Clovis Oncology, Inc. Form S-1 March 23, 2012 Table of Contents

As filed with the Securities and Exchange Commission on March 22, 2012

**Registration No. 333-**

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-1

### **REGISTRATION STATEMENT**

### UNDER

### **THE SECURITIES ACT OF 1933**

# **CLOVIS ONCOLOGY, INC.**

(Exact name of registrant as specified in its charter)

**Delaware** (State or other jurisdiction of

incorporation or organization)

2834 (Primary Standard Industrial **90-0475355** (I.R.S. Employer

Identification Number)

Classification Code Number) 2525 28th Street, Suite 100

#### Boulder, Colorado 80301

#### (303) 625-5000

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

#### Patrick J. Mahaffy

#### President and Chief Executive Officer

**Clovis Oncology, Inc.** 

#### 2525 28th Street, Suite 100

#### Boulder, Colorado 80301

#### (303) 625-5000

(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 this Registration Statement becomes effective.

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, 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, 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. (Check one):

Large accelerated filer "

Accelerated filer "

 Non-accelerated filer b (Do not check if a smaller reporting company)
 CALCULATION OF REGISTRATION FEE Smaller reporting company "

Title of Each Class of

Securities to be Registered Common Stock, par value \$0.001 per share Proposed Maximum Aggregate Offering Price<sup>(1)(2)</sup> \$ 86,250,000

Amount of Registration Fee \$ 9,885

(1) Includes shares of common stock which may be purchased by the underwriters to cover over-allotments, if any.

(2) Estimated solely for purposes of determining the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended.

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 which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

Subject to completion, dated March 22, 2012

Prospectus

### \$75,000,000

### **COMMON STOCK**

We are offering up to \$75,000,000 of shares of our common stock.

Our common stock is listed on the NASDAQ Global Select Market under the symbol CLVS . On March 21, 2012, the reported last sale price of our common stock was \$25.99 per share.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds to Clovis, before expenses	\$	\$

We have granted the underwriters an option to purchase up to \$11,250,000 of additional shares of our common stock to cover over-allotments.

Investing in our common stock involves risks. See <u>Risk Factors</u> beginning on page 8.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares on or about , 2012.

## J.P. Morgan

Leerink Swann

**Credit Suisse** 

, 2012

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You should rely only on the information contained in this prospectus or in any free writing prospectus that we may specifically authorize to be delivered or made available to you. We have not, and the underwriters have not, authorized anyone to provide you with any information other than that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus may only be used where it is legal to offer and sell shares of our common stock. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date. We are not, and the underwriters are not, making an offer of these securities in any jurisdiction where the offer is not permitted.

For investors outside the United States: We have not and the underwriters have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States.

#### PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and consolidated financial statements included elsewhere in this prospectus. This summary does not contain all of the information that may be important to you. You should read and carefully consider the following summary together with the entire prospectus, including our consolidated financial statements and the related notes thereto appearing elsewhere in this prospectus and the matters discussed in the sections in this prospectus entitled Risk Factors, Selected Consolidated Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations, before deciding to invest in our common stock. Some of the statements in this prospectus constitute forward-looking statements that involve risks and uncertainties. See Cautionary Note Regarding Forward-Looking Statements and Industry Data. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of certain factors, including those discussed in the Risk Factors and other sections of this prospectus.

Clovis Oncology<sup>®</sup> and the Clovis logo are trademarks of Clovis Oncology, Inc. in the United States and in other selected countries. All other brand names or trademarks appearing in this prospectus are the property of their respective holders. Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to Clovis, the Company, we, us, and our, refer to Clovis Oncology, Inc. together with its consolidated subsidiary.

#### Overview

We are a biopharmaceutical company focused on acquiring, developing and commercializing innovative anti-cancer agents in the United States, Europe and additional international markets. We target our development programs for the treatment of specific subsets of cancer populations, and seek to simultaneously develop, with partners, companion diagnostics that direct our product candidates to the patients that are most likely to benefit from their use. We are currently developing three product candidates for which we hold global marketing rights: CO-101, a lipid-conjugated form of the anti-cancer drug gemcitabine, which is in a pivotal study in a specific patient population for the treatment of metastatic pancreatic cancer; CO-1686, an orally available, small molecule epidermal growth factor receptor, or EGFR, covalent inhibitor that was the subject of an investigational new drug application, or IND, submitted to the U.S. Food and Drug Administration, or FDA, that became effective in January 2012 and is entering clinical development for the treatment of non-small cell lung cancer, or NSCLC, in patients with activating EGFR mutations, including the initial activating mutations, as well as the primary resistance mutation, T790M; and rucaparib, also known as CO-338, an orally available, small molecule poly (ADP-ribose) polymerase, or PARP, inhibitor being developed for various solid tumors that is currently in Phase I/II clinical trials.

We believe that discovery productivity exceeds development capacity in oncology, and we have built our organization to meet the need for innovative patient-specific oncology drug development. To implement our strategy, we have assembled an experienced team with core competencies in global clinical development and regulatory operations in oncology, as well as conducting collaborative relationships with companies specializing in companion diagnostic development. As our product candidates mature, we intend to build our own commercial organizations in major global markets and contract with local distributors in smaller markets.

The most common anti-cancer drug therapies typically address cancers within a specific organ as a single disease as opposed to a collection of different disease subtypes, often resulting in poor response rates and minimal effect on overall survival. We believe the oncology community is increasingly recognizing that tumors in a particular organ have unique pathologic and molecular characteristics that may warrant different treatment strategies. By better understanding differences in tumor biology and underlying disease pathways, researchers are identifying biomarkers to guide development of targeted oncology therapies, with streamlined clinical trials, stratified patient populations and improved patient outcomes. We believe that targeted therapies and companion diagnostics offer a patient-tailored approach to the treatment of cancers with improved diagnosis and outcomes.

We were founded in April 2009 by former executives of Pharmion Corporation, which successfully developed and commercialized novel oncology products in the United States and Europe and was ultimately

acquired by Celgene Corporation in 2008. Our investors include the following entities or their affiliates: Domain Associates, New Enterprise Associates, Versant Ventures, Aberdare Ventures, Abingworth Bioventures, Frazier Healthcare Ventures, Pfizer Inc., ProQuest Investments and our management team. To date, we have not generated any revenues. Based on our current development plans, we do not expect to generate revenues until 2014 at the earliest. As of December 31, 2011, we had an accumulated deficit of \$110.5 million.

#### **Our Strategy**

Our strategy is to acquire, develop, and commercialize innovative anti-cancer agents in the United States, Europe and additional international markets in oncology indications with significant unmet medical need. The critical components of our business strategy include the following:

*Focus on oncology.* The oncology market is characterized by a number of disorders with high rates of recurrence and a limited response from current therapies or treatments.

*Focus on compounds where improved outcomes are associated with specific biomarkers.* Our strategy to date has been to prioritize opportunities in which a strong biological hypothesis has been established linking a specific characteristic or biological state of a cell, or biomarker, with improved outcomes for the product candidate.

*Combine companion diagnostics with drug development efforts to realize superior clinical outcomes.* A companion diagnostic is a test or measurement intended to assist physicians in making treatment decisions for their patients. Companion diagnostics do so by evaluating the presence of biomarkers, and physicians use this information to select a specific drug or treatment to which their patient will most likely respond. Our development strategy is based on the premise that we can utilize effective companion diagnostics to identify different patient subsets who we believe will uniquely benefit from our product candidates.

*Manage and control global development activities and regulatory operations.* We believe our development and regulatory experience enables us to devise time- and cost-efficient strategies to develop and obtain regulatory approvals for new drugs, and to identify the regulatory pathway that allows us to get a product candidate to market as quickly as possible.

*Seek and maintain global commercial rights.* We believe that it is very important to maintain global rights to our product candidates, and that we can build our own commercial organizations in major pharmaceutical markets as well as a network of third-party distributors in smaller markets.

#### **Our Product Pipeline**

Consistent with our strategy, each of our initial three in-licensed product candidates, for which we hold global marketing rights, is being developed for selected patient subsets. The following table summarizes the status of our product pipeline:

#### CO-101 a Lipid-Conjugated Form of the Anti-Cancer Drug Gemcitabine

CO-101 is currently in a Phase II clinical study in patients with metastatic pancreatic cancer for use as an initial therapy recommended for treatment of the disease, or a so-called first-line treatment . CO-101 is a novel, patented, lipid-conjugated form of the anti-cancer drug gemcitabine that is designed to treat patients with pancreatic cancer whose tumors express low amounts of a membrane transporter protein on the surface of the cancer cell known as hENT1 and are thus expected to be resistant to standard gemcitabine-based therapy. Based on the published results of multiple studies assessing the correlation of hENT1 expression to survival outcomes in pancreatic cancer patients treated with gemcitabine, as well as the prospective hENT1 classification of the first 250 patients enrolled in our pivotal study of CO-101, we believe that approximately one-half to two-thirds of pancreatic cancer patients express low levels of hENT1, and thus derive little or no benefit from gemcitabine therapy. For example, in 2009, a study published in *Gastroenterology* reported the results of a retrospective analysis of randomized samples collected from 198 pancreatic cancer patients between 1998 and 2002 comparing treatment with gemcitabine versus 5-fluorouracil (5-FU). Patients in this study treated with gemcitabine who had a high level of hENT1 expression had a median overall survival of 21 months, compared to a median overall survival of 16 months for gemcitabine-treated patients with low hENT1 expression and 12 months for gemcitabine-treated patients with no hENT1 expression.

CO-101, which we in-licensed from Clavis Pharma ASA, is currently in an international, randomized and controlled 360-patient Phase II clinical study for the first-line treatment of metastatic pancreatic cancer. This open-label study compares CO-101 to gencitabine as a first-line treatment in patients with metastatic pancreatic cancer. The primary objective of this study is to compare the overall survival of patients with metastatic pancreatic cancer and low hENT1 expression that are treated with CO-101 versus gencitabine. Secondary endpoints include overall survival in all patients and in patients with high hENT1 expression, disease response rate, and drug tolerability and toxicity. We expect to complete enrollment for this trial in the first quarter of 2012

and report top line results as to overall survival in the prespecified hENT1-low patient subset in the fourth quarter of 2012. While we have not sought a Special Protocol Assessment, or SPA, from the FDA for this trial, for the reasons set forth under *CO-101 Regulatory Strategy*, we believe that if its results are positive, this study will serve as a pivotal trial for CO-101 and enable us to file a New Drug Application, or NDA, with the FDA and a Marketing Approval Application, or MAA, with the European Medicines Agency, or EMA, in mid-2013. We have partnered with Ventana Medical Systems for the development and commercialization of a companion diagnostic for the assessment of hENT1 levels.

#### CO-1686 an Oral EGFR Mutant-Selective Inhibitor

CO-1686, which we in-licensed from Avila Therapeutics, Inc., is a novel, orally available, small molecule covalent inhibitor of the cancer-causing mutant forms of EGFR for the treatment of NSCLC. Because CO-1686 targets both the initial activating EGFR mutations as well as the primary resistance mutation, T790M, it has the potential to treat NSCLC patients with EGFR mutations, both as a first-line treatment, or as a therapy recommended for patients when a first-line treatment has been ineffective, a so-called second-line treatment . According to a study published in *Clinical Cancer Research* in 2008, such initiating activating mutations occur in approximately 10% to 15% of NSCLC cases in Caucasian patients and approximately 30% to 35% of NSCLC cases in East Asian patients. Based on multiple published reports, including a study in *Nature Reviews Cancer* in 2007, following treatment with approved NSCLC therapies, Tarceva (erlotinib) or Iressa (gefitinib), both known as tyrosine kinase inhibitors, or TKIs, approximately half of these patients develop the T790M mutation.

In January 2012, our IND became effective, permitting us to begin clinical investigation of CO-1686. We expect to commence initial Phase I/II studies of CO-1686 in the U.S. and Europe in the second quarter of 2012 and in Asia during the third quarter of 2012. We have designed an accelerated clinical development program for CO-1686, and if successful, have a goal of filing an NDA for an initial indication within approximately four years of filing our IND. We intend to pursue the development of CO-1686 as both a second-line therapy for EGFR-mutated NSCLC patients who become resistant to TKIs due to the emergence of the T790M secondary mutation and potentially as a first-line treatment for EGFR-mutated NSCLC. We have partnered with Roche Molecular Systems, Inc., or Roche, for the development and commercialization of a companion diagnostic for identification of EGFR mutations.

#### Rucaparib a PARP Inhibitor

Rucaparib, also known as CO-338, is a novel, orally available, small molecule PARP inhibitor that we intend to develop as both monotherapy and in combination with chemotherapeutic agents for the treatment of patients with cancers predisposed to PARP inhibitor sensitivity. Such cancers include serous ovarian cancer and selected patients with breast cancer. Rucaparib, which we in-licensed from Pfizer Inc., is currently in a Phase I clinical trial to determine the maximum tolerated dose of oral rucaparib that can be combined with intravenous, or IV, platinum chemotherapy in the treatment of solid tumors. This program is supplemented by two ongoing investigator-initiated trials: a Phase I/II monotherapy study in hereditary, or germ-line, BRCA mutant breast and ovarian cancer and a Phase II randomized study of the chemotherapy drug cisplatin, with or without rucaparib, in the adjuvant treatment of high-risk germ-line BRCA mutant and triple-negative breast cancer, a particularly difficult to treat form of breast cancer. In the fourth quarter of 2011, we initiated a Phase I/II monotherapy study of the oral formulation to determine an appropriate dose and schedule for long term administration and to then assess preliminary efficacy in breast and ovarian cancers, including in patients with germ-line mutations in BRCA genes.

#### **Risks Associated with Our Business**

Our business and our future results of operations and financial condition are subject to a number of risks and uncertainties. These risks and uncertainties that could adversely affect our actual results and performance, as well as the successful implementation of our business strategy, are discussed more fully in the Risk Factors and Cautionary Note Regarding Forward-Looking Statements and Industry Data sections of this prospectus. You should carefully consider all of the information set forth in this prospectus and, in particular, should evaluate the specific factors set forth under Risk Factors and Cautionary Note Regarding Forward-Looking Statements and

Industry Data in deciding whether to invest in our common stock. Among these important risks and uncertainties that could adversely affect our results of operations and business condition are the following:

We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the foreseeable future. We are a clinical-stage company with no approved products, and no historical revenues, which makes it difficult to assess our future viability.

If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates, or continue our development programs.

We are heavily dependent on the success of our three product candidates, and we cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

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

The regulatory approval processes of the FDA and similar foreign authorities is lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics could harm our drug development strategy.

Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, healthcare payors and major operators of cancer clinics.

We face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.

If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

Other factors identified elsewhere in this prospectus, including those set forth under Risk Factors . Our Corporate Information

We were incorporated under the laws of the State of Delaware in April 2009. Our principal executive offices are located at 2525 28th Street, Suite 100, Boulder, Colorado 80301, and our telephone number is (303) 625-5000. Our website address is *www.clovisoncology.com*. Our website and the information contained on, or that can be accessed through, the website will not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. You should not rely on any such information in making your decision whether to purchase our common stock.

#### THE OFFERING

Common stock offered	\$75,000,000 of shares of common stock
Common stock to be outstanding immediately following this offering	25,261,482 shares
Over-allotment option	Up to \$11,250,000 of shares of common stock
Use of proceeds	We estimate that the net proceeds from this offering will be approximately \$69.9 million, or approximately \$80.5 million if the underwriters exercise their over-allotment option in full, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use the proceeds of this offering to fund our development programs and for working capital and general corporate purposes. See Use of Proceeds for a more complete description of the intended use of proceeds from this offering.
Risk factors	You should read Risk Factors for a discussion of factors you should carefully consider before deciding to invest in our common stock.

NASDAQ Global Select Market symbol

CLVS

The number of shares of our common stock to be outstanding after this offering set forth above is based on 22,375,757 shares of our common stock outstanding as of December 31, 2011 and assumes the sale of \$75,000,000 of shares of common stock at \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012. A 5% increase or decrease in the assumed public offering price of \$25.99 per share would increase or decrease the number of shares of our common stock issued in this offering by approximately 5%.

The number of shares of our common stock to be outstanding after this offering set forth above excludes:

934,816 shares of our common stock issuable upon the exercise of stock options outstanding as of December 31, 2011 at a weighted-average exercise price of \$4.88 per share;

1,357,258 shares of our common stock reserved for future issuance under our 2011 Equity Incentive Plan, or the 2011 Plan, as of December 31, 2011, plus any annual increases in the number of shares of common stock reserved for future issuance under the 2011 Plan pursuant to an evergreen provision and any other shares that may become issuable under the 2011 Plan pursuant to its terms, as more fully described in Executive and Director Compensation Compensation Decisions Relating to Fiscal Year 2012 2012 Option Grants ; and

189,656 shares of our common stock reserved for future issuance under our 2011 Employee Stock Purchase Plan, or the ESPP, as of December 31, 2011, plus any annual increases in the number of shares of our common stock reserved for future issuance under the ESPP pursuant to an evergreen provision and any other shares that may become issuable under the ESPP pursuant to its terms, as more fully described in Executive and Director Compensation Narrative Disclosure Relating to Summary Compensation Table and Grant of Plan Based Awards Table 2011 Employee Stock Purchase Plan.

Unless we specifically state otherwise, the information in this prospectus assumes or gives effect to:

no exercise by the underwriters of their over-allotment option to purchase up to \$11,250,000 of additional shares of common stock from us.

#### SUMMARY CONSOLIDATED FINANCIAL DATA

The following table sets forth a summary of our historical consolidated financial data at the dates and for the periods indicated. The summary historical financial data presented below for the years ended December 31, 2011 and 2010 and the periods from April 20, 2009 (inception) to December 31, 2009 and 2011 has been derived from our audited financial statements, which are included elsewhere in this prospectus.

The financial information presented from April 20, 2009 (inception) to December 31, 2010 is based solely on the results of Clovis Oncology, Inc. Subsequent to January 1, 2011, the financial information is consolidated and includes the results of our wholly owned subsidiary in the United Kingdom. Our historical results are not necessarily indicative of results expected in any future period.

The summary historical financial data presented below should be read in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes thereto, which are included elsewhere in this prospectus. The summary historical financial data in this section is not intended to replace our financial statements and the related notes thereto.

#### **Statement of Operations Data:**

	For the Ye Decem 2011	ber 31, 2010	Period from April 20, 2009 (Inception) to December 31, 2009 xcept per share amoun	Cumulative from April 20, 2009 (Inception) to December 31, 2011
Revenue	\$	\$	\$	\$
Operating expenses:				
Research and development	40,726	22,323	1,762	64,811
General and administrative	6,860	4,302	2,209	13,371
Acquired in-process research and development	7,000	12,000	13,085	32,085
Operating loss Other income (expense), net	(54,586) (957)	(38,625) 795	(17,056) (43)	(110,267) (205)
Loss before income taxes	(55,543)	(37,830)	(17,099)	(110,472)
Income taxes	(27)	(	( ,,,	(27)
Net loss	\$ (55,570)	\$ (37,830)	\$ (17,099)	(110,499)
Basic and diluted net loss per common share <sup>(1)</sup>	\$ (14.42)	\$ (28.55)	\$ (15.38)	(51.06)
Common shares used in the computation of basic and diluted net loss per common share	3,854	1,325	1,112	2,164

	Actual	As of December 31, 2011 Actual As Adjusted <sup>(2)</sup> (Unaudited) (In thousands)	
Balance sheet data:			
Cash, cash equivalents and available for sale securities	\$ 140,248	\$	210,193
Working capital	130,519		200,465
Total assets	143,445		213,390
Common stock and additional paid-in-capital	242,243		312,188
Total stockholders equity	\$ 131,793	\$	201,738

- (1) See Note 11 within the notes to our consolidated financial statements which are included elsewhere in this prospectus for a description of the method used to compute basic and diluted loss per common share.
- (2) As adjusted to reflect the sale of \$75.0 million of shares of our common stock offered in this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

#### **RISK FACTORS**

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, together with the other information contained in this prospectus, including our financial statements and the related notes appearing at the end of this prospectus, before making your decision to invest in shares of our common stock. We cannot assure you that any of the events discussed in the risk factors below will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition and cash flows. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.

This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this prospectus. See Cautionary Note Regarding Forward-Looking Statements and Industry Data for information relating to these forward-looking statements.

