth herein is not satisfied or because of the refusal, inability or failure on the part of the Company to perform any agreement herein or to satisfy any condition or to comply with the provisions hereof, then in addition to the payment of amounts in accordance with Section 5, the Company shall reimburse the Underwriters for the fees and expenses of Underwriters' counsel and for such other out-of-pocket expenses as shall have been reasonably incurred by them in connection with this Agreement and the proposed purchase of the Stock (up to the limitations in reimbursable amounts set forth in Section 5), including, without limitation, travel and lodging expenses of the Underwriters, and upon demand the Company shall pay the full amount thereof to the Representative; provided that if this Agreement is terminated pursuant to Section 10 by reason of the default of one or more Underwriters, the Company shall not be obligated to reimburse any defaulting Underwriter on account of expenses to the extent incurred by such defaulting Underwriter provided further that the foregoing shall not limit any reimbursement obligation of the Company to any non-defaulting Underwriter under this Section 9.

10. SUBSTITUTION OF UNDERWRITERS. If any Underwriter or Underwriters shall default in its or their obligations to purchase shares of Stock hereunder on any Closing Date and the aggregate number of shares which such defaulting Underwriter or Underwriters agreed but failed to purchase does not exceed ten percent (10%) of the total number of shares to be purchased by all Underwriters on such Closing Date, the other Underwriters shall be obligated severally, in proportion to their respective commitments hereunder, to purchase the shares which such defaulting Underwriter or Underwriters agreed but failed to purchase on such Closing Date. If any Underwriter or Underwriters shall so default and the aggregate number of shares with respect to which such default or defaults occur is more than ten percent (10%) of the total number of shares to be purchased by all Underwriters on such Closing Date and arrangements satisfactory to the Representative and the Company for the purchase of such shares by other persons are not made within forty eight (48) hours after such default, this Agreement shall terminate.

If the remaining Underwriters or substituted Underwriters are required hereby or agree to take up all or part of the shares of Stock of a defaulting Underwriter or Underwriters on such Closing Date as provided in this Section 10, (i) the Company shall have the right to postpone such Closing Dates for a period of not more than five (5) full business days in order that the Company may effect whatever changes may thereby be made necessary in the Registration Statements or the Prospectus, or in any other documents or arrangements, and the Company agrees promptly to file any amendments to the Registration Statements or supplements to the Prospectus which may thereby be made necessary, and (ii) the respective numbers of shares to be purchased by the remaining Underwriters or substituted Underwriters shall be taken as the basis of their underwriting obligation for all purposes of this Agreement. Nothing herein contained shall relieve any defaulting Underwriter of its liability to the Company or the other Underwriters for damages occasioned by its default hereunder. Any termination of this Agreement pursuant to this Section 10 shall be without liability on the part of any non-defaulting Underwriter or the Company, except that the representations, warranties, covenants, indemnities, agreements and other statements set forth in Section 2, the obligations with respect to expenses to be paid or reimbursed pursuant to Section 5 and 9 and the provisions of Section 7 and Sections 11 through 20, inclusive, shall not terminate and shall remain in full force and effect.

11. ABSENCE OF FIDUCIARY RELATIONSHIP. The Company acknowledges and agrees that:

(a) each Underwriter's responsibility to the Company is solely contractual in nature, the Representative has been retained solely to act as underwriter in connection with the sale of the Stock and no fiduciary, advisory or agency relationship between the Company and the Representative has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Representative has advised or is advising the Company on other matters;

(b) the price of the Stock set forth in this Agreement was established by the Company following discussions and arms-length negotiations with the Representative, and the Company is capable of evaluating and understanding, and understands and accepts, the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) it has been advised that the Representative and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Representative has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(d) it waives, to the fullest extent permitted by law, any claims it may have against the Representative for breach of fiduciary duty or alleged breach of fiduciary duty and agrees that the Representative shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