#### **Risks Related to Our Financial Position and Capital Requirements**

# We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the foreseeable future. We are a clinical-stage company with no approved products, and no historical revenues, which makes it difficult to assess our future viability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We have focused primarily on in-licensing and developing our product candidates, CO-101, CO-1686 and rucaparib. We are not profitable and have incurred losses in each year since our inception in April 2009. Because we were only recently formed, we have only a limited operating history upon which you can evaluate our business and prospects. In addition, as an early stage company, we have limited experience and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical area. We have not generated any revenue from product sales to date. We continue to incur significant research and development and other expenses related to our ongoing operations. Our net loss for the year ended December 31, 2011 was approximately \$55.6 million. As of December 31, 2011, we had an accumulated deficit of \$110.5 million. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our product candidates, and begin to commercialize any approved products. As such, we are subject to all of the risks incident in the development of new biopharmaceutical products and related companion diagnostics, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. If any of our product candidates fail in clinical trials or do not gain regulatory approval, or if any of our product candidates, if approved, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders equity and working capital.

# We will require substantial additional funding which may not be available to us on acceptable terms, or at all. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates, or continue our development programs.

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to advance the clinical development of our product candidates and launch and commercialize any product candidates for which we receive regulatory approval, including building our own commercial organizations to address certain markets.

We will require additional capital for the further development and commercialization of our product candidates and may also need to raise additional funds sooner if we choose to expand more rapidly than we presently anticipate. We will also require funding for our other operating expenses as well as capital expenditures to maintain and improve our facilities, equipment and systems.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. We may also seek collaborators for one or more of our current or future product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available. Any of these events could significantly harm our business, financial condition and prospects.

#### **Risks Related to Our Business and Industry**

# We are heavily dependent on the success of our three product candidates, and we cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

To date, we have invested a significant portion of our efforts and financial resources in the acquisition and development of our product candidates. Our future success is substantially dependent on our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize such product candidates. Two of our product candidates, CO-101 and rucaparib, are in clinical trials, while our third product candidate, CO-1686, is expected to enter clinical trials during the second quarter of 2012. Our business depends entirely on the successful development and commercialization of our product candidates, which may never occur. We currently generate no revenues from sales of any drugs, and we may never be able to develop or commercialize a marketable drug.

Each of our product candidates will require additional clinical development, management of clinical, preclinical and manufacturing activities, regulatory approval in multiple jurisdictions, obtaining manufacturing supply, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenues from product sales. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates. We believe that, depending on the result of our current CO-101 clinical trial, this trial may serve as a pivotal trial to support our application for approval of CO-101. To the extent that the results of the trial are not satisfactory to the FDA or the EMA for support of an NDA or MAA, respectively, with respect to CO-101, we will be required to expend significant additional resources to conduct additional clinical trials in support of approval of CO-101. In addition, our product development programs contemplate the development of companion diagnostics by our third-party collaborators. Companion diagnostics are subject to regulation as medical devices and must themselves be approved for marketing by the FDA or certain other foreign regulatory agencies before we may commercialize our product candidates.

We have not previously submitted an NDA to the FDA, or similar drug approval filings to comparable foreign authorities, for any product candidate, and we cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market one or more of our product candidates, our revenues will be dependent, in part, upon our collaborators ability to obtain regulatory approval of the companion diagnostics to be used with our product candidates, as well as the size of the markets in the territories for which we gain regulatory approval and have commercial rights. If the markets for patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of such products, if approved.

We plan to seek regulatory approval to commercialize our product candidates both in the United States, the European Union and in additional foreign countries. While the scope of regulatory approval is similar in other countries, to obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our product candidates, and we cannot predict success in these jurisdictions.

# Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. For example, the positive results generated to date in clinical trials for CO-101 and rucaparib do not ensure that later clinical trials will demonstrate similar results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Our future clinical trial results may not be successful.

Although we have clinical trials ongoing for CO-101 and rucaparib, and although we are planning to initiate clinical trials for CO-1686 in the second quarter of 2012, we may experience delays in our ongoing clinical trials and we do not know whether planned clinical trials will begin on time, need to be redesigned, enroll patients on time or be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including delays related to:

obtaining regulatory approval to commence a trial;

reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

obtaining institutional review board, or IRB, approval at each site;

recruiting suitable patients to participate in a trial;

developing and validating companion diagnostics on a timely basis;

having patients complete a trial or return for post-treatment follow-up;

clinical sites deviating from trial protocol or dropping out of a trial;

adding new clinical trial sites; or

manufacturing sufficient quantities of product candidate for use in clinical trials.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials and clinicians and patients perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. Furthermore, we rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we have agreements governing their committed activities, we have limited influence over their actual performance.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory

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requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these

occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate s clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;

we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;

the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;

we may be unable to demonstrate that a product candidate s clinical and other benefits outweigh its safety risks;

the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;

the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;

the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies;

the FDA or comparable foreign regulatory authorities may fail to approve the companion diagnostics we contemplate developing with partners; and

the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market CO-101, rucaparib and CO-1686, which would significantly harm our business, results of operations and prospects.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

# Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. To date, patients treated with CO-101 have experienced drug-related side effects including nausea, vomiting, anorexia, fatigue, myelosuppression (an impairment of bone marrow function), neutropenia (a reduction in white blood cells), and thrombocytopenia (a reduction in blood platelet cells) and those treated with rucaparib have experienced drug-related side effects such as nausea and vomiting. While we have not yet initiated clinical trials for CO-1686, as is the case with all oncology drugs, it is likely that there may be side effects associated with its use. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Additionally if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

regulatory authorities may withdraw approvals of such product;

regulatory authorities may require additional warnings on the label;

we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;

we could be sued and held liable for harm caused to patients; and

our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

# Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics could harm our drug development strategy.

As one of the key elements of our clinical development strategy, we seek to identify patient subsets within a disease category who may derive selective and meaningful benefit from the product candidates we are developing. In collaboration with partners, we plan to develop companion diagnostics to help us to more accurately identify patients within a particular subset, both during our clinical trials and in connection with the commercialization of our product candidates. Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as medical devices and require separate regulatory approval prior to commercialization. We do not develop companion diagnostics internally and thus we are dependent on the sustained cooperation and effort of our third-party collaborators in developing and obtaining approval for these companion diagnostics. We and our collaborators may encounter difficulties in developing and obtaining approval for the companion diagnostics, including issues relating to selectivity/specificity, analytical validation, reproducibility, or clinical validation. Any delay or failure by our collaborators to develop or obtain regulatory approval of the companion diagnostics could delay or prevent approval of our product candidates. In addition, our collaborators may encounter production difficulties that could constrain the supply of the companion diagnostics, and both they and we may have difficulties gaining acceptance of the use of the companion diagnostics in the clinical community. If such companion diagnostic fail to gain market acceptance, it would have an adverse effect on our ability to derive revenues from sales of our products. In addition, the diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic that we anticipate using in connection with development and commercialization of our product candidates or our

relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our product candidates.

# If we established the hENT1 cut-off improperly, or if our LEAP trial results do not support the hENT1 hypothesis, we could jeopardize our potential for success with CO-101.

Retrospective analysis of tissue samples has shown a correlation between hENT1 expression levels and response to gemcitabine therapy such that patients with low levels of hENT1 expression are believed to derive little or no benefit from the drug. Our ongoing pivotal trial will, to our knowledge, be the first clinical trial to prospectively identify patients as hENT1-low and to then correlate their response to CO-101 versus gemcitabine. We utilized both previously published research data, as well as the data we derived from our own retrospective analysis of tissue samples, to reach a judgment as to those pancreatic cancer patients whose level of hENT1 expression we characterize as hENT1-low . Using this definition of hENT1-high and hENT1-low, 65% of the first 250 patients enrolled in the LEAP trial have been classified as hENT1-low. If we have set the cut-off too high (to cover a broader range of patients), we may reduce our chances of being able to show a statistically significant improvement in the rate of survival in the patients classified as hENT1-low, and thereby fail to meet the pre-defined endpoint of the trial. Conversely, if we were overly conservative in our judgment of classifying patients as hENT1-low, we may improve our chance of success in achieving the pre-defined endpoint, but at the cost of limiting the prescribing label on CO-101 to such a small subset of potential patients as to significantly constrain the commercial potential for this product candidate, if approved. Finally, we have established our hENT1 cut-off based on tissue samples that came from primary pancreatic tumors, but are using tissue samples from metastatic cancer sites to define the hENT1 status of the patients in the trial. While there are limited data that suggest that the hENT1 status is generally consistent between metastatic and primary tumors, this may not be the case in the clinical setting, which could adversely affect the outcome of the trial.

There have been multiple publications addressing the relationship between hENT1 levels and gemcitabine treatment outcomes. To date, all of these publications have suggested the same relationship, namely that hENT1-high patients tend to respond better to gemcitabine therapy than hENT1-low patients. For example, in 2009, a study published in *Gastroenterology* reported the results of a retrospective analysis of randomized samples collected from 198 pancreatic cancer patients between 1998 and 2002 comparing treatment with gemcitabine versus 5-FU. Patients in this study treated with gemcitabine who had a high level of hENT1 expression had a median overall survival of 21 months, compared to a median overall survival of 16 months for gemcitabine-treated patients with low hENT1 expression and 12 months for gemcitabine-treated patients with low hENT1 expression and 12 months for gemcitabine-treated patients with low hENT1 expression and 12 months for gemcitabine-treated patients with no hENT1 expression for patients treated with 5-FU. It is possible that other retrospective analyses of tissue samples may be published that do not reflect this correlation. Moreover, none of such studies have attempted to do what our LEAP trial is designed to do, which is to seek to prospectively prove this hENT1 hypothesis. Accordingly, we bear the risk that in a prospective, well controlled clinical trial, we may not be able to prove the hENT1 hypothesis. Our failure to achieve the predefined endpoints of the LEAP trial that support this hENT1 hypothesis would have an adverse impact on our ability to obtain approval for CO-101 and on our business, financial condition and prospects.

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

We have relied upon and plan to continue to rely upon third-party CROs to monitor and manage data for our ongoing preclinical and clinical programs. We rely on these parties for execution of our preclinical and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs are

required to comply with current good clinical practices, or cGCP, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable foreign regulatory authorities for all of our products in clinical development. Regulatory authorities enforce these cGCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable cGCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with these regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our on-going clinical, nonclinical and preclinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We rely completely on third parties to manufacture our clinical drug supplies and we intend to rely on third parties to produce commercial supplies of any approved product candidate, and our commercialization of any of our product candidates could be stopped, delayed or made less profitable if those third parties fail to obtain approval of the FDA, Competent Authorities of the Member States of the EEA or comparable regulatory authorities, fail to provide us with sufficient quantities of drug product or fail to do so at acceptable quality levels or prices.

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our clinical drug supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit our NDA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as current good manufacturing practices, or cGMPs, for manufacture of both active drug substances and finished drug products. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities

for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical trials. There are a limited number of suppliers for raw materials that we use to manufacture our drugs and there may be a need to assess alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials, and if approved, ultimately for commercial sale. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of our product candidates.

We expect to continue to depend on third-party contract manufacturers for the foreseeable future. We have not entered into long-term agreements with our current contract manufacturers or with any alternate fill/finish suppliers, and though we intend to do so prior to commercial launch in order to ensure that we maintain adequate supplies of finished drug product, we may be unable to enter into such an agreement or do so on commercially reasonable terms, which could have a material adverse impact upon our business. We currently obtain our supplies of finished drug product through individual purchase orders.

Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and cGCPs for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;

fines, warning letters or holds on clinical trials;

refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product license approvals;

product seizure or detention, or refusal to permit the import or export of products; and

injunctions or the imposition of civil or criminal penalties.

The FDA s policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We currently have no marketing and sales organization. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to effectively market and sell our product candidates, if approved, or generate product revenues.

We currently do not have a marketing or sales organization for the marketing, sales and distribution of pharmaceutical products. In order to commercialize any product candidates, we must build our marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our product candidates receive regulatory approval, we intend to establish our sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time consuming. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. With respect to our product candidates, we may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

# Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, healthcare payors and major operators of cancer clinics.

Even if we obtain regulatory approval for our product candidates, the product may not gain market acceptance among physicians, health care payors, patients and the medical community, which are critical to commercial success. Market acceptance of any product candidate for which we receive approval depends on a number of factors, including:

the efficacy and safety as demonstrated in clinical trials;

the timing of market introduction of such product candidate as well as competitive products;

the clinical indications for which the drug is approved;

the approval, availability, market acceptance and reimbursement for the companion diagnostic;

acceptance by physicians, major operators of cancer clinics and patients of the drug as a safe and effective treatment;

the potential and perceived advantages of such product candidate over alternative treatments, especially with respect to patient subsets that we are targeting with such product candidate;

the safety of such product candidate seen in a broader patient group, including its use outside the approved indications;

the cost of treatment in relation to alternative treatments;

the availability of adequate reimbursement and pricing by third-party payors and government authorities;

relative convenience and ease of administration;

the prevalence and severity of adverse side effects; and

the effectiveness of our sales and marketing efforts.

If our product candidates are approved but fail to achieve an adequate level of acceptance by physicians, health care payors and patients, we will not be able to generate significant revenues, and we may not become or remain profitable.

# We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. In addition, the competition in the oncology market is intense. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions. For example, there are currently two agents approved for the treatment of metastatic pancreatic cancer: Gemzar<sup>®</sup>/gemcitabine marketed by Eli Lilly, Teva Pharmaceutical Industries and APP Pharmaceuticals, and Tarceva<sup>®</sup> (erlotinib) marketed by Astellas Pharma, and there are a number of active clinical trials ongoing in pancreatic cancer, including by AB Science SA, Amgen Inc., Astellas Pharma, BioSante Pharmaceuticals, Inc., Celgene Corporation, Immunomedics, Inc., Lorus Therapeutics, Merrimack Pharmaceuticals, Inc., NewLink Genetics Corporation and Threshold Pharmaceuticals, Inc. Tarceva<sup>®</sup> and Iressa<sup>®</sup> are two of the currently approved drugs that are used to treat EGFR mutant NSCLC, and in addition, we are aware of two products in development targeting EGFR for the treatment of NSCLC: Boehringer Ingelheim s BIBW-2992 (afatinib) and Pfizer s PF-299804. Finally, we believe the products in development targeting the PARP pathway consist of Abbott s ABT-888 (velaparib), Merck s MK-4827, Eisai s E-7016, Cephalon s CEP-9722 and Biomarin s BMN-673.

Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. As a result, these companies may obtain regulatory approval more rapidly than we are able and may be more effective in selling and marketing their products as well. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis drug products that are more effective or less costly than any drug candidate that we are currently developing or that we may develop. If approved, our product candidates will face competition from commercially available drugs as well as drugs that are in the development pipelines of our competitors and later enter the market.

Established pharmaceutical companies may invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make our product candidates less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA, EMA or other regulatory approval or discovering, developing and commercializing medicines before we do, which would have a material adverse impact on our business.

# Reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our products profitably.

There is significant uncertainty related to the third-party coverage and reimbursement of newly approved drugs. We intend to seek approval to market our product candidates in the United States, Europe and other selected foreign jurisdictions. Market acceptance and sales of our product candidates in both domestic and international markets will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for any of our product candidates and may be affected by existing and future health care reform measures.

Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs they will pay for and establish reimbursement levels. Reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor s determination that use of a product is:

a covered benefit under its health plan;

safe, effective and medically necessary;

appropriate for the specific patient;

cost-effective; and

neither experimental nor investigational.

Obtaining coverage and reimbursement approval for a product from a government or other third-party payor is a time consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to the payor. We may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. If reimbursement of our future products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability.

In both the United States and certain foreign jurisdictions, there have been and we expect there will continue to be a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, the Medicare Modernization Act of 2003 revised the payment methodology for many products under the Medicare program in the United States. This has resulted in lower rates of reimbursement. In 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Healthcare Reform Law, was enacted. The Healthcare Reform Law substantially changes the way healthcare is financed by both governmental and private insurers and significantly affects the pharmaceutical industry. Among the provisions of the Healthcare Reform Law of greatest importance to the pharmaceutical industry are the following:

an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, beginning in 2011;

an increase in the minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;

a new Medicare Part D coverage gap discount program, under which manufacturers must agree to offer 50 percent point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer s outpatient drugs to be covered under Medicare Part D, beginning in 2011;

extension of manufacturers Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations, effective March 23, 2010;

expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program, effective January 2010;

a licensure framework for follow-on biologic products; and

a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research.

There have been, and likely will continue to be, legislative and regulatory proposals at the federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare may adversely affect:

the demand for any drug products for which we may obtain regulatory approval;

our ability to set a price for our products;

our ability to generate revenues and achieve or maintain profitability;

the level of taxes that we are required to pay; and

the availability of capital.

In addition, governments may impose price controls, which may adversely affect our future profitability.

In some foreign countries, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct additional clinical trials that compare the cost-effectiveness of our product candidates to other available therapies. If reimbursement of our product candidates is unavailable or limited in scope or amount in a particular country, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability of our products in such country.

# If we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our industry has experienced a high rate of turnover of management personnel in recent years. Our ability to compete in the highly competitive biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, scientific and medical personnel, especially Patrick J. Mahaffy, our President and Chief Executive Officer, Erle T. Mast, our Executive Vice President and Chief Financial Officer, Andrew R. Allen, our Executive Vice President of Clinical and Pre-Clinical Development and Chief Medical Officer, Steven L. Hoerter, our Senior Vice President of Commercial, and Gillian C. Ivers-Read, our Executive Vice President of Technical Operations and Chief Regulatory Officer, whose services are critical to the successful implementation of our product candidate acquisition, development and regulatory strategies. We are not aware of any present intention of any of these individuals to leave our company. In order to induce valuable employees to continue their employment with us, we have provided stock options that vest over time. The value to employees of stock options that vest over time is significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies.

Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Pursuant to their employment arrangements, each of our executive officers may voluntarily terminate their employment at any time by providing as little as thirty days advance notice. Our employment arrangements, other than those with our executive officers, provide for at-will employment, which means that any of our employees (other than our executive officers) could leave our employment at any time, with or without notice. The loss of the services of any of our executive officers or other key employees and our inability to find suitable replacements could potentially harm our business, financial condition and prospects. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level, and senior managers as well as junior, mid-level, and senior scientific and medical personnel.

We may not be able to attract or retain qualified management and scientific personnel in the future due to the intense competition for a limited number of qualified personnel among biopharmaceutical, biotechnology, pharmaceutical and other businesses. Many of the other pharmaceutical companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high quality candidates than what we have to offer. If we are unable to continue to attract and retain high quality personnel, the rate and success at which we can develop and commercialize product candidates will be limited.

#### We will need to grow the size of our organization, and we may experience difficulties in managing this growth.

As of March 12, 2012, we had 57 full-time employees. As our development and commercialization plans and strategies develop, we expect to need additional managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including:

managing our clinical trials effectively;

identifying, recruiting, maintaining, motivating and integrating additional employees;

managing our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors and other third parties;

improving our managerial, development, operational and finance systems; and

expanding our facilities.

As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical trials effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

# Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we have established, comply with federal and state health-care fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a Code of Business Ethics, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

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

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

the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or induce, or in

return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;

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

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

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

state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

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

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates, if approved. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

decreased demand for our product candidates or products that we may develop;

injury to our reputation;

withdrawal of clinical trial participants;

initiation of investigations by regulators;

costs to defend the related litigation;

a diversion of management s time and our resources;

substantial monetary awards to trial participants or patients;

product recalls, withdrawals or labeling, marketing or promotional restrictions;

loss of revenues from product sales; and

the inability to commercialize our product candidates.

Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop.

We currently carry \$10.0 million of product liability insurance, which we believe is adequate for our clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

#### Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred substantial losses during our history and do not expect to become profitable in 2012 and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an ownership change (generally defined as a greater than 50% change (by value) in its equity ownership over a three year period), the corporation s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We may experience ownership changes in the future as a result of subsequent shifts in our stock ownership. As of December 31, 2011, we had federal net operating loss carryforwards of approximately \$63.6 million that could be limited if we experience an ownership change, which could have an adverse effect on our results of operations.

#### Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

# We will incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes Oxley Act, as well as rules subsequently adopted by the SEC and the NASDAQ Stock Market, or NASDAQ. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and financial condition. In addition, on July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation-related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as say on pay and proxy access, and the SEC has since issued final rules implementing say on pay measures. We expect these rules and regulations to substantially increase our legal and financial compliance costs, to make some activities more time-consuming and costly, to result in increased general and administrative expenses and to divert management time and attention from revenue-generating activities. The increased costs will decrease our net income or increase our consolidated net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we are required to perform system and

process evaluation and testing of our internal controls over financial reporting to allow management to report, commencing in our annual report on Form 10-K for the year ending December 31, 2012, on the effectiveness of our internal controls over financial reporting, if then required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner or if we identify or our independent registered public accounting firm identifies deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities, which would require additional financial and management resources.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act and rules adopted by the SEC and by NASDAQ, would likely result in increased costs to us as we respond to their requirements.

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

# If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or license may fail to result in issued patents in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the breadth or strength of protection provided by the patent applications we hold or pursue with respect to our product candidates is threatened, it could threaten our ability to commercialize our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, an interference proceeding can be provoked by a third-party or instituted by the United States Patent and Trademark Office, or the U.S. PTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications.

With respect to CO-101, we have an exclusive, worldwide license from Clavis to a portfolio of patents directed to the CO-101 composition of matter that expire in 2018. With respect to rucaparib, we have an exclusive, worldwide license from Pfizer to a portfolio of patents and patent applications directed to the rucaparib composition of matter that expire in 2020. While patent term extensions under the Hatch-Waxman Act in the United States and under supplementary protection certificates in Europe may be available to extend our patent exclusivity for either CO-101 or rucaparib, we cannot provide any assurances that any such patent term extension will be obtained.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug development processes that involve proprietary know-how, information or technology that is not covered by patents. Although we require all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have

access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

#### Third-party claims of intellectual property infringement may prevent or delay our drug discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including interference and reexamination proceedings before the U.S. PTO or oppositions and other comparable proceedings in foreign jurisdictions. Numerous United States and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtain a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent expires or is finally determined to be held invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all.

We are aware of a family of patents and patent applications controlled by a third party that claim certain uses of PARP inhibitors that could potentially be asserted against our use of rucaparib in certain indications. We are conducting clinical trials for the treatment of solid tumors, a subset of which are ovarian cancer and breast cancer characterized as having positive germ-line BRCA mutations. Methods for treating such germ-line BRCA mutations. We are evaluating the validity of the patents and patent applications, including the scope or potential scope of the claims of these patents and patent applications, to determine whether to seek a license under such patents or patent applications, when and if they issue, or alternatively whether to initiate proceedings to challenge such patents. If we are unable to either license or successfully challenge such patents, we may consider shifting our development emphasis among alternative uses, and in so doing we could reduce the size of the aggregate potential market for rucaparib.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us,

we may have to pay substantial damages, including treble damages and attorneys fees for willful infringement, obtain one or more licenses from third parties, limit our uses, pay royalties or redesign our infringing product candidates, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly.

#### The patent protection and patent prosecution for some of our product candidates is dependent on third parties.

While we normally seek and gain the right to fully prosecute the patents relating to our product candidates, there may be times when platform technology patents that relate to our product candidates are controlled by our licensors. This is the case with our license of CO-1686 from Avila Therapeutics, Inc., in which Avila retained the right to prosecute and maintain the patents and patent applications covering its core discovery technology, including molecular backbones, building blocks and classes of compounds generated by that technology, aspects of which relate to CO-1686. While we have the right to prosecute and maintain the patent rights for the composition of matter for CO-1686, if Avila or any of our future licensing partners fail to appropriately prosecute and maintain patent protection for patents covering any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products.

# We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by the U.S. PTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees.

We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

#### We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

# If we breach any of the agreements under which we license commercialization rights to our product candidates from third parties, we could lose license rights that are important to our business.

We license the use, development and commercialization rights for all of our product candidates, and may enter into similar licenses in the future. Under each of our existing license agreements with Clavis (CO-101), Avila (CO-1686) and Pfizer (rucaparib), we are subject to commercialization and development, diligence obligations, milestone payment obligations, royalty payments and other obligations. If we fail to comply with any of these obligations or otherwise breach our license agreements, our licensing partners may have the right to terminate the license in whole or in part. Generally, the loss of any one of our three current licenses or other licenses in the future could materially harm our business, prospects, financial condition and results of operations.

#### Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

Others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed.

We or our licensors or strategic partners might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed.

We or our licensors or strategic partners might not have been the first to file patent applications covering certain of our inventions.

Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.

It is possible that our pending patent applications will not lead to issued patents.

Issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors.

Our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.

We may not develop additional proprietary technologies that are patentable.

The patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

#### Risks Related to This Offering and Ownership of our Common Stock

# There may not be a viable public market for our common stock and as a result it may be difficult for you to sell your shares of our common stock.

Our common stock had not been publicly traded prior to our initial public offering in November 2011. The trading market for our common stock on The NASDAQ Global Select Market has been limited and an active

trading market for our shares may not be sustained. As a result of these and other factors, you may be unable to resell your shares at a price that is attractive to you or at all. Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic partnerships or acquire companies or products by using our shares of common stock as consideration.

#### The price of our stock has been, and may continue to be, volatile, and you could lose all or part of your investment.

The trading price of our common stock has been, and may continue to be, volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. Since our initial public offering in November 2011 the price of our common stock on the NASDAQ Global Select Market has ranged from \$11.45 per share to \$27.55 per share. In addition to the factors discussed in this Risk Factors section and elsewhere in this prospectus, these factors include:

our failure to commercialize our product candidates, if approved;

actual or anticipated adverse results or delays in our clinical trials;

unanticipated serious safety concerns related to the use of any of our product candidates;

adverse regulatory decisions;

changes in laws or regulations applicable to our product candidates, including but not limited to clinical trial requirements for approvals;

disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our product candidates;

our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;

our dependence on third parties, including CROs as well as our partners that provide us with companion diagnostic products;

additions or departures of key scientific or management personnel;

failure to meet or exceed any financial guidance or expectations regarding development milestones that we may provide to the public;

actual or anticipated variations in quarterly operating results;

failure to meet or exceed the estimates and projections of the investment community;

overall performance of the equity markets and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies;

conditions or trends in the biotechnology and biopharmaceutical industries;

introduction of new products offered by us or our competitors;

announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;

our ability to maintain an adequate rate of growth and manage such growth;

issuances of debt or equity securities;

significant lawsuits, including patent or stockholder litigation;

sales of our common stock by us or our stockholders in the future;

trading volume of our common stock;

publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;

ineffectiveness of our internal controls;

general political and economic conditions;

effects of natural or man-made catastrophic events; and

other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the NASDAQ Global Select Market and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in these Risk Factors, could have a dramatic and material adverse impact on the market price of our common stock.

# Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Prior to this offering, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates known to us beneficially owned approximately 77.2% of our voting stock and, upon the closing of this offering, that same group will hold approximately 68.6% of our outstanding voting stock (assuming no exercise of the underwriters over-allotment option and no exercise of outstanding options), assuming a public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012. Therefore, even after this offering these stockholders will have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

#### If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The public offering price is substantially higher than the net tangible book value per share of our common stock. Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of \$18.00 per share, assuming a public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less than the price offered to the public in this offering when they purchased their shares. In addition, as of December 31, 2011, options to purchase 934,816 shares of our common stock at a weighted-average exercise price of \$4.88 per share were outstanding. The exercise of any of these options would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we will need to raise additional capital to fund our clinical development programs, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of common stock or common stock-related securities, together with the exercise of outstanding options and any additional shares issued in connection with acquisitions, if any, may result in further dilution to investors. For a further description of the dilution that you will experience immediately after this offering, see Dilution.

#### Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Persons who were our stockholders prior to our initial public offering continue to hold a substantial number of shares of our common stock. If such persons sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lapse of lock-up restrictions on resale resulting from our initial public offering and any other legal restrictions on resale discussed in this prospectus, the trading price of our common stock could decline. As of March 12, 2012, we have 22,375,757 shares of common stock outstanding. Of these shares, approximately 6,427,761 are freely tradable, without restriction, in the public market.

We expect that the lock-up agreements pertaining to our initial public offering signed by our directors, officers and substantially all of our stockholders prior to our initial public offering will expire on May 13, 2012 (subject to extension upon the occurrence of specified events). The lock-up agreements pertaining to this offering signed by our directors and executive officers will expire 60 days from the date of this prospectus (subject to extension upon the occurrence of specified events). After these lock-up periods expire, up to an additional 15,947,996 shares of common stock, subject to vesting schedules, will be eligible for sale in the public market, 11,851,091 of which shares are held by directors, executive officers and other affiliates and will be subject to vesting schedules, volume limitations under Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. Our underwriters, however, may, in their sole discretion, permit our officers, directors and other stockholders who are subject to the lock-up agreements to sell shares prior to the expiration of the lock-up agreements.

In addition, shares of common stock that are either subject to outstanding options or reserved for future issuance under our equity incentive plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Furthermore, 15,689,252 shares of our common stock, or approximately 70.1% of our total outstanding common stock as of March 12, 2012 (and holders of 297,237 shares of our common stock issuable upon exercise of options to purchase our common stock), are entitled to rights with respect to the registration of their shares under the Securities Act, subject to vesting schedules and to the lock-up agreements described above). Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

# Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our equity incentive plan(s), our compensation committee (or a subset thereof) is authorized to grant equity-based incentive awards to our employees, directors and consultants. As of December 31, 2011, the number of shares of our common stock available for future grant under our 2011 Plan is 1,357,258, which includes 138,258 shares of our common stock that were reserved for future issuance under our the 2009 Equity Incentive Plan, or the 2009 Plan, and were transferred to the 2011 Plan for future issuance. The number of shares of our common stock reserved for issuance under our 2011 Plan will be increased (i) from time to time by the number of shares of our common stock forfeited upon the expiration, cancellation, forfeiture, cash settlement or other termination of awards under our 2009 Plan, and (ii) at the discretion of our board of directors, on the date

of each annual meeting of our stockholders, by up to the lesser of (x) a number of additional shares of our common stock representing 4% of our then-outstanding shares of common stock on such date and (y) 2,758,621 shares of our common stock. Future option grants and issuances of common stock under our 2011 Plan may have an adverse effect on the market price of our common stock.

#### We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment. We expect to use the net proceeds from this offering to fund our development programs and for working capital and general corporate purposes. Pending their use, we may invest the net proceeds from this offering in short-term, interest-bearing investment grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

# Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third-party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders or remove our current management. These provisions include:

authorizing the issuance of blank check preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;

limiting the removal of directors by the stockholders;

creating a staggered board of directors;

prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;

eliminating the ability of stockholders to call a special meeting of stockholders;

permitting our board of directors to accelerate the vesting of outstanding option grants upon certain transactions that result in a change of control; and

establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may discourage, delay or prevent someone from acquiring us or merging with us whether or not it is desired by or beneficial to our stockholders. Under Delaware law, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Any provision of

our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

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

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

# Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to the Company.

Our certificate of incorporation provides that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our bylaws to be effective immediately prior to the completion of this offering and our indemnification agreements that we have entered into with our directors and officers provide that:

We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person s conduct was unlawful.

We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.

We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

We will not be obligated pursuant to our bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.

The rights conferred in our bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

We may not retroactively amend our bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus includes statements that are, or may be deemed, forward-looking statements. In some cases, these forward-looking statements can be identified by the use of forward-looking terminology, including the terms believes, estimates, anticipates, expects, plans, intends, could, might, will, should, approximately or, in each case, their negative or other variations thereon or comparable terminology, although no forward-looking statements contain these words. They appear in a number of places throughout this prospectus and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ongoing and planned clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, the degree of clinical utility of our products, particularly in specific patient populations, expectations regarding clinical trial data, our results of operations, financial condition, liquidity, prospects, growth and strategies, the industry in which we operate and the trends that may affect the industry or us.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics, and industry change and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this prospectus. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this prospectus, they may not be predictive of results or developments in future periods.

Some of the factors that we believe could cause actual results to differ from those anticipated or predicted include:

the success and timing of our preclinical studies and clinical trials;

our ability to obtain and maintain regulatory approval of our product candidates, and the labeling under any approval we may obtain;

our plans to develop and commercialize our product candidates;

our ability, with partners, to validate, develop and obtain regulatory approval of companion diagnostics for our product candidates;

the loss of key scientific or management personnel;

the size and growth of the potential markets for our product candidates and our ability to serve those markets;

regulatory developments in the United States and foreign countries;

the rate and degree of market acceptance of any of our product candidates;

our use of the proceeds from this offering;

the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;

our ability to obtain and maintain intellectual property protection for our product candidates;

the successful development of our sales and marketing capabilities;

the success of competing drugs that are or become available; and

the performance of third-party manufacturers.

Any forward-looking statements that we make in this prospectus speak only as of the date of such statement, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this

prospectus or to reflect the occurrence of unanticipated events. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

You should also read carefully the factors described in the Risk Factors section of this prospectus to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act do not protect any forward-looking statements that we make in connection with this offering.

This prospectus also includes estimates of market size and industry data that we obtained from industry publications and surveys and internal company sources. The industry publications and surveys used by management to determine market size and industry data contained in this prospectus have been obtained from sources believed to be reliable.

#### **USE OF PROCEEDS**

We estimate that our net proceeds from the sale of the shares of common stock in this offering will be approximately \$69.9 million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their over-allotment option in full, we estimate that our net proceeds will be approximately \$80.5 million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We anticipate that we will use the net proceeds of this offering to fund our development programs and for working capital and general corporate purposes.

Pending these uses, we intend to invest the net proceeds of this offering in short-term, interest-bearing investment grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government.

#### PRICE RANGE OF COMMON STOCK

Our common stock is traded on the NASDAQ Global Select Market under the symbol CLVS. Trading of our common stock commenced on November 16, 2011, following the completion of our initial public offering. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported on the NASDAQ Global Select Market:

	HIGH	LOW
Year Ended December 31, 2011		
Fourth Quarter (beginning November 16, 2011)	\$ 14.85	\$ 11.45
Year Ended December 31, 2012		
First Quarter (ending March 21, 2012)	\$ 27.55	\$ 13.41
On March 21, 2012, the reported last sale price of our common stock on the NASDAQ Global Select Market was \$25.99	. On March 1	12, 2012,
there were approximately 45 holders of record of our common stock.		

#### **DIVIDEND POLICY**

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

#### CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and our consolidated capitalization as of December 31, 2011 on:

an actual basis; and

an as adjusted basis giving additional effect to the sale of \$75.0 million of shares of our common stock offered in this offering, assuming a public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The information in this table is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual public offering price and other terms of this offering determined at pricing. You should read this table in conjunction with the information contained in Use of Proceeds, Selected Consolidated Financial Data and Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as the consolidated financial statements and the notes thereto included elsewhere in this prospectus.

	As of December 31, 2011	
	· · · · · · · · · · · · · · · · · · ·	As Adjusted (dited) (thousands)
Cash and cash equivalents	\$ 138,236	\$ 208,181
Stockholders equity:		
Preferred stock, par value \$0.001 per share; 10,000,000 shares authorized and no shares issued and		
outstanding, actual and as adjusted		
Common stock, par value \$0.001 per share; 100,000,000 shares authorized and 22,375,757 shares issued		
and outstanding, actual; 25,261,482 shares issued and outstanding, as adjusted	22	25
Additional paid-in capital	242,221	312,163
Accumulated other comprehensive income	49	49
Accumulated deficit	(110,499)	(110,499)
	121 502	201 520
Total stockholders equity	131,793	201,738
Total capitalization	\$ 131,793	\$ 201,738

The number of shares of our common stock to be outstanding after this offering set forth above excludes:

934,816 shares of our common stock issuable upon the exercise of stock options outstanding as of December 31, 2011 at a weighted-average exercise price of \$4.88 per share;

1,357,258 shares of our common stock reserved for future issuance under the 2011 Plan as of December 31, 2011, plus any annual increases in the number of shares of common stock reserved for future issuance under the 2011 Plan pursuant to an evergreen provision and any other shares that may become issuable under the 2011 Plan pursuant to its terms, as more fully described in Executive and Director Compensation Compensation Decisions Relating to Fiscal Year 2012 2012 Option Grants ; and

189,656 shares of our common stock reserved for future issuance under the ESPP as of December 31, 2011, plus any annual increases in the number of shares of our common stock reserved for future issuance under the ESPP pursuant to an evergreen provision and any other shares that may become issuable under the ESPP pursuant to its terms, as more fully described in Executive and Director Compensation Narrative Disclosure Relating to Summary Compensation Table and Grant of Plan Based Awards Table 2011 Employee Stock Purchase Plan.

A 5% increase or decrease in the assumed public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012, would increase or decrease the number of shares of our common stock issued in this offering by approximately 5%.

#### DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock upon completion of this offering. Net tangible book value per share of our common stock is determined at any date by subtracting our total liabilities from the amount of our total tangible assets (total assets less intangible assets) and dividing the difference by the number of shares of our common stock deemed to be outstanding at that date.

Our historical net tangible book value as of December 31, 2011 was approximately \$131.8 million, or \$5.89 per share, based on 22,375,757 shares of common stock outstanding as of December 31, 2011.

Investors participating in this offering will incur immediate, substantial dilution. After giving effect to our receipt of approximately \$69.9 million of estimated net proceeds (after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us) from our sale of common stock in this offering, assuming a public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012, our as adjusted net tangible book value as of December 31, 2011 would have been \$201.7 million, or \$7.99 per share. This amount represents an immediate increase in net tangible book value of \$2.10 per share of our common stock to existing stockholders and an immediate dilution in net tangible book value of \$18.00 per share of our common stock to new investors purchasing shares of common stock in this offering.

The following table illustrates this dilution on a per share basis:

Assumed public offering price per share		\$ 25.99
Historical net tangible book value per share as of December 31, 2011	\$ 5.89	
As adjusted increase in net tangible book value per share attributable to investors participating in this offering	\$ 2.10	
As adjusted net tangible book value per share after this offering		\$ 7.99
Dilution of as adjusted net tangible book value per share to new investors		\$ 18.00

The number of shares of our common stock to be outstanding immediately following this offering set forth above excludes:

934,816 shares of our common stock issuable upon the exercise of stock options outstanding as of December 31, 2011 at a weighted-average exercise price of \$4.88 per share;

1,357,258 shares of our common stock reserved for future issuance under the 2011 Plan as of December 31, 2011, plus any annual increases in the number of shares of common stock reserved for future issuance under the 2011 Plan pursuant to an evergreen provision and any other shares that may become issuable under the 2011 Plan pursuant to its terms, as more fully described in Executive and Director Compensation Compensation Decisions Relating to Fiscal Year 2012 2012 Option Grants ; and

189,656 shares of our common stock reserved for future issuance under the ESPP as of December 31, 2011, plus any annual increases in the number of shares of our common stock reserved for future issuance under the ESPP pursuant to an evergreen provision and any other shares that may become issuable under the ESPP pursuant to its terms, as more fully described in Executive and Director Compensation Narrative Disclosure Relating to Summary Compensation Table and Grant of Plan Based Awards Table 2011 Employee Stock Purchase Plan.

If the underwriters over-allotment option is exercised in full, the as adjusted net tangible book value per share after giving effect to this offering would be \$8.26 per share, which amount represents an immediate increase in as adjusted net tangible book value of \$2.37 per share of our

common stock to existing stockholders and an immediate dilution in net tangible book value of \$17.73 per share of our common stock to new investors purchasing shares of common stock in this offering.

If all our outstanding stock options had been exercised as of December 31, 2011, assuming the treasury stock method, our as adjusted net tangible book value would have been \$7.80 per share, representing dilution in our as adjusted net tangible book value per share to new investors of \$18.19.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital by issuing equity securities or convertible debt, your ownership will be further diluted.

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#### SELECTED CONSOLIDATED FINANCIAL DATA

The following table sets forth certain of our selected historical financial data at the dates and for the periods indicated. The selected historical statement of operations data presented below for the years ended December 31, 2011 and 2010 and the periods from April 20, 2009 (inception) to December 31, 2009 and 2011 have been derived from our audited financial statements, which are included elsewhere in this prospectus.

The financial information presented from April 20, 2009 (inception) to December 31, 2010 was based solely on the results of Clovis Oncology, Inc. Subsequent to January 1, 2011, the financial information is consolidated and includes the results of our wholly owned subsidiary in the United Kingdom. The historical results are not necessarily indicative of results expected in any future period.

The selected historical financial data presented below should be read in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the related notes thereto, which are included elsewhere in this prospectus. The selected historical financial information in this section is not intended to replace our financial statements and the related notes thereto.