12. SUCCESSORS; PERSONS ENTITLED TO BENEFIT OF AGREEMENT. This Agreement shall inure to the benefit of and be binding upon the several Underwriters, the Company and their respective successors and assigns. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, other than the persons mentioned in the preceding sentence, any legal or equitable right, remedy or claim under or in respect of this Agreement, or any provisions herein contained, this Agreement and all conditions and provisions hereof being intended to be and being for the sole and exclusive benefit of such persons and for the benefit of no other person; except that the representations, warranties, covenants, agreements and indemnities of the Company contained in this Agreement shall also be for the benefit of the Underwriter Indemnified Parties, and the indemnities of the several Underwriters shall be for the benefit of the Company Indemnified Parties. It is understood that each Underwriter's responsibility to the Company is solely contractual in nature and the Underwriters do not owe the Company, or any other party, any fiduciary duty as a result of this Agreement. No purchaser of any of the Stock from any Underwriter shall be deemed to be a successor or assign by reason merely of such purchase.

13. SURVIVAL OF INDEMNITIES, REPRESENTATIONS, WARRANTIES, ETC. The respective indemnities, covenants, agreements, representations, warranties and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by them respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter, the Company or any person controlling any of them and shall survive delivery of and payment for the Stock. Notwithstanding any termination of this Agreement, including without limitation any termination pursuant to Section 8 or Section 10, the indemnities, covenants, agreements, representations, warranties and other statements forth in Sections 2, 5, 7 and 9 and Sections 11 through 20, inclusive, of this Agreement shall not terminate and shall remain in full force and effect at all times.



14. NOTICES. All statements, requests, notices and agreements hereunder shall be in writing, and:

(a) if to the Underwriters, shall be delivered or sent by mail, telex, facsimile transmission or email to the Representative c/o Cowen and Company, LLC, 599 Lexington Avenue, New York, New York 10022, Attention: Head of Equity Capital Markets, Fax: 646-562-1249 with a copy to the General Counsel, Fax: 646-562-1124; with a copy (which shall not constitute notice) to: Goodwin Procter LLP, The New York Times Building, 620 Eighth Avenue, New York, New York 10018, Attention: Thomas S. Levato, Esq., Fax: 212-355-3333; and

(b) if to the Company shall be delivered or sent by mail, telex, facsimile transmission or email to Catalyst Pharmaceutical Partners, Inc., 355 Alhambra Circle, Suite 1500, Coral Gables, Florida 33134, Attention: Patrick J. McEnany, Fax: 305-529-0933; with a copy (which shall not constitute notice) to: Akerman Senterfitt, One Southeast Third Avenue, Suite 2500, Miami, Florida 33131, Attention: Philip B. Schwartz, Esq., Fax: 305-349-4833.

provided, however, that any notice to an Underwriter pursuant to Section 7 shall be delivered or sent by mail, or facsimile transmission to such Underwriter at its address set forth in its acceptance telex to the Representative, which address will be supplied to any other party hereto by the Representative upon request. Any such statements, requests, notices or agreements shall take effect at the time of receipt thereof.

15. DEFINITION OF CERTAIN TERMS. For purposes of this Agreement, "business day," means any day on which the NASDAQ Stock Market is open for trading.

16. GOVERNING LAW, AGENT FOR SERVICE AND JURISDICTION. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, including without limitation Section 5-1401 of the New York General Obligations. The Company irrevocably (a) submits to the non-exclusive jurisdiction of the Federal and state courts in the Borough of Manhattan in The City of New York for the purpose of any suit, action or other proceeding arising out of this Agreement or the transactions contemplated by this Agreement, the Registration Statements and any Preliminary Prospectus or the Prospectus, (b) agrees that all claims in respect of any such suit, action or proceeding may be heard and determined by any such court, (c) waives to the fullest extent permitted by applicable law, any immunity from the jurisdiction of any such court or from any legal process, (d) agrees not to commence any such suit, action or proceeding other than in such courts, and (e) waives, to the fullest extent permitted by applicable law, any claim that any such suit, action or proceeding is brought in an inconvenient forum.

17. UNDERWRITERS' INFORMATION. The parties hereto acknowledge and agree that, for all purposes of this Agreement, the Underwriters' Information consists solely of the following information in the Prospectus: (i) the last paragraph under the heading "Discounts and Commissions", (ii) the paragraph under the heading "Discretionary Accounts", (iii) the paragraphs under the heading "Stabilization", and (iv) the paragraph under the heading "Electronic Offer, Sale and Distribution of Securities", each in the "Underwriting" section of the Prospectus.

18. PARTIAL UNENFORCEABILITY. The invalidity or unenforceability of any section, paragraph, clause or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph, clause or provision hereof. If any section, paragraph, clause or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

19. GENERAL. This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. In this Agreement, the masculine, feminine and

neuter genders and the singular and the plural include one another. The section headings in this Agreement are for the convenience of the parties only and will not affect the construction or interpretation of this Agreement. This Agreement may be amended or modified, and the observance of any term of this Agreement may be waived, only by a writing signed by the Company and the Representative.

20. COUNTERPARTS. This Agreement may be signed in two counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

If the foregoing is in accordance with your understanding of the agreement between the Company and the several Underwriters, kindly indicate your acceptance in the space provided for that purpose below.

Very truly yours,

CATALYST PHARMACEUTICAL PARTNERS, INC.

By: \_\_\_\_\_  
Name:  
Title:

Accepted as of the date first above written:

**COWEN AND COMPANY, LLC**

Acting on its own behalf and as Representative of several  
Underwriters referred to in the foregoing Agreement

By: \_\_\_\_\_  
Name:  
Title:

**SCHEDULE I**

**Underwriters**

<u>Name</u>	<u>Number of Shares of Firm Stock</u>
Cowen and Company, LLC	[ ]
Roth Capital Partners, LLC	[ ]
Total	[ ]

**SCHEDULE II**

**Issuer Free Writing Prospectus**

[None.]

**Pricing Information:**

Number of Shares of Firm Stock:	[ ] shares
Price to the public:	\$( ) per share
Underwriting Discount:	[ ]%

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**SCHEDULE III**

**Lock-Up Agreement Signatories**

Patrick J. McEnany  
Hubert E. Huckel, M.D.  
Philip H. Coelho  
Charles B. O'Keeffe  
David S. Tierney  
Milton J. Wallace  
Alicia Grande  
Steven R. Miller

## Form of Lock Up Agreement

April \_\_\_\_\_, 2012

COWEN AND COMPANY, LLC

As Representative of the several Underwriters

599 Lexington Avenue

New York, New York 10022

Re: Catalyst Pharmaceutical Partners, Inc. – Registration Statement on Form S-1

Dear Sirs:

This Lock Up Agreement is being delivered to you in connection with the proposed Underwriting Agreement (the “Underwriting Agreement”) between Catalyst Pharmaceutical Partners, Inc., a Delaware corporation (the “Company”), and Cowen and Company, LLC (“Cowen”), as representative of a group of underwriters (collectively, the “Underwriters”), to be named therein, and the other parties thereto (if any), relating to the proposed public offering of shares of the common stock, par value \$0.001 per share (the “Common Stock”), of the Company.

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, and in light of the benefits that the offering of the Common Stock will confer upon the undersigned in his or her capacity as an officer or director of the Company, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each Underwriter that, during the period beginning on the date hereof through and including the date that is the 90th day after the date of the Underwriting Agreement (the “Lock-Up Period”), except as otherwise permitted herein, the undersigned will not, without the prior written consent of Cowen, directly or indirectly, (i) offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, or announce the intention to otherwise dispose of, any shares of Common Stock (including, without limitation, Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations promulgated under the Securities Act of 1933, as the same may be amended or supplemented from time to time (such shares, the “Beneficially Owned Shares”)) or securities convertible into or exercisable or exchangeable for Common Stock, (ii) enter into any swap, hedge or similar agreement or arrangement that transfers in whole or in part, the economic risk of ownership of the Beneficially Owned Shares or securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or (iii) engage in any short selling of the Common Stock or securities convertible into or exercisable or exchangeable for Common Stock.