#### **Statement of Operations Data:**

	For the Year Ended December 31,				Ар	ulative from ril 20, 2009 ception) to
	2011	2010 (in thousands, e	December 31, 2009 xcept per share amo		cember 31, 2011	
Revenue	\$	\$	\$	\$		
Operating expenses:						
Research and development	40,726	22,323	1,762		64,811	
General and administrative	6,860	4,302	2,209		13,371	
Acquired in-process research and development	7,000	12,000	13,085		32,085	
Operating loss Other income (expense), net	(54,586) (957)	(38,625) 795	(17,056) (43)		(110,267) (205)	
Loss before income taxes	(55,543)	(37,830)	(17,099)		(110,472)	
Income taxes	(27)	(	( ,,,		(27)	
Net loss	\$ (55,570)	\$ (37,830)	\$ (17,099)	\$	(110,499)	
Basic and diluted net loss per common share	\$ (14.42)	\$ (28.55)	\$ (15.38)	\$	(51.06)	
Common shares used in the computation of basic and diluted net loss per common share Balance Sheet Data:	3,854	1,325	1,112		2,164	

	2011	As of December 31 2010 (in thousands)	, 2009
Balance Sheet Data:			
Cash, cash equivalents and available for sale securities	\$ 140,248	\$ 22,299	\$ 57,311
Working capital	130,519	19,886	57,349
Total assets	143,445	26,200	59,574
Convertible preferred stock		75,499	75,499

Common stock and additional paid-in capital	242,243	138	41
Total stockholders equity (deficit)	131,793	(54,749)	(17,058)

#### MANAGEMENT S DISCUSSION AND ANALYSIS OF

#### FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing at the end of this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. You should read the Risk Factors section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

#### Overview

We are a biopharmaceutical company focused on acquiring, developing and commercializing innovative anti-cancer agents in the United States, Europe and additional international markets. We target our development programs for the treatment of specific subsets of cancer populations, and seek to simultaneously develop, with partners, companion diagnostics that direct our product candidates to the patients that are most likely to benefit from their use. We are currently developing three product candidates for which we hold global marketing rights: CO-101, a lipid-conjugated form of the anti-cancer drug gencitabine, which is in a pivotal study in a specific patient population for the treatment of metastatic pancreatic cancer; CO-1686, an orally available, small molecule epidermal growth factor receptor, or EGFR, covalent inhibitor that in the second quarter of 2012 will begin Phase I clinical development for the treatment of non-small cell lung cancer, or NSCLC, in patients with activating EGFR mutations, including the initial activating mutations, as well as the primary resistance mutation, T790M; and rucaparib, also known as CO-338, an orally available, small molecule poly (ADP-ribose) polymerase, or PARP, inhibitor being developed for various solid tumors that is currently in Phase I/II clinical trials. As our product candidates mature, we intend to build commercial organizations of our own in major global markets and contract with local distributors in smaller markets.

We were incorporated in Delaware in April 2009 and commenced operations in May 2009. To date, we have devoted substantially all of our resources to identifying and in-licensing product candidates, performing development activities with respect to those product candidates, and the general and administrative support of these operations. Since inception, we have generated no revenues and, through December 31, 2011, have principally funded our operations using the \$75.5 million of net proceeds from the sale of convertible preferred stock, the issuance of \$35.0 million aggregate principal amount of convertible promissory notes and \$129.4 million of net proceeds from our initial public offering completed in November 2011. The convertible preferred stock and outstanding principal amount of the convertible promissory notes and all accrued and unpaid interest converted into shares of our common stock immediately prior to the closing of our initial public offering. On September 22, 2011, our board of directors and stockholders effectuated a 1 for 2.9 reverse stock split. Our historical share information has been retrospectively adjusted to give effect to this reverse stock split.

We have never been profitable and, as of December 31, 2011, we had an accumulated deficit of \$110.5 million. We incurred losses of \$17.1 million, \$37.8 million, and \$55.6 million for the period from April 20, 2009 (inception) through December 31, 2009 and for the years ended December 31, 2010, and 2011, respectively. We expect to incur significant and increasing losses for the foreseeable future as we advance our product candidates through clinical development to seek regulatory approval and, if approved, commercialize such product candidates. We will need additional financing to support our operating activities. We will seek to fund our operations through public or private equity or debt financings or other sources. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We expect that research and development expenses will increase as we continue the development of our product candidates and general and administrative costs will increase as we grow and operate as a public company. We will need to generate significant revenues to achieve profitability and we may never do so.

The financial information presented from April 20, 2009 (inception) to December 31, 2010 was based solely on the results of Clovis Oncology, Inc. Subsequent to January 1, 2011, the financial information is consolidated

and includes the results of our wholly owned subsidiary in the United Kingdom. All intercompany transactions and balances are eliminated in this consolidation.

#### **Product License Agreements**

#### CO-101

In November 2009, we entered into a license agreement with Clavis to develop and commercialize CO-101 in North America, Central America, South America and Europe. Under the terms of the license agreement, we made an up-front payment to Clavis in the amount \$15.0 million, which was comprised of \$13.1 million for development costs incurred prior to the execution of the agreement, which we recognized as acquired in-process research and development and \$1.9 million for the prepayment of preclinical activities to be performed by Clavis. In November 2010, the license agreement was amended to expand the license territory to include Asia and other international markets. We paid Clavis \$10.0 million for the territory expansion and recognized that payment as acquired in-process research and development expense. As part of the amendment to the license agreement, Clavis has also agreed to reimburse up to \$3.0 million of our research and development costs for certain CO-101 development activities subject to our incurring such costs. We are responsible for all remaining development and commercialization costs of the compound and, if approved, Clavis will be entitled to receive royalties based on the volume of annual net sales achieved. We may be required to pay Clavis an aggregate of up to \$115.0 million in development and regulatory milestone payments if certain clinical study objectives and regulatory filings, acceptances and approvals are achieved. In addition, we may be required to pay Clavis an aggregate of up to \$445.0 million in sales milestone payments if certain annual sales targets are met for CO-101.

Subject to certain conditions set forth in the license agreement, Clavis may elect to co-develop and co-promote CO-101 in Europe. If Clavis were to make this election, it would be required to reimburse us for a portion of both past and future development costs. In addition, our milestone payment obligations described above would be reduced. Clavis would not be entitled to royalties on the net sales in Europe, but would instead share equally in the pretax profits or losses resulting from commercialization activities in Europe.

#### CO-1686

In May 2010, we entered into a worldwide license agreement with Avila to discover, develop and commercialize preclinical covalent inhibitors of mutant forms of EGFR. CO-1686 was identified as the lead inhibitor candidate developed by Avila under the license agreement. We are responsible for all preclinical, clinical, regulatory and other activities necessary to develop and commercialize CO-1686. We made an up-front payment of \$2.0 million to Avila upon execution of the license agreement which we recognized as acquired in-process research and development expense. We are obligated to pay Avila royalties on net sales of CO-1686, based on the volume of annual net sales achieved. Avila has the option to increase royalty rates by electing to reimburse a portion of our development expenses. This option must be exercised within a limited period of time of Avila s being notified by us of our intent to pursue regulatory approval of CO-1686 in the United States or the European Union as a first-line treatment. We may be required to pay Avila up to an aggregate of \$119.0 million in development and regulatory milestone payments if certain clinical study objectives and regulatory filings, acceptances and approvals are achieved. In addition, we may be required to pay Avila up to an aggregate of \$120.0 million in sales milestone payments if certain annual sales targets are achieved.

In January 2012, our IND to begin clinical investigation of CO-1686 became effective, which triggered the first development milestone payment to Avila of \$4.0 million.

#### Rucaparib

In June 2011, we entered into a license agreement with Pfizer to acquire exclusive global development and commercialization rights to Pfizer s drug candidate PF-01367338, also known as CO-338 or rucaparib. This drug candidate is a small molecule PARP inhibitor which we are developing for the treatment of selected solid tumors. Pursuant to the terms of the license agreement, we made an up-front payment by issuing Pfizer \$7.0 million principal amount of a 5% convertible promissory note due 2012, which was subsequently converted to common

stock immediately prior to our initial public offering. We are responsible for all development and commercialization costs of rucaparib and, if approved, we will be required to pay Pfizer royalties on sales of the product. In addition, we may be required to pay Pfizer up to an aggregate of \$259.0 million in milestone payments if certain development, regulatory and sales milestones are achieved.

#### **Financial Operations Overview**

#### Revenue

To date, we have not generated any revenues. In the future, we may generate revenue from the sales of product candidates that are currently under development. Based on our current development plans, we do not expect to generate significant revenues until 2014 at the earliest. If we fail to complete the development of our product candidates and, together with our partners, companion diagnostics or obtain regulatory approval for them, our ability to generate future revenue, and our results of operations and financial position, will be adversely affected.

#### **Research and Development Expenses**

Research and development expenses consist of costs incurred for the development of our product candidates and companion diagnostics, which include:

license fees related to the acquisition of in-licensed products, which are reported on our statements of operations as acquired in-process research and development;

employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;

expenses incurred under agreements with CROs and investigative sites that conduct our clinical trials and preclinical studies;

the cost of acquiring, developing and manufacturing clinical trial materials;

costs associated with preclinical activities and regulatory operations; and

activities associated with the development of companion diagnostics for our product candidates. Research and development costs are expensed as incurred. License fees and milestone payments related to in-licensed products and technology are expensed if it is determined that they have no alternative future use. Costs for certain development activities, such as clinical trials, are recognized based on an evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations or information provided to us by our vendors.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later stage clinical trials. We plan to increase our research and development expenses for the foreseeable future as we seek to complete development of our most advanced product candidate, CO-101, and its companion diagnostic, transition our CO-1686 product candidate into human clinical trials, and commence the development of rucaparib including the cost of ongoing clinical trials.

The following table identifies research and development costs and acquired in-process research and development costs on a program-specific basis for our product candidates in-licensed through December 31, 2011 and their companion diagnostics. Personnel-related costs, depreciation and stock-based compensation are not allocated to specific programs as they are deployed across multiple projects under development and, as such, are separately classified as personnel and other expenses in the table below.

	Year Ended December 31,		ar Ended ember 31,	Apr (Ir	riod from il 20, 2009 nception) to cember 31,	Apri	lative from l 20, 2009 eption) to
	2011	200	2010	n thousan	2009		ber 31, 2011
CO-101 Expenses							
Acquired in-process R&D	\$	\$	10,000	\$	13,085	\$	23,085
Research and development	21,703		14,461		371		36,535
CO-101 Total	21,703		24,461		13,456		59,620
CO-1686 Expenses							
Acquired in-process R&D			2,000				2,000
Research and development	6,196		2,432				8,628
CO-1686 Total	6,196		4,432				10,628
Rucaparib Expenses							
Acquired in-process R&D	7,000						7,000
Research and development	2,861						2,861
Rucaparib Total	9,861						9,861
Personnel and other expenses	9,966		5,430		1,391		16,787
•							
Total	\$ 47,726	\$	34,323	\$	14,847	\$	96,896

#### General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive, finance, business development, and information technology functions. Other general and administrative expenses include facility costs, communication expenses, and professional fees for legal, patent review, consulting and accounting services.

We anticipate that our general and administrative expenses will increase due to many factors and the most significant of these factors include:

increased personnel expenses to support the growth in research and development activities; and

increased expenses related to becoming a publicly traded company, including increased legal and accounting services, addition of new headcount to support compliance and communication needs, and increased insurance premiums. *Other Income and Expense* 

Other income is comprised of interest income earned on cash, cash equivalents and available for sale securities, gain on the sale of available for sale securities, and a federal grant awarded to us under the Qualifying Therapeutic Discovery Project Program in 2010. Other expense includes interest expense associated with the convertible notes payable outstanding during 2011. In addition, we hold cash balances at financial institutions denominated in currencies other than the U.S. dollar to fund research and development activities performed by various third-party

vendors. The translation of these currencies into U.S. dollars results in foreign currency gains or losses, depending on the change in value of these currencies against the U.S. dollar. These gains and losses are included in Other Income and Expense.

#### Critical Accounting Policies and Significant Judgments 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 U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation. We base our estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in more detail in the notes to our financial statements appearing elsewhere in this prospectus. We believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements.

#### Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include:

fees paid to CROs in connection with clinical studies;

fees paid to investigative sites in connection with clinical studies;

fees paid to vendors in connection with preclinical development activities;

fees paid to vendors associated with the development of companion diagnostics; and

#### fees paid to vendors related to product manufacturing, development and distribution of clinical supplies.

We base our expenses related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple CROs that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the clinical expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed, enrollment of patients, number of sites activated and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed may vary and may result in us reporting amounts that are too high or too low in any particular period. Based on the amount of accrued research and development expenses as of December 31, 2011, if our estimates of our net accrued liabilities are too high or too low by 5%, this could increase or decrease our research and development expenses by approximately \$254,000.

#### Stock-Based Compensation

Described below is the methodology we have utilized in measuring stock-based compensation expense. Following the consummation of our initial public offering in November 2011, stock option values are determined based on the quoted market price of our common stock.

Since our inception in 2009, we applied the fair value recognition provisions of Financial Accounting Standards Board Accounting Standards Codification, or ASC, 718 Accounting for Stock Based Compensation , which we refer to as ASC 718. Determining the amount of stock-based compensation to be recorded requires us to develop estimates of the fair value of stock options as of their grant date. Compensation expense is recognized over the vesting period of the award. Calculating the fair value of stock-based awards requires that we make highly subjective assumptions. We use the Black-Scholes option pricing model to value our stock option awards. Use of this valuation methodology requires that we make assumptions as to the price volatility of our common stock, the expected term of our stock options, the risk free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. Because we are a company with a limited operating history, we utilize data from several peer companies to estimate expected stock price volatility and the expected term of our options. We selected peer companies from the biopharmaceutical industry with similar characteristics as us, including stage of product development, market capitalization, number of employees and therapeutic focus. We utilize a dividend yield of zero based on the fact that we have never paid cash dividends and have no current intention to pay cash dividends. The risk-free interest rate used for each grant is based on the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

The fair value of stock options was estimated at the grant date using the following weighted average assumptions:

	Year Ended December 31, 2011	Year Ended December 31, 2010	Period from April 20, 2009 (Inception) Through December 31, 2009
Dividend yield			
Volatility	74%	80%	80%
Risk-free interest rate	2.13%	2.10%	2.33%
Expected term (years)	6.0	5.6	5.3

In accordance with ASC 718, we recognized stock-based compensation expense of approximately \$4,000, \$68,000, and \$1.3 million for the period April 20, 2009 (inception) through December 31, 2009 and for the years ended December 31, 2010 and 2011, respectively. As of December 31, 2011, we had \$6.0 million in total unrecognized compensation expense, net of related forfeiture estimates, which is expected to be recognized over a weighted-average remaining vesting period of approximately 3.1 years. We expect our stock-based compensation to grow in future periods due to the potential increases in the value of our common stock and headcount.

Under ASC 718, we are required to estimate the level of forfeitures expected to occur and record compensation expense only for those awards that we ultimately expect will vest. Due to the lack of historical forfeiture activity of our plan, we estimated our forfeiture rate based on peer company data with characteristics similar to our company.

As there was no public market for our common stock until our initial public offering in November 2011, the estimated fair value of our common stock from April 2009 through the initial public offering date effective November 15, 2011 was determined contemporaneously by our board of directors based on valuation estimates provided by management and prepared in accordance with the framework of the 2004 AICPA Technical Practice Aid, Valuation of Privately-Held-Company Equity Practice Aids, or the Practice Aid.

For the period from April 20, 2009 (inception) to December 31, 2009, our board of directors determined the fair value of our common stock to be \$0.29 per share. Due to the minimal value of non-cash assets owned during this period, the superior preferences associated with our convertible preferred stock in relation to our common stock and our focus on start up activities, there was a nominal value attributed to the fair value of our common stock during this time.

In the fourth quarter of 2009, we completed the in-licensing of our first product candidate and the issuance of our Series A-2 and Series B convertible preferred stock for total net proceeds of \$65.6 million. Based on the significance of these transactions, we deemed it appropriate to update the estimated valuation of our common stock as of December 31, 2009. This valuation was updated again as of December 31, 2010.

Based on the valuation methodology selection criteria set forth in the Practice Aid and the stage of our development as a company as of December 31, 2009 and 2010, we determined that the Option Pricing Method based on a Black-Scholes option pricing model was the most appropriate valuation methodology to estimate the fair value of our common stock. We concluded that there were no significant transactions affecting our capital structure or changes in the development plans for our product candidates from what was previously expected which would have indicated that an update to our valuation was required at dates other than December 31, 2009 and 2010, which was validated by the relatively insignificant change in value during each period.

Key variables used in applying the Option Pricing Method are as follows:

Underlying equity value To estimate the value of our total equity (including both common and preferred equity), we utilized the marketable equity value based on the most recent rounds our preferred stock issuances, which we believed to be the most indicative of our value.

Volatility We estimated volatility based on comparison to volatility of publicly-traded comparable companies.

Time to liquidity We estimated time to a liquidity event based on the forecasted time to significant clinical development events for our product candidates which we believed could lead to an initial public offering, or IPO, or other type of liquidation event for our stockholders.

Risk-free interest rate We determined the risk-free interest rate based on the yield of a U.S. Treasury bill with a maturity date closest to the estimated time to a liquidation event for our stockholders.

Discounts for lack of marketability Because we are a privately-held company, shares of our common stock are highly illiquid and, as such, warrant a discount in value from their estimated marketable price. We estimate the discount factor for illiquidity using legal guidelines from U.S. Tax Court cases regarding privately-held business valuations, fundamental business factors, and empirical studies on the discount for lack of marketability. We corroborated the discount factor based on the value of a put option compared to the value of common stock using a Black-Scholes option pricing model.

The following tables summarize the significant assumptions utilized in the Option Pricing Method used to determine the fair value of our common stock as of the dates indicated.

		December 31,		
	2009	2009 20		
		1 Yr. Liquidity	2 Yr. Liquidity	
Underlying equity value (\$ millions)	\$89.7	\$99.0	\$104.4	
Volatility	80%	70%	70%	
Time to liquidity	3 yrs.	1 yr.	2 yrs.	
Risk-free interest rate	1.69%	0.29%	0.61%	
Discount for lack of marketability	55%	40%	50%	
Estimated per-share fair value of common stock	\$3.08	\$3.10	\$3.45	
Average of 2010 valuations		\$3.28		

For our valuation as of December 31, 2009, we assumed a three-year time to liquidity based on our assumption that clinical data from the LEAP study for CO-101 would be available in the fourth quarter of 2012. At that time, we believed that an IPO or other liquidity event would most likely occur following the availability of those data. For our valuation as of December 31, 2010, we performed two valuation models, one that

assumed a one-year time to liquidity and another that assumed a two-year time to liquidity. As of December 31, 2010, we believed that a liquidity event was possible within one year due to the fact that we had in-licensed a second product candidate (CO-1686), which was expected to commence human clinical trials in the first half of 2012,

and the development of CO-101 was progressing as planned. We also believed that a liquidity event was equally likely to occur after the availability of the clinical data from the LEAP study, which was still expected within two years of the valuation. Since neither of these scenarios seemed more likely than the other, we calculated valuations using both liquidity event assumptions and equally weighted the results to estimate the fair value of our common stock. The primary reason for the lower marketable value per share of our common stock in comparison to the marketable value per share of our preferred stock on each valuation date was the value of the superior rights and preferences associated with the preferred stock, the most significant of which are the liquidation rights held by the preferred stockholders.

The estimated fair value of our common stock increased significantly from our initial estimate of \$0.29 made at our inception to \$3.08 as of December 31, 2009. This increase was primarily due to our improved financial position resulting from the issuance of our Series A-2 and Series B convertible preferred stock as well as the in-licensing of our first product candidate, CO-101, each of which occurred in the fourth quarter of 2009. These events increased the likelihood of creating value for common stockholders above the thresholds necessary to satisfy the liquidation preferences held by our preferred stockholders.

In April 2011, our board of directors authorized management to pursue an IPO. As a result of this action, we determined that the valuation of our common stock should be updated to reflect the greater clarity as to a likely liquidity event for common stockholders (*i.e.*, the IPO), as well as the in-licensing of our third product candidate, rucaparib, and the issuance in May and June 2011 of \$35.0 million in aggregate principal amount of our 5% convertible promissory notes due 2012. In accordance with the Practice Aid, we determined that the probability weighted expected return method, or PWERM, was the most appropriate valuation methodology going forward. Accordingly, we updated the valuation of our common stock effective June 30, 2011.

In our application of PWERM, we estimated the fair value of our common stock using three potential liquidity scenarios and then probability weighted the resulting valuation under each of these scenarios. The three liquidity scenarios assumed were as follows:

completing the IPO, or the IPO scenario;

remaining as a private company and selling the company at a future date, or the merger and acquisition, or M&A, scenario; and

remaining as a private company and executing an IPO at a future date, or the Future IPO scenario.