If (i) the Company issues an earnings release or material news or a material event relating to the Company occurs during the last 17 days of the Lock-Up Period, or (ii) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, the Lock-Up Period shall be extended and the restrictions imposed by this Lock Up Agreement shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

The restrictions set forth in the immediately preceding paragraph shall not apply to any transfers made by the undersigned (a) as a bona fide gift to any member of the immediate family (as defined

below) of the undersigned or to a trust the beneficiaries of which are exclusively the undersigned or members of the undersigned's immediate family, (b) by will or intestate succession upon the death of the undersigned or (c) as a bona fide gift to a charity or educational institution; provided, however, that it shall be a condition to the transfer that (i) the transferee executes and delivers to Cowen, acting on behalf of the Underwriters, not later than one business day prior to such transfer, a written agreement, in substantially the form of this Lock Up Agreement (it being understood that any references to "immediate family" in the agreement executed by such transferee shall expressly refer only to the immediate family of the undersigned and not to the immediate family of the transferee) and otherwise reasonably satisfactory in form and substance to Cowen, and (ii) if the undersigned is required to file a report under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), reporting a reduction in beneficial ownership of shares of Common Stock or Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or Beneficially Owned Shares during the Lock-Up Period (as the same may be extended as described above), the undersigned shall include a statement in such report to the effect that such transfer is being made as a gift or by will or intestate succession. For purposes of this paragraph, "immediate family" shall mean a spouse, child, grandchild or other lineal descendant (including by adoption), father, mother, brother or sister of the undersigned; and "affiliate" shall have the meaning set forth in Rule 405 under the Securities Act of 1933, as amended.

Further, the restrictions set forth in this Lock Up Agreement shall not apply to the exercise of any of the undersigned's rights to acquire shares of Common Stock or other securities of the Company issued pursuant to any stock option or similar equity incentive or compensation plan approved by the Board of Directors ("Board") of the Company or a committee of the Board ("Equity Incentive Grants"), including (i) the delivery to the Company or forfeiture of any shares of Common Stock as payment for exercised shares in any "cashless" exercise, and (ii) the exercise of any previously granted stock option on a "cashless basis"; provided that such Equity Incentive Grant is already in effect as of the date of this Lock Up Agreement, and provided further that, to the extent the undersigned receives shares of Common Stock as part of an Equity Incentive Grant, the undersigned may offer, sell, contract to sell, or otherwise dispose of, or forfeit to the Company, up to the number of such shares of Common Stock necessary to satisfy withholding tax obligations incurred by the undersigned in connection with the receipt or exercise of such Equity Incentive Grant, and provided further, as a condition to any delivery, transfer or other disposition, that if the undersigned is required to file a report under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of Common Stock or Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or Beneficially Owned Shares during the Lock-Up Period (as the same may be extended as described in this Lock Up Agreement), the undersigned shall include a statement in such report, and if applicable an appropriate disposition transaction code, to the effect that such transfer is being made as a share delivery or forfeiture in connection with a net value exercise, or as a forfeiture or sale of shares solely to cover required tax withholding, as the case may be.

In order to enable this covenant to be enforced, the undersigned hereby consents to the placing of legends or stop transfer instructions with the Company's transfer agent with respect to any Common Stock or securities convertible into or exercisable or exchangeable for Common Stock.

The undersigned further agrees that (i) it will not, during the Lock-Up Period (as the same may be extended as described above), make any demand or request for or exercise any right with respect to the registration under the Securities Act of 1933, as amended, of any shares of Common Stock or other Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or other Beneficially Owned Shares, and (ii) the Company may, with respect to any Common Stock or other Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or other Beneficially Owned Shares owned or held (of record or beneficially) by the undersigned, cause the transfer agent or other registrar to enter stop transfer instructions and implement stop transfer procedures with respect to such securities during the Lock-Up Period (as the same may be extended as described above).



The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock Up Agreement and is a valid and binding agreement of the undersigned. This Lock Up Agreement and all authority herein conferred are irrevocable and shall survive the death or incapacity of the undersigned and shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

The undersigned acknowledges and agrees that whether or not any public offering of shares of Common Stock actually occurs depends on a number of factors, including market conditions.

Very truly yours,

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(Name of Stockholder—Please Print)

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(Signature)

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We have issued our report dated March 30, 2012 with respect to the financial statements of Catalyst Pharmaceutical Partners, Inc. contained in the Registration Statement and Prospectus. We consent to the use of the aforementioned report in the Registration Statement and Prospectus, and to the use of our name as it appears under the caption "Experts."

/s/ GRANT THORNTON LLP

Miami, Florida

April 24, 2012