In order to estimate our equity value under the IPO scenario, we employed an income approach using a discounted cash flow analysis. Net cash flows from the multi-year forecast for each of our product candidates were discounted to their present value based on our estimated weighted average cost of capital, or WACC. The WACC was estimated using a capital asset pricing model, taking into account risk-free interest rates, an equity risk premium, risk premiums for our industry and entity size, company-specific risks associated with the development and commercialization of our product candidates, and the cost and capital structure weighting of our debt. The estimated future cash flows were based on anticipated timing of the clinical development and regulatory approvals for each of our product candidates as well as their commercialization opportunity. This equity value was applied to the number of common shares outstanding determined on a fully diluted basis to calculate the per share fair value of our common stock, assuming the conversion of all preferred stock into common stock.

To value our common stock under the M&A and Future IPO scenarios, we utilized the Option Pricing Method as described above. However, for these scenarios the current value of our underlying common and preferred equity was determined using a discounted cash flow analysis that is substantially the same as the analysis performed for the IPO scenario rather than using a marketable equity value based on recent rounds of our preferred stock issuances as was used in the December 31, 2009 and 2010 valuations. We believed this to be a more accurate measurement of our equity value as of June 30, 2011 due to the 19 month time gap since our last issuance of preferred stock. Once our equity value for the M&A and Future IPO scenarios was determined, we allocated a portion of the value to our common stock based on a best economic outcome model. For the M&A scenario, the value assigned to our common stock was determined using a break point analysis to estimate the various enterprise values at which holders of each series of our preferred stock would elect to convert to common

stock and the points at which holders of options would exercise as a result of the value of the common stock exceeding the exercise price. For the Future IPO scenario, the value assigned to our common stock was estimated using a fully diluted outstanding share analysis assuming the conversion of all preferred stock into common stock as such a conversion would be required to execute an IPO.

The following tables summarize the significant assumptions utilized for each of the valuation scenarios used to determine the fair value of our common stock as of June 30, 2011.

		Liquidity Scenario		
		Initial Public	Future	
Key Assumptions		Offering	IPO	M&A
Probability weighting		80%	10%	10%
Liquidity date		10/1/2011	6/30/2014	6/30/2014
Underlying equity value (\$ millions)		\$124.6	\$120.0	\$120.0
WACC		28%	N/A	N/A
Volatility		N/A	100%	100%
Risk-free interest rate		N/A	0.81%	0.81%
Discount for lack of marketability		N/A	50%	50%
Estimated per-share fair value of common stock		\$12.47	\$5.57	\$4.93
PWFRM	\$11.02			

The estimated per share fair value of our common stock determined as of June 30, 2011 increased significantly from the December 31, 2010 valuation. This is primarily due to the April 2011 decision by our board of directors to authorize management to pursue an IPO and the June 2011 authorization of our board of directors to file a registration statement with the SEC, which, among other things, contributed to the elimination of the discount for lack of marketability from the IPO scenario in the June 30, 2011 analysis. Given the assumed acceleration of the IPO to October 1, 2011, we believed the value of our common stock no longer warranted a discount from its marketable price. In addition, the June 30, 2011 valuation was positively impacted by the assumption that all preferred stock would automatically convert into common stock upon the IPO, thereby eliminating the impact of preferred stock liquidation preferences on the value of the common stock.

We utilized the common stock valuation contemporaneously prepared as of December 31, 2010 to set the exercise price for stock options granted during the six months ended June 30, 2011. In light of the close proximity of the stock option grants in March, April, May and June 2011 to the April and June 2011 actions by our board of directors with respect to the IPO and our June 2011 entry into a license agreement to acquire exclusive global development and commercialization rights to rucaparib, we retrospectively determined to use the fair value of our common stock as of June 30, 2011 to calculate stock-based compensation expense for those stock option grants. No stock options were granted in January or February 2011.

The following table presents the grant dates and related exercise prices of stock options granted to our employees and our board of directors from April 20, 2009 (inception) through November 15, 2011, prior to the closing of our initial public offering, along with the corresponding exercise price for each grant and the fair value per share utilized to calculate stock-based compensation expense.

	Number of Shares			mon Stock ir Value	
	Underlying	Exercise	per		
	Options	Price per	Share on Grant		
Month of Grant	Granted	Share		Date	
August 2009	260,348	\$ 0.29	\$	0.29	
October 2009	34,482	\$ 0.29	\$	0.29	
November 2009	12,069	\$ 0.29	\$	0.29	
December 2009	4,311	\$ 0.29	\$	0.29	
April 2010	114,309	\$ 3.08	\$	3.08	
May 2010	29,309	\$ 3.08	\$	3.08	
June 2010	12,069	\$ 3.08	\$	3.08	
August 2010	1,034	\$ 3.08	\$	3.08	
October 2010	4,310	\$ 3.08	\$	3.08	
November 2010	31,897	\$ 3.08	\$	3.08	
December 2010	48,273	\$ 3.08	\$	3.08	
March 2011	534,449	\$ 3.28	\$	11.02	
April 2011	5,173	\$ 3.28	\$	11.02	
May 2011	12,412	\$ 3.28	\$	11.02	
June 2011	48,274	\$ 3.28	\$	11.02	
July 2011	5,172	\$ 11.02	\$	11.02	
August 2011	194,647	\$ 11.02	\$	11.02	
October 2011	18,016	\$ 11.02	\$	11.02	
November 2011	14,000	\$ 11.02	\$	11.02	

The price of our common stock at our initial public offering was \$13.00 per share, as compared to our most recent common stock valuation of \$11.02 per share completed as of June 30, 2011. We believe that the difference in estimated value between the IPO price and management s determination of the estimated fair value of our common stock as of June 30, 2011 is primarily the result of the contemporaneous valuation prepared as of June 30, 2011 containing multiple liquidity scenarios, including an initial public offering with an anticipated completion date of October 1, 2011 and two scenarios that assumed we remained as a private company for an extended period of time. If we had considered only the October 1, 2011 initial public offering scenario with 100% probability, the contemporaneous valuation would have resulted in a fair value determination of \$12.47 per share, representing a discount of 4% from the IPO price.

There are significant judgments and estimates inherent in the determination of these valuations. These judgments and estimates include assumptions regarding our future performance, including the successful completion of our clinical trials as well as the determination of the appropriate valuation methods. If we had made different assumptions, our share-based compensation expense could have been different.

#### **Results of Operations**

#### Comparison of Years Ended December 31, 2011 and 2010 and the Period from April 20, 2009 (inception) to December 31, 2009:

*Research and Development Expenses.* Research and development expenses for the years ended December 31, 2011 and 2010 and the period from April 20, 2009 (inception) to December 31, 2009 were as follows:

	Years E 2011	2010	Apri (Ind	iod from 1 20, 2009 ception) to ember 31, 2009
Research and development expenses	\$ 40,726	(in thousands) \$ 22,323	\$	1,762
Increase from prior year	\$ 18,403	\$ 20,561	\$	1,702
% Change from prior year	82.4%	1166.9%		

The increase in research and development expenses for the year ended December 31, 2011 over 2010 was due primarily to development expenses associated with CO-101 and rucaparib clinical trials. Clinical trial expenses increased by \$9.6 million due to growth in the number of patients, active sites and investigators that are participating in our CO-101 clinical trials and costs incurred for the development of companion diagnostics for our CO-101 drug product, as well as the assumption of clinical development costs for rucaparib following the in-licensing of that product candidate in June 2011. Drug product development and manufacturing activities also increased by \$470,000 in support of the CO-101 development. In addition, \$3.8 million of the increase was the result of discovery, formulation development, manufacturing, and the commencement of preclinical activities associated with CO-1686, a compound that was in-licensed in May 2010. The remaining increase of \$4.5 million was due primarily to an increase in salaries, benefits and personnel related costs resulting from additional headcount hired to support the expanding development activities of CO-101, CO-1686 and rucaparib.

The increase in research and development expenses for the year ended December 31, 2010 over the period from April 20, 2009 (inception) to December 31, 2009 was due primarily to the commencement of research and development activities in 2010 for our in-licensed compounds CO-101 and CO-1686. Significant 2010 development activities included:

increase of \$5.5 million related to the commencement of our pivotal clinical trial for CO-101 in January 2010;

increase of \$4.7 million for CO-101 drug product development, clinical supply manufacturing and distribution;

increase of \$2.3 million associated with CO-1686 product development and IND enabling activities;

increase of \$2.0 million for the initiation of additional supporting CO-101 clinical studies;

increase of \$1.1 million for companion diagnostic development related to both CO-101 and CO-1686; and

increase of \$4.0 million to salaries, benefits and other personnel costs to support the growth in our 2010 development activities.

*General and Administrative Expenses.* General and administrative expenses for the years ended December 31, 2011 and 2010 and the period from April 20, 2009 (inception) to December 31, 2009 were as follows:

	Years E	Years Ended		
	2011	2010 (in thousands)		ember 31, 2009
General and administrative expenses	\$ 6,860	\$ 4,302	\$	2,209
Increase from prior year	\$ 2,558	\$ 2,093	\$	
% Change from prior year	59.5%	94.7%		

The increase in general and administrative expenses for the year ended December 31, 2011 over 2010 was primarily attributable to a full year s lease expense in 2011 associated with office space in San Francisco, California and Cambridge, England where the leases commenced in May 2010 and August 2010, respectively, as well as legal fees associated with patent review and analysis activities for two of our product candidates, and increased personnel, travel and information system costs to support company growth. Additionally, stock compensation expense increased by \$701,000 relative to the increase in the valuation of our common stock in 2011.

The increase in general and administrative expenses for the year ended December 31, 2010 over the period from April 20, 2009 (inception) to December 31, 2009 was due primarily to an increase of \$0.9 million in personnel related expenses to support corporate operational activities and the commencement of research and development activities for CO-101 and CO-1686 in 2010. In addition, office lease expense increased by \$0.9 million due to new lease agreements for the Boulder, Colorado and San Francisco, California locations, effective in December 2009 and May 2010, respectively. In addition, we commenced operations in May 2009 and, as such, expenses for the period ended December 31, 2009 reflect only a partial year s activity.

Acquired In-Process Research and Development Expenses. Acquired in-process research and development expenses for the years ended December 31, 2011 and 2010 and the period from April 20, 2009 (inception) to December 31, 2009 were as follows:

	Years E	Years Ended		
	2011	2010 (in thousands)	Dec	ember 31, 2009
Acquired in-process research and development	\$ 7,000	\$ 12,000	\$	13,085
Decrease from prior year	\$ (5,000)	\$ (1,085)	\$	
% Change from prior year	-41.7%	-8.3%		

The decrease in acquired in-process research and development expenses for the year ended December 31, 2011 over 2010 was due to the difference in up-front acquisition costs for the development and commercialization rights of rucaparib in comparison to CO-1686 and CO-101. The licensing rights to rucaparib were acquired in June 2011. We made an up-front payment by issuing Pfizer a \$7.0 million convertible promissory note, which was recognized as acquired in-process research and development expense. In May 2010, we acquired the global rights to develop and commercialize CO-1686 and made a \$2.0 million up-front payment which was recognized as acquired in-process research and development expense. Additionally, in November 2010, we made a payment of \$10.0 million to Clavis to expand the territory rights under the license agreement to include Asia and other international markets and we recorded this payment as acquired in-process research and development expense.

The decrease in acquired in-process research and development expenses for the year ended December 31, 2010 over the period from April 20, 2009 (inception) to December 31, 2009 was primarily due to the payments made for CO-101 licensing in 2010 vs. 2009 and the up-front acquisition costs for the worldwide rights to CO-1686. The rights to develop and commercialize CO-101 in North America, Central America, South America and Europe were licensed from Clavis in November 2009. As part of the in-license transaction, we recognized

\$13.1 million in 2009 as acquired in-process research and development expense. In November 2010, we made a payment of \$10.0 million to Clavis to expand the territory rights under the license agreement to include Asia and other international markets and we recorded this payment as acquired in-process research and development expense. The acquired in-process research and development expense associated with CO-101 decreased \$3.1 million for the year ended December 31, 2010 in comparison to the period from April 20, 2009 (inception) to December 31, 2009 as a result of the transactions described above. This reduction was partially offset by the acquisition of the worldwide rights to CO-1686 in May 2010. We recognized the up-front payment of \$2.0 million for CO-1686 rights as acquired in-process research and development expense during 2010.

*Other Income (Expense), Net.* Other income (expense), net for the years ended December 31, 2011 and 2010 and the period from April 20, 2009 (inception) to December 31, 2009 were as follows:

	Years E 2011	(in thousands)		
		(in thousands)		
Other income (expense), net:	\$ (957)	\$ 795	\$	(43)
Increase (decrease) from prior year	\$ (1,752)	\$ 838	\$	
% Change from prior year	-220.4%	1948.8%		

The decrease in other income (expense), net for the year ended December 31, 2011 over 2010 was due to interest expense increasing by \$851,000, resulting from the convertible promissory notes issued to our existing investors and Pfizer during the second quarter of 2011, which were subsequently converted to common stock upon the effective date of our initial public offering in November 2011. We also recorded \$97,000 of debt issuance costs in 2011 associated with the issuance of convertible promissory notes. In addition, other expense increased in 2011 due to a \$489,000 award received in 2010 under the Qualifying Therapeutic Discovery Project Program that did not occur in 2011, as well as a \$183,000 reduction in foreign currency transaction gains in 2011 due primarily to a change in the value of the Euro in relation to the U.S. Dollar.

The increase in other income (expense), net for the year ended December 31, 2010 over the period from April 20, 2009 (inception) to December 31, 2009 was primarily due to a \$489,000 award received in 2010 under the Qualifying Therapeutic Discovery Project Program for the development of CO-101 and CO-1686. In addition, \$232,000 was due to the strengthening of the Euro value in relation to the U.S. Dollar over the 2010 year, which created an exchange gain to our Euro denominated cash account. The Euro cash account was established in May 2010 and had no impact in the period ended December 31, 2009.

#### Liquidity and Capital Resources

We have funded our operations primarily through the private placement of equity, convertible debt securities and our initial public offering completed in November 2011. As of December 31, 2011, we have received \$75.5 million in net proceeds from the issuance of convertible preferred stock and \$129.4 million in net proceeds from the issuance of common stock through our initial public offering. In May and June 2011, we received proceeds of \$28.0 million through the issuance of convertible promissory notes. The outstanding principal amount and all accrued and unpaid interest converted into shares of our common stock immediately prior to the closing of our initial public offering at \$13.00 per share, equal to our initial public offering price. As of December 31, 2011, we had cash, cash equivalents and available for sale securities totaling \$140.2 million.

The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

			Period from	
			April 20, 2009	
	Year Ended	Year Ended	(Inception) to	
	December 31,	December 31,	December 31,	
	2011	2010	2009	
Net cash used in operating activities	\$ (39,828)	\$ (34,011)	\$ (17,955)	
Net cash provided by (used in) investing activities	9,168	(12,821)	(270)	
Net cash provided by financing activities	158,346	29	75,536	
Effect of exchange rate changes on cash and cash equivalents	42			
Net increase (decrease) in cash and cash equivalents	\$ 127,728	\$ (46,803)	\$ 57,311	

#### **Operating Activities**

The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in components of working capital. The increase of \$5.8 million to cash used in operating activities for the year ended December 31, 2011 in comparison to the prior year was due to an increase in clinical trial costs for CO-101 resulting from an increase in the number of patients enrolled and sites activated for our ongoing LEAP trial, commencement of CO-1686 research and development activities, in-licensed by us in May 2010, and commencement of product development and clinical trial activities for rucaparib, in-licensed by us in June 2011. The significant increase in cash used in operating activities for the year ended December 31, 2010 compared to the period from April 20, 2009 (inception) to December 31, 2009 was due to an increase in research and development expenses as we commenced development work on CO-101 and CO-1686 following the in-licensing of those programs in November 2009 and May 2010, respectively. In addition, we commenced operations in May 2009 and, as such, the period ended December 31, 2009 reflects only a partial year of activity.

#### **Investing** Activities

The cash provided by (used in) investing activities for all periods primarily reflects the purchase of available for sale securities offset by maturities and sales of available for sale securities. The increase of \$22.0 million in cash provided by investing activities for the year ended December 31, 2011 compared to the year ended December 31, 2010 was due primarily to the maturities and sale of available for sale securities in 2011 to fund operations. The increase related to the sale and maturities of available for sale securities is partially offset by the purchase of \$0.5 million in property and equipment in 2011 compared to \$0.8 million in 2010. The net use of cash for these activities increased from zero in 2009 to \$12.0 million in 2010 as we invested a portion of the proceeds received from the sale of convertible preferred stock in November 2009 in available for sale securities. In addition, we purchased \$0.8 million in property and equipment to \$0.3 million in 2009.

#### **Financing** Activities

Cash provided by financing activities for the year ended December 31, 2011 was due to the issuance of \$28.0 million of 5% convertible promissory notes for cash in the second quarter of 2011, the receipt of \$129.4 million in net cash proceeds in the fourth quarter of 2011 from the sale of common stock during our initial public offering, and the exercise of stock options for \$1.1 million. The cash provided by financing activities in 2009 was the result of the sale and issuance of 5,044,828 shares of our Series A-1 convertible preferred stock for net proceeds of \$9.9 million, 5,044,828 shares of our Series A-2 convertible preferred stock for net proceeds of \$15.1 million, and 10,919,540 shares of our Series B convertible preferred stock for net proceeds of \$50.4 million.

#### **Operating Capital Requirements**

Assuming we successfully complete clinical trials and obtain requisite regulatory approvals, we do not anticipate commercializing any of our product candidates until 2014 at the earliest. As such, we anticipate that we will continue to generate significant losses for the next several years as we incur expenses to complete our

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development activities for each of our programs, including clinical trial activities, companion diagnostic development, drug development, establishing our commercial capabilities, and expanding our general and administrative functions to support the growth in our research and development and commercial organizations.

The net proceeds from our initial public offering will not be sufficient to fund our operations through successful development and commercialization of our product candidates. As a result, we will need to raise additional capital following our initial public offering to fund our operations and continue to conduct clinical trials to support additional development and potential regulatory approval, make milestone payments to our licensors and commercialize our product candidates.

We believe that our existing cash and cash equivalents and available for sale securities, will allow us to fund our operating plan through at least the next 12 months. If our available cash and cash equivalents and available for sale securities are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity or debt securities or obtain a credit facility. The sale of additional equity and debt securities may result in additional dilution to our stockholders.

In addition, if we raise additional funds through the issuance of debt securities or convertible preferred stock, these securities may have rights senior to those of our common stock and could contain covenants that would restrict our operations. Furthermore, any such required additional capital may not be available on reasonable terms, if at all. If we were unable to obtain additional financing, we may be required to reduce the scope of, delay, or eliminate some or all of our planned development and commercialization activities, which could harm our business.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amounts of our working capital requirements. Our future funding requirements will depend on many factors, including but not limited to:

the number and characteristics of the product candidates, companion diagnostics, and indications we pursue;

the achievement of various development, regulatory and commercial milestones resulting in required payments to partners pursuant to the terms of our license agreements;

the scope, progress, results and costs of researching and developing our product candidates and related companion diagnostics and conducting clinical and preclinical trials;

the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates and companion diagnostics;

the cost of commercialization activities, if any, of our product candidates are approved for sale, including marketing and distribution costs;

the cost of manufacturing any of our product candidates we successfully commercialize;

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

the timing, receipt and amount of sales, if any, of our product candidates. *Contractual Obligations and Commitments* 

The following table summarizes our contractual obligations at December 31, 2011 (in thousands):

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#### Payments due by Period

					More than
		Less than			5
Contractual Obligations	Total	1 Year	1 to 3 Years	3 to 5 Years	Years
Operating lease obligations	\$ 1,533	\$ 751	\$ 592	\$ 190	\$

In addition, we have certain obligations under licensing agreements with third parties contingent upon achieving various development, regulatory and commercial milestones. Pursuant to our license agreement with Clavis for the development and commercialization of CO-101, we may be required to pay Clavis an aggregate of

up to \$115.0 million if certain clinical study objectives and regulatory filings and approvals are achieved. Further, we may be required to pay Clavis up to an aggregate of \$445.0 million in sales milestone payments if certain annual sales targets are met for CO-101. Subject to certain conditions set forth in the license agreement, Clavis may elect to co-develop and co-promote CO-101 in Europe. If Clavis were to make this election, it would be required to reimburse us for a portion of both past and future development costs. In addition, the milestone payments described above would be reduced. Pursuant to our license agreement with Avila for the development and commercialization of CO-1686, we may be required to pay Avila an aggregate of up to \$119.0 million if certain clinical study objectives and regulatory approvals are achieved, of which we have already paid \$4.0 million in the first quarter of 2012 upon filing the IND for CO-1686. Further, we may be required to pay Avila an aggregate of up to \$120.0 million in sales milestone payments if certain annual sales targets are met for CO-1686. Pursuant to our license agreement with Pfizer for the development of rucaparib, which was signed in June 2011, we may be required to pay Pfizer up to an aggregate \$259.0 million in milestone payments upon the successful attainment of development, regulatory and sales milestones. Finally, pursuant to terms of each of these license agreements, we will pay royalties to our licensors on sales, if any, of the respective products.

#### **Off-Balance Sheet Arrangements**

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under the rules promulgated by the SEC.

## **Tax Loss Carryforwards**

As of December 31, 2011, we have federal net operating loss carryforwards of approximately \$63.6 million to offset future federal income taxes. We also have federal research and development tax credit carryforwards of \$18.2 million to offset future federal income taxes. The federal net operating loss carryforwards and research and development tax credit carryforwards expire at various times through 2031. To date, there have not been any ownership changes under Section 382 of the Code that would limit the amount of net operating loss carryforwards and tax credit carryforwards available in future years. However, the occurrence of certain events, including significant changes in ownership interests, may limit the amount of the tax carryforwards available in future years. At December 31, 2011, we recorded a 100% valuation allowance against our net operating loss and research and development tax credit carryforwards of approximately \$44.3 million, as we believe it is more likely than not that the tax benefits will not be fully realized. In the future, if we determine that a portion or all of the tax benefits associated with our tax carryforwards will be realized, net income would increase in the period of determination.

#### Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk related to changes in interest rates. As of December 31, 2011, we had cash, cash equivalents and available for sale securities of \$140.2 million, consisting of money market funds and U.S. government and agency obligations. The primary objectives of our investment policy are to preserve principal and maintain proper liquidity to meet operating needs. Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term securities. Our available for sale securities are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

We contract with CROs, investigational sites, and contract manufacturers globally. We may be subject to fluctuations in foreign currency rates in connection with these agreements. While we periodically hold foreign currencies, primarily Euro and Pound Sterling, we do not use other financial instruments to hedge our foreign exchange risk. Transactions denominated in currencies other than the functional currency are recorded based on exchange rates at the time such transactions arise. As of December 31, 2011 and December 31, 2010, approximately 31% and 23%, respectively, of our total liabilities were denominated in currencies other than the functional currency.

#### **Recently Adopted Accounting Standards**

In June 2011, the FASB issued Accounting Standards Update No. 2011-05, Presentation of Comprehensive Income. This update eliminates the current option to report other comprehensive income and its components in the statement of shareholders equity. This update is intended to enhance comparability between entities that report under GAAP and to provide a more consistent method of presenting non-owner transactions that affect an entity s equity. This standard is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. We do not expect the adoption of this update to cause any material changes to the disclosures in, or the presentation of, our consolidated financial statements.

#### **Financial Statements and Supplementary Data**

Reference is made to the consolidated financial statements, the report thereon, and the notes thereto, commencing at page F-1 of the consolidated financial statements included in this prospectus.

#### BUSINESS

#### Overview

We are a biopharmaceutical company focused on acquiring, developing and commercializing innovative anti-cancer agents in the United States, Europe and additional international markets. We target our development programs for the treatment of specific subsets of cancer populations, and seek to simultaneously develop, with partners, companion diagnostics that direct our product candidates to the patients that are most likely to benefit from their use. We are currently developing three product candidates for which we hold global marketing rights: CO-101, a lipid-conjugated form of the anti-cancer drug gemcitabine, which is in a pivotal study in a specific patient population for the treatment of metastatic pancreatic cancer; CO-1686, an orally available, small molecule epidermal growth factor receptor, or EGFR, covalent inhibitor that was the subject of an investigational new drug, or IND, application that became effective in January 2012 and is entering clinical development for the treatment of non-small cell lung cancer, or NSCLC, in patients with activating EGFR mutations, including the initial activating mutations, as well as the primary resistance mutation, T790M; and rucaparib, also known as CO-338, an orally available, small molecule poly (ADP-ribose) polymerase, or PARP, inhibitor being developed for various solid tumors that is currently in Phase I/II clinical trials.

We believe that discovery productivity exceeds development capacity in oncology, and we have built our organization to meet the need for innovative patient-specific oncology drug development. To implement our strategy, we have assembled an experienced team with core competencies in global clinical development and regulatory operations in oncology, as well as conducting collaborative relationships with companies specializing in companion diagnostic development. As our product candidates mature, we intend to build our own commercial organizations in major global markets and contract with local distributors in smaller markets.

The most common anti-cancer drug therapies typically address cancers within a specific organ as a single disease as opposed to a collection of different disease subtypes, often resulting in poor response rates and minimal effect on overall survival. We believe the oncology community is increasingly recognizing that tumors in a particular organ have unique pathologic and molecular characteristics that may warrant different treatment strategies. By better understanding differences in tumor biology and underlying disease pathways, researchers are identifying biomarkers to guide development of targeted oncology therapies, with streamlined clinical trials, stratified patient populations and improved patient outcomes. We believe that targeted therapies and companion diagnostics offer a patient-tailored approach to the treatment of cancers with improved diagnosis and outcomes.

Our pipeline consists of the following three product candidates, each of which is being developed for selected patient subsets:

**CO-101**-Our most advanced product candidate, CO-101, is currently in a pivotal clinical study comparing CO-101 to gemcitabine in patients with metastatic pancreatic cancer for use as an initial therapy recommended for treatment of the disease, or a so-called first-line treatment . We expect to complete enrollment for this trial in the first quarter of 2012 and report top line results as to overall survival in the prespecified hENT1-low patient subset in the fourth quarter of 2012. CO-101 is a novel, patented, lipid-conjugated form of the anti-cancer drug gemcitabine that is designed to treat patients with pancreatic cancer whose tumors express low amounts of a membrane transporter protein on the surface of the cancer cell known as hENT1 and are thus expected to be resistant to standard gemcitabine-based therapy. Based on the published results of multiple studies assessing the correlation of hENT1 expression to survival outcomes in pancreatic cancer patients treated with gemcitabine, as well as the prospective hENT1 classification of the first 250 patients enrolled in our pivotal study of CO-101, we believe that approximately one-half to two-thirds of pancreatic cancer patients express low levels of hENT1, and thus derive little or no benefit from gemcitabine therapy. We have partnered with Ventana Medical Systems for the development and commercialization of a companion diagnostic for the assessment of hENT1 levels.

**CO-1686**-Our second product candidate, CO-1686, is an orally available, small molecule covalent inhibitor of the cancer-causing mutant forms of EGFR for the treatment of NSCLC. Because CO-1686 targets both the initial activating mutations as well as the primary resistance mutation, T790M, it has

the potential to treat NSCLC patients with EGFR mutations, both as a first-line treatment, or as a therapy recommended for patients when a first-line treatment has been ineffective, a so-called second-line treatment . In January 2012, our IND to begin clinical investigation of CO-1686 became effective. We expect to commence initial Phase I/II studies of CO-1686 in the U.S. and Europe in the second quarter of 2012 and in Asia during the third quarter of 2012. We have designed an accelerated clinical development program for CO-1686, and if successful, have a goal of filing a New Drug Application, or NDA, for an initial indication within approximately four years of filing our IND. We have partnered with Roche Molecular Systems, Inc., or Roche, for the development and commercialization of a companion diagnostic for EGFR mutations.

**Rucaparib**-Our third product candidate, rucaparib, also known as CO-338, is an orally available, small molecule PARP inhibitor being developed for use as monotherapy or in combination with chemotherapeutic agents for the treatment of various cancers. Rucaparib is currently in a dose ranging Phase I clinical trial in combination with carboplatin chemotherapy for the treatment of solid tumors. This program is supplemented by two investigator-sponsored trials of rucaparib for the treatment of breast and ovarian cancers. In the fourth quarter of 2011, we initiated a Phase I/II monotherapy study of the oral formulation to determine an appropriate dose and schedule for long term administration and to then assess preliminary efficacy in breast and ovarian cancers, including in patients with germ-line mutations in BRCA genes.

We were founded in April 2009 by former executives of Pharmion Corporation, which successfully developed and commercialized novel oncology products in the United States and Europe and was ultimately acquired by Celgene Corporation in 2008. Our investors include the following entities or their affiliates: Domain Associates, New Enterprise Associates, Versant Ventures, Aberdare Ventures, Abingworth Bioventures, Frazier Healthcare Ventures, Pfizer Inc., ProQuest Investments and our management team.

#### **Our Strategy**

Our strategy is to acquire, develop, and commercialize innovative anti-cancer agents in the United States, Europe and additional international markets in oncology indications with significant unmet medical need. The critical components of our business strategy include the following:

*Focus on oncology.* The oncology market is characterized by a number of disorders with high rates of recurrence and a limited response from current therapies or treatments. Many of these therapies include severe side effects. New oncology product candidates addressing unmet medical needs or providing superior safety profiles are frequently the subject of expedited regulatory reviews and, if approved, can experience rapid adoption rates. We believe that the increasing role of targeted therapies and companion diagnostics to identify selected patient subsets in oncology presents the potential for improved patient outcomes.

*Focus on compounds where improved outcomes are associated with specific biomarkers.* Our licensing strategy to date has been to prioritize opportunities in which a strong biological hypothesis has been established linking a specific characteristic or biological state of a cell, or biomarker, with improved outcomes for the product candidate. As evidenced by the proliferation of studies focused on the biomarkers of specific cancers, significant progress has been made over the last several years in the identification of molecular targets and pathways that more narrowly specify the causes of cancer and the variation in responses to different therapies experienced by patient subsets with a particular cancer or tumor type. In certain cases, the underlying science has progressed to the point that subset patient populations deriving little or no benefit from existing therapies can be identified and targeted by newly developed therapies, such as our product candidates. We believe that the identification of such subsets, and the correlation of their specific characteristics to the drug under development, should increase the clinical benefit to targeted patients and the probability of success in our clinical trials. Such patient identification should also enable us to design clinical trials that may be completed more rapidly than has traditionally been the case, and, if successful, to achieve clinical outcomes for the targeted group that are sufficiently attractive to support the risk/benefit metrics of healthcare payors.

*Combine companion diagnostics with drug development efforts to realize superior clinical outcomes.* A companion diagnostic is a test or measurement intended to assist physicians in making treatment decisions for their patients. Companion diagnostics do so by identifying the presence of biomarkers, and physicians use this information to select a specific drug or treatment to which their patient will most likely respond. Our development strategy is based on the premise that we can utilize effective companion diagnostics to identify different patient subsets who we believe will uniquely benefit from our product candidates. We are partnering to develop these companion diagnostics for use in the clinical development and ultimate commercial utilization of our product candidates. Because we do not develop diagnostics internally, we are able to select from among all available technologies when choosing a partner for our programs under development. This flexibility allows us to choose the most appropriate partner and diagnostic platform for each program under development and affords us the best chance of clinical success. We have partnered with experienced diagnostic companies that we believe have the ability and commitment to gain the required regulatory approvals and support global commercialization for these companion diagnostics.

*Manage and control global development activities and regulatory operations.* We believe our development and regulatory experience enables us to devise time- and cost-efficient strategies to develop and obtain regulatory approvals for new drugs, and to identify the regulatory pathway that allows us to get a product candidate to market as quickly as possible. Unlike many early stage biotechnology and pharmaceutical companies that have development or regulatory capabilities only in the country in which they are located, we have assembled an experienced team with a successful track record at managing global clinical development activities, and with multinational expertise in obtaining regulatory approvals for new drugs and in maintaining compliance with the regulations governing the sales, marketing and distribution of pharmaceutical products. We believe we can manage a global development program without local partners. We manage critical functions in house, including clinical development, biostatistics, pharmaceutical development, molecular diagnostics and clinical and regulatory operations, and we outsource certain activities where economically and strategically appropriate.

*Seek and maintain global commercial rights.* We believe that it is very important to maintain global rights to our product candidates, and that we can build our own commercial organizations in major pharmaceutical markets as well as a network of third-party distributors in smaller markets. We believe there are a relatively small number of oncologists practicing in each of the major pharmaceutical markets and an even smaller number of oncology opinion leaders who significantly influence the types of drugs prescribed in cancer therapy. We therefore believe that we can effectively reach the oncology markets with a relatively small sales and marketing organization focused on these physicians and oncology opinion leaders. As a result, we plan to maintain commercial autonomy and will not require a pharmaceutical partner for commercialization activities. By managing the global sales and marketing of our products on our own, we believe we can provide uniform marketing programs and consistent product positioning, pricing and labeling. Finally, by controlling commercial activities ourselves in major markets, we will retain the vast majority of the revenues from our product candidates.

#### **Product Candidates**

Consistent with our strategy, each of our initial three in-licensed product candidates, for which we hold global marketing rights, is being developed for selected patient subsets. The following table summarizes the status of our product pipeline:

#### CO-101 - a Lipid-Conjugated form of the Anti-Cancer Drug Gemcitabine

#### Overview

CO-101 is a new chemical entity that we in-licensed in November 2009 from Clavis Pharma ASA, a publicly traded biotechnology company based in Oslo, Norway. CO-101 is a novel, patented, lipid-conjugated form of the anti-cancer drug gencitabine. CO-101 is designed to treat patients with pancreatic cancer whose tumors express low amounts of a membrane transporter protein known as hENT1 and thus are expected to be resistant to standard gemcitabine-based therapy. CO-101 is currently in an international, randomized, controlled 360-patient Phase II clinical study comparing CO-101 to gemcitabine for the first-line treatment of metastatic pancreatic cancer. We expect to complete enrollment for this trial in the first quarter of 2012 and report top line results as to overall survival in the prespecified hENT1-low patient subset in the fourth quarter of 2012. While we have not sought a Special Protocol Assessment, or SPA, from the U.S. Food and Drug Administration, or FDA, for this trial, for the reasons set forth under *Regulatory Strategy* below, we believe that if its results are positive, this study will serve as a pivotal trial for CO-101 and enable us to file a New Drug Application, or NDA, with the FDA and a Marketing Approval Application, or MAA, with the European Medicines Agency, or EMA, in mid-2013. We are also conducting clinical trials of CO-101 for the second-line treatment of pancreatic cancer.

#### Pancreatic Cancer Market Overview

According to the American Cancer Society, over 43,000 new cases of pancreatic cancer occurred in the United States in 2010. In addition, according to Pancreatic Cancer Action Network, over 60,000 new cases are reported each year in the European Union and according to a study published in *Cancer Chemotherapy and Pharmacology* in 2004, over 20,000 new cases are reported annually in Japan. According to *Medical, Surgical & Radiation Oncology* (9th Edition, 2005), 85% of patients with pancreatic cancer present with unresectable, locally advanced, also referred to as Stage III, or metastatic, also referred to as Stage IV, disease. Even after

surgical resection and adjuvant chemotherapy or radiotherapy for apparently localized disease, these patients often experience early recurrence and rapid disease progression. As a result, according to the American Cancer Society, pancreatic cancer has one of the highest mortality rates among all cancers, with estimates for one- and five-year overall survival of 24% and 5%, respectively, in the United States.

The standard first-line treatment for patients with unresectable or metastatic disease is gemcitabine, given as monotherapy. Gemcitabine was originally introduced in the United States in 1996 under the brand name Gemzar<sup>®</sup>, and is now widely available as a generic drug. Gemcitabine is part of a class of drugs known as nucleoside analogues and can be used alone or in combination with other chemotherapy agents in the treatment of various malignancies, including pancreatic, NSCLC, breast, and ovarian cancers. Current guidelines of the National Comprehensive Cancer Network list gemcitabine monotherapy as an appropriate therapy for all pancreatic cancer patients eligible for cytotoxic therapy. Although the drug Tarceva<sup>®</sup> (erlotinib) is approved in combination with gemcitabine in patients with metastatic pancreatic cancer, this combination involves increased toxicity and has been shown to confer a median survival benefit of only approximately two weeks when compared to gemcitabine monotherapy. Alternative therapies for the treatment of pancreatic cancer include: FOLFIRINOX (combination of 5-fluorouracil (5-FU), leucovorin, irinotecan and oxaliplatin), gemcitabine combination therapy or capecitabine. Some patients initially respond to cytotoxic chemotherapy, but all eventually progress, and many fail to derive even an initial benefit from such treatment. There are no approved second-line treatments for pancreatic cancer, and in practice, for those patients that do receive second-line treatment, it is typically a treatment that was not utilized in the first-line setting. Based upon a survey which we commissioned in 2009 of approximately 25 physicians in the United States and Europe, we believe that the consequence of this treatment paradigm is that approximately 80% of all pancreatic cancer patients will receive gemcitabine during their disease course.

#### Targeting Gemcitabine Non-Responders: the hENT1 Hypothesis

For gemcitabine to kill cancer cells, it must enter them through specific membrane transporters, or channels, on the surface of the cancer cells. The human equilibrative nucleoside transporter 1, or hENT1, is believed to be the dominant transporter for gemcitabine. As a consequence, it is believed that tumor cells with low hENT1 expression will be resistant to gemcitabine therapy. This was first supported by clinical data in 2004. Specifically, *Clinical Cancer Research* reported the study results of 21 metastatic pancreatic cancer patients treated with gemcitabine. This study demonstrated that survival after gemcitabine therapy was positively correlated with hENT1 expression. As shown in the figure below, also referred to as a Kaplan-Meier estimate of survival, patients with a high level of hENT1 expression had a median overall survival of 13 months compared to four months for those patients with a low level of hENT1 expression when treated with gemcitabine.

Kaplan-Meier estimate of survival in gemcitabine-treated hENT1-high and hENT1-low pancreatic cancer patients.

\*hENT1-high = all tumor cells had detectable hENT1 protein by IHC

Source: Spratlin et al. Clin Can Res(2004)

This correlation of overall survival and hENT1 expression in pancreatic cancer patients treated with gemcitabine has been further demonstrated in multiple studies. For example, in 2009, a study published in Gastroenterology reported the results of a retrospective analysis of randomized samples collected from 198 pancreatic cancer patients between 1998 and 2002 comparing treatment with gemcitabine versus 5-FU. Patients in this study treated with gemcitabine who had a high level of hENT1 expression had a median overall survival of 21 months, compared to a median overall survival of 16 months for gemcitabine-treated patients with low hENT1 expression and 12 months for gemcitabine-treated patients with no hENT1 expression. Importantly, the results of this study also demonstrated that there was no correlation between overall survival and hENT1 expression for patients treated with 5-FU. This suggests that the correlation between survival and hENT1 expression is specific to pancreatic cancer patients treated with gemcitabine and not a prognostic marker. The Kaplan-Meier curves for this study are shown in the figure below.

Source: Farrell et al. Gastroenterology 2009:136:187-195

A positive, and statistically significant association is seen between tumor hENT1 expression and overall survival for recipients of gencitabine (left, p=0.002 for high vs. no hENT1, p=0.03 for low vs. no hENT1), but not for recipients of 5-FU (right, p=not significant). hENT1 expression was characterized as no, low or high. High hENT1 was defined by strong reactivity in greater than 50% of neoplastic cells on IHC, whereas no hENT1 was defined as no staining in greater than 50% of neoplastic cells. A score of low hENT1 staining was given to all cases in between.

The table below summarizes a number of studies conducted over the past several years that have repeatedly confirmed the correlation between survival outcomes for pancreatic cancer patients treated with gemcitabine and their hENT1 expression and repeatedly found distributions of pancreatic cancer patients with low expressions of hENT1 ranging from 40% to 60% of all pancreatic cancer patients.

In the Spratlin study, samples defined as hENT1-high had uniformly detectable hENT1 and samples defined as hENT1-low had 10-100% of tumor cells without detectable hENT1. In the Giovanetti study, a median hENT1 expression was established based on gene expression levels, and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression under the median were defined as hENT1-low. In the Farrell study, hENT1-high was defined by strong reactivity in greater than 50% of neoplastic cells on IHC, no hENT1 was defined as no staining in greater than 50% of neoplastic cells and hENT1-low was defined as all cases in between. In the Morinaga study, a median hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression under the median were defined as hENT1-low. In the Marechal study, a median hENT1 expression was established based on an assessment of intensity of sample staining, and samples with hENT1 expression over the median were defined as hENT1-high and samples with hENT1 expression under the median were defined as hENT1-low. In the Marechal study, a median hENT1 expression was established based on an assessment of intensity of sample staining, and samples with hENT1 expression over the median were defined as hENT1 expression under the median were defined as hENT1-low.

These studies were conducted independently of each other with different personnel, methodologies, criteria and protocols, including different definitions of hENT1 expression. Indeed, as is described below, one of the principal concepts underlying the LEAP clinical trial was our decision to arrive at our own definition of a low level of hENT1 expression, based upon our retrospective analysis of existing tissue samples from other trials and using the companion diagnostic we have developed with Ventana, and to then apply this definition prospectively in our LEAP clinical trial.

#### CO-101: Addressing Patients with Low Levels of hENTI

CO-101, also known as gemcitabine-5 -elaidate, is a new chemical entity that is derived by adding a fatty acid to the gemcitabine chemical structure, creating a lipid-conjugate. In contrast to the conventional form of gemcitabine, the lipid-conjugate enables CO-101 to enter cancer cells without the need for a specific membrane transporter protein on the surface of the cancer cell known as hENT1, as evidenced by the accumulation of active drug metabolite inside cells with low hENT1 that are treated with CO-101. CO-101 is thus designed to address the unmet need of patients with pancreatic cancer whose tumors express low amounts of hENT1 and are thus expected to be resistant to standard gemcitabine-based therapy. Based on the published results of multiple studies assessing the correlation of hENT1 expression to survival outcomes in pancreatic cancer patients treated with gemcitabine, as well as the prospective hENT1 classification of the first 250 patients enrolled in our ongoing

pivotal study of CO-101, we believe that approximately one-half to two-thirds of pancreatic cancer patients express low levels of hENT1. CO-101 has a broad spectrum of anti-proliferative activity *in vitro* and antitumor activity in a wide range of mouse and human tumor models *in vivo*. These tumor models are similar to those used for evaluating the *in vivo* activity of generitabine.

#### CO-101 Clinical Development

LEAP Study: Pivotal Trial of CO-101 in First-Line Pancreatic Cancer. In mid-2010, we commenced a pivotal study of CO-101, which we refer to as LEAP (Low hENT1 and Adenocarcinoma of the Pancreas). We plan to enroll a total of 360 patients across approximately 90 sites in North and South America, Europe and Australia. This open-label, randomized, controlled, multicenter study compares CO-101 to gencitabine as a first-line treatment in patients with metastatic pancreatic cancer. The primary objective of this study is to compare the overall survival of patients with metastatic pancreatic cancer and low hENT1 expression that are treated with CO-101 versus gemcitabine. Secondary endpoints include overall survival in all patients and in patients with high hENT1 expression, disease response rate, and drug tolerability and toxicity. Patients enrolled in the trial are being randomized on a one-to-one basis to receive either CO-101 or gencitabine. Patients receiving CO-101 are dosed at 1250mg/m<sup>2</sup> delivered through intravenous infusion once per week for three out of every four weeks. Gemcitabine patients are dosed at its standard prescribing regimen of 1000mg/m<sup>2</sup> delivered through intravenous infusion once per week for seven weeks, followed by one week of rest and then once per week for three out of every four weeks. We expect enrollment to be completed in the first quarter of 2012. The study was designed to show that gencitabine will have no better effect than best supportive care in hENT1-low patients, and that CO-101 will perform in hENT1-low patients similarly to the way gencitabine does in hENT1-high patients. Since, according to its FDA approved prescribing information, gemcitabine has a median overall survival of 5.7 months in metastatic pancreatic cancer patients, we have designed the study to show a median survival of approximately 4 months for generitabine in hENT1-low patients, which is consistent with best supportive care, versus 7.7 months for CO-101 in hENT1-low patients. While multiple publications support this hypothesis, to our knowledge the LEAP trial is the first prospective test of this hypothesis. We expect to report top line overall survival data from this trial in the fourth quarter of 2012. While we have not sought an SPA from the FDA for this trial, we believe that if its results are positive, this study will serve as a pivotal trial for CO-101 and enable us to file a NDA with the FDA and a MAA with the EMA in mid-2013.

To test the primary hypothesis that CO-101 is more effective than gemcitabine in pancreatic cancer patients with low levels of hENT1, we needed to develop an *in vitro* diagnostic, or IVD, product to reliably measure tissue hENT1 expression and enable prospective classification of patients as either hENT1-high or hENT1-low. We are collaborating with Ventana Medical Systems, Inc., part of the Roche Group, or Ventana, to develop the IVD using an IHC based approach. Key characteristics of this companion diagnostic are:

*Ability to analyze accessible tissue:* Patients with metastatic pancreatic cancer typically have liver metastases which can be biopsied quite easily and analyzed by IHC;

Simple assay/local analysis: IHC is a standard laboratory technique that is widely utilized and does not require samples to be sent off-site for analysis;

*Based on existing technology:* Ventana utilized established IHC diagnostic techniques to develop a validated hENT1 IHC assay using knowledge already gained from IHC hENT1 assays developed by academics;

*Regulatory precedent:* IHC IVDs have previously been approved by the FDA as companion diagnostics for cancer therapeutics, including Ventana s PATHWAY HER-2/neu assay intended to assist in the assessment of breast cancer patients for whom Herceptin treatment is considered; and

*Reimbursement:* IHC diagnostic kits are widely reimbursed by health care payors. In the United States, the marketing approval of this type of IVD requires the submission to and approval by the FDA of a Pre-Market Approval Application, or PMA, submission. We and Ventana will generate data on the IVD, including the necessary analytical and clinical validation studies, with the goal of being in a position to submit a PMA and, assuming a successful outcome for the LEAP trial, seek approval of the PMA for the IHC

hENT1 assay substantially simultaneously with the approval of an NDA for CO-101. In the European Union, the EMA is not currently involved in approving companion diagnostics and, instead, Ventana will apply for a CE mark designation in the European Union that will allow it to sell the diagnostic in the European Union.

Study CO-101-002: Establishing a hENT1 Cut-Off. Having developed the IHC assay with Ventana, we also needed to establish a cut-off for determining whether an individual patient is hENT1-high or hENT1-low. This cut-off must be robust such that the assay will provide consistent results when run and interpreted in different geographies by different labs and pathologists. Our goal is for a patient who presents with metastatic pancreatic cancer to undergo a metastasis biopsy and subsequent IHC assay that will be interpreted by a local pathologist, to determine whether a patient is hENT1-low and thus a good candidate for CO-101 therapy. In order to prospectively establish the hENT1-high/low cut-off, we commenced study CO-101-002. Pursuant to the protocol for this study, we collected tumor tissue samples from previously completed clinical studies of gemcitabine for the treatment of pancreatic cancer. Using the Ventana IHC assay, we assessed the hENT1 levels in each of the tissue samples and correlated the hENT1 expression with clinical outcomes. We then defined a cut-off level of hENT1 expression that is optimally associated with overall survival outcomes following gemcitabine therapy. According to the hypothesis, patients with tumor hENT1 expression levels below the cut-off will derive minimal benefit from gencitabine and will constitute the prospectively defined hENT1-low population in the LEAP trial. Collection and analysis of the tissue samples is complete and we established the hENT1 cut-off in October 2011. Importantly, patients from LEAP will thus be prospectively classified as hENT1-high or -low before data from the ongoing LEAP trial are known. The primary efficacy analysis for LEAP is in hENT1-low patients, and their prospective classification prior to analyzing survival outcomes is important to ensure study integrity. Based on the published results of multiple studies assessing the correlation of hENT1 expression to survival outcomes in pancreatic cancer patients treated with gemcitabine, which found similar distributions of pancreatic cancer patients with low expressions of hENT1, as well as the prospective hENT1 classification of the first 250 patients enrolled in our ongoing pivotal study of CO-101, we believe that approximately one-half to two-thirds of pancreatic cancer patients are hENT1-low.

As part of study CO-101-002, we analyzed tissue samples from a large comparative study comparing adjuvant gemcitabine to adjuvant 5-FU in pancreatic cancer. These patient samples were from the same study evaluated by Farrell, et al., and published in Gastroenterology in 2009. In this analysis, using the Ventana hENT1 IHC assay, we were able to establish a rigorous algorithm of two qualitative measurements (intensity of staining and area stained) to stratify patients into hENT1-low and hENT1-high. Using this algorithm, the hENT1-high gemcitabine treated patient population had a median survival of approximately 24 months versus approximately 15 months for the hENT1-low gemcitabine treated population. We also evaluated 5-FU survival outcomes based on hENT1 status and detected no difference in survival related to hENT1. Using this algorithm, approximately two-thirds of patients in both the gemcitabine and 5-FU arms were hENT1-low.

The gemcitabine analysis had a p-value of 0.018 and a hazard ratio of 0.58. In clinical trials, the p-value is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming-as true-the hypothesis that a potential treatment has no effect. A p-value of 0.018 is considered statistically significant. The hazard ratio is a statistical measure of the relative risk of death for patients in different groups. A hazard ratio of 0.58 means that a hENT1-high patient treated with gemcitabine has a 42% lower chance of dying than a hENT1-low patient. The Kaplan-Meier curves for this study are shown in the figure below.

Kaplan-Meier Curves for 38 hENT1-high and 64 hENT1-low Pancreatic Cancer Patients After Receiving

**Adjuvant Gemcitabine** 

### Kaplan-Meier Curves for 35 hENT1-high and 64 hENT1-low Pancreatic Cancer Patients After Receiving

Adjuvant 5-FU

Based on this analysis, as well as that analysis of other tissue samples, we selected this algorithm as the basis for setting the hENT1 cut-off for the LEAP study. In addition, a 16-patient study of matched metastatic and primary tumor samples from the same patients demonstrated 100% correlation of hENT1 classification in the

metastatic samples as in the primary samples using our selected algorithm. The hENT1-low population in this study was also approximately 66%. In January 2012, this percentage was prospectively confirmed when we announced that the Independent Data Monitoring Committee for the LEAP trial informed us that 65 percent of the first 250 patients enrolled in LEAP had been classified as hENT1-low. We remain blinded as to the hENT1 status of individual patients within the LEAP trial.

The following chart shows the LEAP study and companion diagnostic validation study design:

*Study CO-101-003: a Phase II Study in Second-Line Pancreatic Cancer.* We are also conducting a Phase II study to evaluate the efficacy of CO-101 as a second-line treatment for pancreatic cancer patients whose disease has progressed after first-line therapy and whose tumor tissue samples demonstrate a complete absence of hENT1 using an IHC diagnostic test. Study CO-101-003 is being conducted at up to 20 investigational centers in the United States. The first patient was enrolled in February 2011 and enrollment is expected to be completed in mid-2013.

Study CO-101-003 uses an open-label, single-arm, two-stage, Phase II design to evaluate CO-101 as second-line therapy in patients with measurable metastatic pancreatic cancer whose best response to gemcitabine as a first-line therapy, measured radiographically after treatment, was progressive disease; that is, patients who received no demonstrable benefit from gemcitabine therapy. Patients receive the same dosing regimen of CO-101 as in the LEAP trial. The primary endpoint for this study is disease control, which is defined as a complete response, partial response, or stable disease using response evaluation criteria in solid tumors, or RECIST, a set of published rules that define when a cancer patient responds, stabilizes, or progresses during treatments. After the first 18 patients have been assessed, the remaining 17 patients will be treated only if three or more patients in the initial 18-patient cohort have exhibited disease control. The study will close when a six-month follow-up has been completed for all patients. If meaningful numbers of patients experience extended stable disease or even partial responses on CO-101, we will view the study as successful in demonstrating CO-101 s activity in second-line pancreatic cancer.

*Other Potential Indications for CO-101: the hENT1 Hypothesis Applied to other Cancers.* In addition to its use in pancreatic cancer, gencitabine is approved, generally in combination with platinum chemotherapies such as cisplatin, for use in NSCLC, ovarian and breast cancer, and we believe the hENT1 hypothesis could be applicable in each of these types of cancers. A small amount of preliminary data suggests the efficacy of gencitabine in combination with cisplatin in NSCLC may relate to hENT1 expression. Consequently, we are considering clinical studies of CO-101 in other tumor types, initially NSCLC, and will seek to confirm a hENT1

cut-off using the Ventana IHC assay in these tumors. Testing of the IHC assay will be undertaken using lung tissue samples obtained from previously completed studies of gemcitabine in NSCLC, using a retrospective tissue collection protocol. The primary objective of the study will be to correlate the hENT1 expression with clinical outcomes in order to confirm the cut-off level of hENT1 that is optimally associated with treatment outcomes and survival in NSCLC patients treated with gemcitabine in combination with cisplatin. We plan to initiate a Phase I study of CO-101 in combination with cisplatin in advanced solid tumors in the third quarter of 2012.

#### Early Clinical Development of CO-101

During its initial development by Clavis Pharma, CO-101, identified by Clavis Pharma as CP-4126, was the subject of two clinical trials:

*Study CP 4126-201: an Abbreviated Phase II Study Conducted by Clavis Pharma*. In June 2009, Clavis Pharma initiated a Phase II, open-label, multicenter European study evaluating CO-101 in patients with advanced pancreatic cancer. This study started as a single-arm study and included patients with locally advanced as well as metastatic disease, who had no prior chemotherapy for advanced disease. The patients were treated with CO-101 1250 mg/m<sup>2</sup> once per week for three out of every four weeks. The primary endpoint was change in a specific tumor marker, CA 19-9, and secondary endpoints were overall survival and overall response rate according to RECIST. Tumor hENT1 status was analyzed using an academically available assay only after patients were enrolled and treatment had begun. The protocol was amended in July 2009 to replace the single-arm treatment with a randomized treatment allocation to either CO-101 or gencitabine after the first 10 patients had been enrolled in the study.

Upon obtaining the rights to CO-101, we and Clavis made the decision to stop this trial and begin the LEAP study, which, for the reasons set forth in detail below, we believe offers the potential for an accelerated pathway to approval. Due to the small number of patients in each treatment group of the Clavis Pharma trial, meaningful treatment comparisons between CO-101 and gencitabine with respect to the primary endpoint of CA 19-9 response and overall survival could not be made. Twenty-one patients completed this study. Analysis of the data from this study was completed in December 2011 and shows the following: two patients in the CO-101 treatment group (N=15) had a partial response with a median duration of response of 115 days, driving an overall response rate of 13.3%, whereas no patients in the gencitabine group (N=6) had a response. Five additional CO-101 patients achieved stable disease, some for a prolonged period, including one patient for 8 months. When analyzed in the subset of patients with metastatic disease and performance status of 0-1, a set of patient criteria similar to the ongoing LEAP study, the median overall survival time for CO-101 recipients was 7.5 months (N=14) versus 6.1 months for patients receiving gencitabine (N=4). In this same subset, when analyzed by hENT1 status, the median survival time for hENT1-low patients was 9.3 months for CO-101 (N=3) and 3.6 months for gencitabine (N=1). The activity of CO-101 appeared to be independent of hENT1 status, whereas the activity of gencitabine appeared to be correlated with hENT1 expression.

All patients in the study experienced one or more treatment-emergent adverse events, or TEAEs. More than half of the CO-101 patients experienced nausea and/or vomiting, which were the most frequent TEAEs reported and occurred at higher frequencies than gencitabine. There were 29 Grade 3 and five Grade 4 events in the CO-101 arm, the most significant level of TEAEs. The most frequent Grade 3 or 4 TEAE in both CO-101 patients and gencitabine patients was neutropenia, a reduction in white blood cells. Neutropenia was also one of the events that led most often to dose reduction of CO-101, with the other being thrombocytopenia, or reduction in blood platelet cells, which was rarely assessed as Grade 3 or 4.

*Phase I Trial: First in Man Study of CP-4126.* The first-in-human study conducted by Clavis Pharma aimed to determine the maximum tolerated dose and the recommended dose for Phase II studies of CO-101. All 43 patients in the study finished treatment by January 2010. The most frequently reported toxicities were mild (Grade 1-2) nausea, vomiting, anorexia and fatigue. Myelosuppression, the impairment of bone marrow function, was also reported. Pharmacokinetic data suggested that CO-101 was present in plasma in a dose-proportional manner after IV administration. Gemcitabine can also be measured in plasma after CO-101 administration, and at the 1250mg/m<sup>2</sup> dose of CO-101, gemcitabine exposure exceeds that seen with conventional gemcitabine given at

the standard dose of  $1000 \text{mg/m}^2$ . Based on the dose limiting toxicities, the recommended Phase II dose of CO-101 was determined to be  $1250 \text{ mg/m}^2$ , given as an IV infusion once per week for three out of every four weeks.

#### Regulatory Strategy

*CO-101 LEAP Trial Design and Requirements for Regulatory Approval.* In most cases, the FDA requires at least two adequate and well-controlled clinical trials to support marketing approval. In certain cases, evidence from a single clinical trial may be sufficient, and it is often the case in oncology where there is an unmet medical need. A single trial may be sufficient in cases where a multicenter study provides highly reliable and statistically strong evidence of an important clinical benefit, such as an effect on survival, and in which confirmation of the result in a second trial would be practically or ethically impossible.

We believe that if CO-101 meets the protocol specified endpoints of the LEAP study, this single Phase II clinical study should be sufficient for submission for marketing approval in the United States and the European Union. We have not sought an SPA for the LEAP study because we believe that the overall survival endpoint and other aspects of the study design are consistent with recent clinical guidelines for pancreatic cancer studies, as published in the *Journal of Clinical Oncology* in 2009. Nevertheless, in September 2010, in response to a briefing document and questions submitted to the FDA, we had a joint meeting with the oncology therapeutic and diagnostic device divisions of the FDA to review the clinical development plan for CO-101 and the development plan for its companion diagnostic. Based on this meeting and our adherence to established guidelines, we believe that this single clinical study could be used for registration if the results are positive. The adequacy of the safety and efficacy database will be a review issue, as with any submission. Similarly, following Protocol Assistance in the European Union, the Committee for Medicinal Products for Human Use, part of the EMA, indicated that a submission based on this single clinical study could be acceptable provided a meaningful survival benefit is demonstrated.

Applications for FDA approval to market a new drug should be based on adequate and well-controlled studies in order to distinguish the effect of the drug from other influences, such as a spontaneous change in the disease, or a biased observation. The reports on adequate and well-controlled studies provide the primary basis for determining whether there is substantial evidence to support the claims for effectiveness of a new drug. The key characteristics considered in determining whether a study is adequate and well-controlled are as follows:

(1) The protocol clearly defines objectives and methods of analysis.

(2) The study design provides a valid comparison with a control and quantitative assessment of drug effect.

(3) The method for selection of subjects assures that they have the disease being studied.

(4) The method of assigning patients to the treatment and control groups minimizes bias and is intended to assure the comparability of the groups.

(5) Adequate measures are taken to minimize bias on the part of the subjects, observers and analysts of the data.

(6) The methods of assessment of response are well-defined and reliable.

(7) The analysis of the results of the study is adequate to assess the effects of the drug.

We believe that the LEAP study protocol meets these requirements and that the study fulfills the criteria of an adequate and well-controlled study. The protocol clearly defines the objectives and patient population. The methods of analysis are subject to a detailed statistical analysis plan. The protocol includes an active treatment control, which is the standard of care, gemcitabine. Various types of control arms can be used, but in oncology an active control is most often used. The sample size for the study is predetermined and the study is powered to provide a quantitative assessment of drug effect and detect a difference between treatments. The selection of subjects follows best practice principles and incorporates the guidance provided in a recent consensus report for clinical trials in pancreatic cancer.

Patients are randomized to therapy with CO-101 or gemcitabine, stratified to ensure the comparability of the groups and precautions are taken to minimize potential bias. The primary efficacy variable is overall survival, which is an objective endpoint and the gold standard for measurement of efficacy for oncology clinical trials. Survival is considered the most reliable cancer endpoint and bias is not considered to be a factor in endpoint measurement.

CO-101 has an orphan drug designation in the United States and the European Union for the treatment of pancreatic cancer. If a product that has an orphan drug designation subsequently receives the first regulatory approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, meaning that the applicable regulatory authority may not approve any other applications to market the same drug for the same indication, except in certain very limited circumstances, for a period of seven years in the U.S. and ten years in the European Union. Orphan drug designation does not prevent competitors from developing or marketing different drugs for an indication. Orphan drug designation must be requested before submitting an NDA or MAA. After orphan drug designation is granted, the identity of the therapeutic agent and its potential orphan use are publicly disclosed. Orphan drug designation does not convey an advantage in, or shorten the duration of, the review and approval process for a drug by the applicable regulatory authority.

The regulations for accelerated approval for new drugs for serious or life threatening illnesses often referred to as subpart H, do not apply to the LEAP study. Although CO-101 is being developed for a serious and life threatening disease, this guidance applies to approvals based on a surrogate endpoint or clinical endpoint other than survival. Since the endpoint in the LEAP study is survival, the NDA would be subject to a regular approval procedure. CO-101 requires the concomitant availability of an *in vitro* diagnostic device to identify the relevant patient population. This diagnostic needs to be available in parallel with the drug product and therefore the development plan for CO-101 allows for the diagnostic to be developed and validated in a time frame that will allow for regulatory approval at the same time that CO-101 would be approved. We are working with Ventana to develop the data necessary for a PMA submission with the FDA. Assuming a successful outcome of our LEAP study, we expect that Ventana will submit a PMA for the hENT1 IHC assay in parallel with our submission of an NDA for CO-101 such that approval would be expected at the same time for both products.

#### CO-1686 - an Oral EGFR Mutant-Selective Inhibitor

#### Overview

CO-1686 is a new chemical entity we in-licensed pursuant to an agreement effective May 2010 from Avila Therapeutics, Inc., a privately held biotechnology company in Waltham, Massachusetts. It is a novel, orally available, small molecule covalent inhibitor of the cancer-causing mutant forms of EGFR for the treatment of NSCLC. Because CO-1686 targets both the initial activating EGFR mutations as well as the primary resistance mutation, T790M, it has the potential to treat both first- and second-line NSCLC patients with EGFR mutations. According to a study published in *Clinical Cancer Research* in 2008, such initiating activating mutations occur in approximately 10% to 15% of NSCLC cases in Caucasian patients and approximately 30% to 35% of NSCLC cases in East Asian patients. Based on multiple published reports, including a study in *Nature Reviews Cancer* in 2007, following treatment with Tarceva<sup>®</sup> (erlotinib) or Iressa<sup>®</sup> (gefitinib), approximately half of these patients develop the T790M mutation. In January 2012, our IND to begin clinical investigation of CO-1686 became effective. We expect to commence initial Phase I/II studies of CO-1686 in the U.S. and Europe in the second quarter of 2012 and in Asia during the third quarter of 2012.

#### Market Overview: Resistance to EGFR Tyrosine Kinase Inhibitors, or TKIs, Represents an Unmet Medical Need

*Lung Cancer and EGFR TKIs.* According to the American Cancer Society, there were an estimated 223,000 new cases of lung cancer in the United States in 2010, making it the most common type of cancer. In addition, according to Cancer Research UK, there are an estimated 288,000 new cases of lung cancer in the European Union each year and, according to a white paper entitled Cancer White Paper Incidence/Death/Prognosis 2004 (Shinoharashinsha Inc.), there are an estimated 85,000 new cases in Japan each year. Lung cancer typically presents relatively late in its clinical course, when locally directed therapy (surgery and radiation) is not curative. The treatment of locally advanced and metastatic lung cancer is a significant unmet medical need.

Lung cancer is typically divided into two groups based upon the histologic appearance of the tumor cells small-cell and non small-cell lung cancer, each of which is treated with distinct chemotherapeutic approaches. According to the American Cancer Society, NSCLC accounts for approximately 85% of lung cancer cases, and can be subdivided into further histologic subsets adenocarcinoma, bronchioalveolar, squamous cell, anaplastic and large cell being the most common although until recently treatment was similar for all of these subsets. The standard of care for treatment of advanced or metastatic NSCLC has historically been a cytotoxic chemotherapy doublet of platinum plus paclitaxel. In the last few years, specifically for non-squamous cell, a subset of NSCLC patients, Avastin<sup>®</sup> (bevacizumab) has been shown to prolong survival when added to the doublet, and Alimta<sup>®</sup> (pemetrexed) has replaced paclitaxel on the basis of improved tolerability and ease of administration. Despite these additions, patients with locally advanced or metastatic NSCLC have five-year survival rates of just 24% and 4%, respectively, according to the Survival Epidemiology and End Results program of the National Cancer Institute.

Approximately 10 years ago, orally active small molecule inhibitors of the tyrosine kinase activity of EGFR were introduced into the treatment of lung cancer. The growth-promoting EGFR was known to be frequently expressed on lung cancer cells, often at high levels, and preclinical work had suggested that EGFR TKIs, such as gefitinib and erlotinib, could provide effective cancer therapy in certain patient subsets. Clinical trials were conducted in humans with NSCLC and the drugs were approved by the FDA in 2003 (Iressa<sup>®</sup> (gefitinib)) and 2004 (Tarceva<sup>®</sup> (erlotinib)) for patients who had failed to respond to conventional chemotherapy. It was noted in a study published in *Nature Reviews Cancer* in 2010 that a small subset of patients experienced profound tumor responses to TKI therapy.

In 2004, it was discovered that the subset of NSCLC patients who experienced dramatic clinical responses to the EGFR TKIs had activating mutations in the EGFR gene in their lung cancer tissue, known as an L858R mutation, rendering the EGFR protein hyperactive. It became clear that the EGFR TKIs potently inhibited the mutant EGFR proteins, switching off their activity and causing dramatic tumor shrinkage in patients. This is an example of oncogene addiction , whereby a single gene mutation (EGFR in this case) is absolutely necessary for the proliferation and/or survival of a tumor cell. A corollary of this situation is that inhibition of that single gene product (in this case with TKIs) is therapeutic and drives tumor shrinkage. It was subsequently shown in a study conducted by Jeffrey A. Engelman, et al. published in *Clinical Cancer Research* in 2008 that EGFR mutations generate tumors with adenocarcinoma histology, and are found in approximately 10% to 15% of Caucasian NSCLC patients and 30 to 35% of East Asian NSCLC patients.

The original approvals of the TKIs made no reference to patient selection, but these new data have suggested that the majority of their therapeutic benefit can be attributed to the subset of patients with activating EGFR mutations. Recent clinical trials have shown that for patients with activating EGFR mutations, treatment with TKIs is superior to standard cytotoxic chemotherapy as it has resulted in superior progression free survival and improved quality of life. Consequently, many cancer therapy guidelines (National Comprehensive Cancer Network and American Society for Clinical Oncology) suggest that patients with adenocarcinoma histology NSCLC should undergo genetic testing for EGFR mutations and TKIs should be used in those patients with identified activating mutations. Molecular testing of NSCLC tissues for EGFR mutations has become standard across many countries, although no specific diagnostic test is included in the regulatory labels for any of the approved TKIs to date.

*Resistance to EGFR TKIs.* Despite the success of TKIs in patients with mutant EGFR-related NSCLC, most patients disease will progress, typically after approximately one year of therapy. Molecular studies have shown that approximately 50% of the resistant tumors carry a second, acquired resistance mutation in the EGFR gene. This resistance mutation is a specific change in the type of amino acid located at position 790 in the EGFR protein, called a T790M mutation. As a consequence of this switch the three-dimensional structure of the TKI binding site changes and thus the EGFR becomes resistant to TKI therapy. This T790M mutation is also called the gatekeeper mutation because of its strategically important position in the EGFR protein.

An early approach to therapy for this important resistance mutation was to develop covalent inhibitors, drugs that bind irreversibly through a covalent bond to their receptor target, and permanently inactivate it. There is a specific location on the EGFR protein, a cysteine residue, that is close to the protein s active site, and is

where most covalent drugs bind to in order to achieve their inhibitory effect. We are aware of two product candidates currently in clinical development that bind to this cysteine residue in EGFR, which are referred to as second generation TKIs. Both drugs have been tested in patients with the T790M mutation in their EGFR, but no responses have been reported to date. We believe the likely explanation for this effect is that these drugs are extremely potent inhibitors of the normal form of the EGFR, and cause very substantial toxicity in the skin (rash) and intestine (diarrhea) which limits dosing significantly. Patients appear to be unable to tolerate the dose of drug needed to inhibit the T790M mutant EGFR in a lung tumor. Consequently, at present, patients who develop TKI resistance receive standard cytotoxic chemotherapy that carries toxicity and only modest palliative efficacy, and all patients will ultimately succumb to their disease. Thus, patients with mutant EGFR-related NSCLC who also carry the T790M mutation represent a defined subset of patients with a clear unmet medical need.

#### **Opportunity for Clovis**

We partnered with Avila to discover and develop an orally active, small molecule covalent inhibitor of the mutant forms of EGFR that does not bind to unmutated or normal EGFR. We identified CO-1686 as a potential product candidate because it has three important potential advantages:

potential to effectively treat patients with T790M mutant EGFR NSCLC a large and growing group of patients, which have been identified with greater frequency due to recently approved guidelines, who today have no effective therapy;

potential to effectively treat patients with initial activating mutations in the EGFR who receive first-generation TKIs, but develop resistance due to the acquired T790M mutation; CO-1686 would be expected to prevent resistance through this mechanism and may thus cause responses of greater duration than seen with first generation TKIs and extend progression-free survival; and

it would not be expected to inhibit normal EGFR in skin or intestine, and thus would be less likely to cause skin rash and diarrhea, which are dose limiting with all other EGFR inhibitors. Design of CO-1686 a Targeted Covalent Drug

Most human diseases are rooted in the improper activity of certain proteins. Traditional small molecule drugs, while able to inhibit disease-causing proteins, are generally only able to form transient binding interactions with the disease targets, and thus considered reversible. A covalent drug, however, forms a strong and durable bond with its protein target, known as a covalent bond. A targeted covalent drug is designed to form its covalent bond in a highly directed and controlled manner with a specific site on the disease target. This directed bond formation is key to achieving a distinct selectivity profile that is difficult to achieve with traditional reversible small molecules.

Covalent drugs have been developed by the pharmaceutical industry for decades, with several successfully commercialized, including Nexium<sup>®</sup>, Plavix<sup>®</sup> and penicillins. However, these drugs were not intentionally designed to be covalent drugs. Avila has developed a proprietary platform called Avilomics<sup>tm</sup> to purposefully and systematically design and develop targeted covalent inhibitors. CO-1686 was designed using this platform.

There are a number of drugs both on the market and being developed that inhibit various kinases, including EGFR. Because kinases are structurally similar to each other, it is difficult to design small molecules that selectively inhibit a single kinase that do not also inhibit other kinases to some degree. Most kinase inhibitors are only modestly selective and inhibit a variety of kinases; these are typically referred to as multi-kinase inhibitors.

However, because of the design of its bond-forming capability, a targeted covalent drug is potent against the disease target of interest, including EGFR, and due to its selectiveness, it is not potent against other targets, even related targets. This is important to avoid undesired off-target side effects which can occur with reversible small molecules, such as multi-kinase inhibitors which are not highly selective.

A targeted covalent approach was employed by Avila in order to design a drug that could potently inhibit the mutant forms of EGFR, while sparing normal EGFR.

Avila designed CO-1686 by identifying a site on the EGFR protein where a covalent bond could be formed and used its proprietary drug design techniques to model chemical structures that could selectively form a bond with this site. These molecules were then synthesized and tested in assays to verify their ability to form targeted covalent bonds and to potently inhibit the mutant forms of EGFR and also to demonstrate that covalent bonds were not formed indiscriminately with other targets.

#### Preclinical Development

CO-1686 has demonstrated up to 200-fold greater binding selectivity for EGFR activating mutations and the T790M resistance mutation relative to the normal receptor when evaluated *in vitro*. Binding to normal EGFR can cause significant side effects, such as rash and diarrhea, which have been observed upon treatment with first and second-generation EGFR inhibitors. Furthermore, experiments have been conducted in which human tumor tissue or cells have been implanted in mice or rats. These experiments, known as xenograft models, have demonstrated that CO-1686 can lead to tumor regression in two relevant models of EGFR-driven lung cancer tumors. The H1975 model employs tumors that contain both the L858R activating EGFR mutation and the T790M resistance mutation. This model represents EGFR-driven NSCLC that is resistant to Tarceva<sup>®</sup> (erlotinib). Use of CO-1686 in this model demonstrates a dose response with drug activity at doses of 30mg/kg and greater activity at doses of 100mg/kg. In addition, because CO-1686 is designed to spare the normal EGFR receptor, the drug was well tolerated at all dose levels with no apparent body weight loss in the mice, which is a surrogate measure for intestinal toxicity.

#### Clinical Development

We have designed an accelerated clinical development program for CO-1686, and if successful, have a goal of filing an NDA for an initial indication within approximately four years of filing our IND. We intend to pursue the development of CO-1686 as both a second-line treatment for EGFR-mutated NSCLC patients who become resistant to TKIs due to the emergence of the T790M mutation and, potentially, as a first-line treatment for EGFR-mutated NSCLC. In January 2012, our IND to begin clinical investigation of CO-1686 became effective. We expect to commence initial Phase I/II studies of CO-1686 in the U.S. and Europe in the second quarter of 2012 and in Asia during the third quarter of 2012. Data from these studies will be used to determine the tolerability and pharmacokinetics of CO-1686, as well as provide evidence of efficacy in selected NSCLC patients with the T790M mutation. We anticipate receiving preliminary data from these studies in the second half of 2013. Once we complete the dose ranging portion of the studies, we plan to enroll an expanded cohort of NSCLC patients with the T790M mutation to test the efficacy of CO-1686 in the selected patient subset. If these studies are successful, they will be followed by a pivotal trial in T790M mutant positive NSCLC patients as a second-line treatment following TKI failure. At the same time, pending data from the Phase I/II studies, we may initiate a study comparing CO-1686 to Tarceva<sup>®</sup> (erlotinib) in confirmed EGFR-mutant NSCLC patients.

In addition to the drug development program, we have commenced a collaboration for the development of a companion diagnostic to enable identification of patients with the T790M mutation. We believe such a patient selection tool would enable a focused clinical development plan, thereby enhancing response rate and optimizing the benefit-to-risk ratio for CO-1686. To achieve this goal, we have partnered with Roche to develop a molecular diagnostic test for EGFR mutations including T790M. The eventual goal of the collaboration is to commence a pivotal trial of CO-1686 in patients selected for the T790M mutation using a PCR-based tool. The diagnostic test will be developed in parallel with the clinical development of CO-1686, with the goal of filing a PMA with the FDA in a time frame that would allow for regulatory approval of the companion diagnostic at substantially the same time that CO-1686 would be approved.

#### Rucaparib - a PARP Inhibitor

#### Overview

Rucaparib, also known as CO-338, is a new chemical entity we in-licensed from Pfizer Inc. in June 2011. Formerly known as PF- 01367338 and AG-014699, rucaparib is a novel, orally available, small molecule poly ADP-ribose polymerase, known as PARP, inhibitor that we intend to develop as both monotherapy and as a therapy in combination with chemotherapeutic agents for the treatment of patients with cancers predisposed to

PARP inhibitor sensitivity. Such cancers include serous ovarian cancer and selected patients with breast cancer. Pursuant to our license agreement with Pfizer, we possess global development and commercialization rights to rucaparib.

Rucaparib is currently in a Phase I clinical trial to determine the maximum tolerated dose of oral rucaparib that can be combined with IV platinum chemotherapy in the treatment of solid tumors. This program is supplemented by two ongoing investigator-initiated trials: a Phase I/II monotherapy study in hereditary, or germ-line, BRCA mutant breast and ovarian cancer and a Phase II randomized study of cisplatin, with or without rucaparib, in the adjuvant treatment of high-risk germ-line BRCA mutant and triple-negative breast cancer, a particularly difficult to treat form of breast cancer. In the fourth quarter of 2011, we initiated a Phase I/II monotherapy study of the oral formulation to determine an appropriate dose and schedule for long term administration and to then assess preliminary efficacy in breast and ovarian cancers, including in patients with germ-line mutations in BRCA genes.

#### DNA Repair and PARP

Cells in the human body are under constant attack from agents that can cause damage to DNA, including sunlight and other forms of radiation, as well as DNA-binding chemicals that can cause changes in the composition of DNA. Since DNA is the vehicle by which fundamental information is passed on when a cell divides, it is critical to the integrity of cells and human health that DNA damage can be repaired. Cells have evolved multiple mechanisms to enable such DNA repair, and these mechanisms are complementary to each other, each driving repair of specific types of DNA damage. If a cell s DNA damage repair system is overwhelmed, then the cell will undergo a form of suicide called apoptosis that appears to operate as a fail-safe system to limit the ability of a mutated cell to proliferate and potentially form a cancer. A fundamental principle of cancer therapy is to damage cells profoundly with radiation or DNA-binding drugs, for example alkylating agents or platinums, and induce apoptosis in those cells, thus killing the cancer cells. DNA repair mechanisms may reduce the activity of these anti-cancer therapies but, conversely, inhibition of DNA repair processes may enhance the effects of DNA-damaging anti-cancer therapy.

Poly-ADP ribose (PAR) is a part of the early warning system for DNA damage, and is synthesized by PARP enzymes on regions of damaged DNA, where it signals to the cell that DNA repair needs to take place. In the absence of PARP, as is seen in gene-knockout mice, cells are unusually sensitive to DNA damage when exposed to radiation or DNA-alkylating agents. There are two major forms of PARP that signal DNA damage in this way, PARP-1 and PARP-2. Knockout of either PARP gene leads to enhanced DNA damage in both instances although the mice may survive. However, the double knockout in which both the PARP-1 and PARP-2 genes are deleted is fatal to the mice at an embryonic stage. We believe that a drug that inhibits both PARP-1 and PARP-2 may have enhanced activity in preventing DNA repair.

As small molecule inhibitors of PARP became available, they were tested for their ability to inhibit DNA damage repair and potentiate the effects of radiation or cytotoxic chemotherapy, and were shown to be potent enhancers of these anti-cancer therapies in preclinical studies. Subsequently, PARP inhibitors have been explored in clinical trials as chemopotentiators, often in combination with drugs that add alkyl groups to DNA, such as temozolamide. Results to date have demonstrated anti-cancer activity, but have clearly demonstrated the need for patient selection in order to show compelling data.

#### Synthetic Lethality

A large advance in the field came when it was recognized that germ-line mutations in the BRCA genes (BRCA1 and BRCA2, two tumor suppressor genes) were associated both with high rates of breast and ovarian cancer in female mutant gene carriers, and also impaired the ability of cells to repair DNA damage. BRCA gene products were shown to be key mediators of DNA repair. The notion was advanced that treatment of BRCA-defective cells with PARP inhibitors could lead to a disabling blow against a tumor cell s ability to repair DNA and could induce apoptosis. This phenomenon was termed synthetic lethality and was demonstrated in a study conducted by H. Farmer, et al., published in *Nature* in 2005 to be true *in vitro*, and then, in a study conducted by Peter C. Fong, M.D. et al., published in the *New England Journal of Medicine* in 2009, it was shown to be valid

in humans, as evidenced by women with advanced breast and ovarian cancer and germ-line BRCA mutations experiencing objective tumor responses when treated with monotherapy PARP inhibitors.

Germ-line BRCA mutations are a minority subset of all breast and ovarian cancers, and the hypothesis was explored that some tumors might have defective BRCA function for reasons other than germ-line gene mutation. This notion has been called BRCA-ness . Subsequent work has shown that BRCA-ness exists, and that cancer patients with normal germ-line BRCA genes can respond to monotherapy with PARP inhibitors. Work is underway to identify a molecular signature for BRCA-ness that could enable patient selection for therapy. As a complement to the work to identify a BRCA-ness signature, clinical criteria have been developed to identify patients likely to respond to PARP inhibitors. If the notion of synthetic lethality is accepted, then PARP inhibitors should work well in patients with pre-existing defective DNA repair in their tumors. Defective DNA repair in a tumor would likely mean that the tumor is responsive to DNA-damaging chemotherapy, since the therapeutic DNA damage that triggers apoptosis cannot be effectively repaired by the tumor cell. Platinum chemotherapy drugs are a good example of one such DNA-damaging agent. To examine the hypothesis that platinum-sensitive tumors will respond to PARP inhibition, ovarian cancer patients have recently been studied, since ovarian cancer typically responds well to initial platinum-based chemotherapy, although relapses are expected after several months. Recent data from a study abstract published in the Journal of Clinical Oncology in 2011 demonstrated that in women with advanced ovarian cancer who have responded twice to platinum chemotherapy, maintenance therapy with an oral PARP inhibitor approximately doubled the time until disease progression versus a placebo-treated arm. This study was not conducted in all ovarian cancer subtypes, but specifically in high grade serous ovarian cancer. According to the National Cancer Institute, there are approximately 22,000 new cases of ovarian cancer each year. According to Cancer: Principles and Practice of Oncology (7th Edition, 2005), high grade serous ovarian cancer accounts for approximately 90% of ovarian cancers. According to an article published in Nature Reviews Clinical Oncology in 2010, BRCA mutation, or BRCA-ness, is believed to be present in at least 50% of high grade serous ovarian cancer tumors.

#### PARP Inhibitor Development Strategy

Based upon the basic science observations and clinical data described above, we will consider at least three ways to develop rucaparib for the treatment of solid tumors:

monotherapy in germ-line BRCA patients (mostly breast and ovarian cancer although a few patients develop tumors in pancreas and prostate);

monotherapy (induction and/or maintenance therapy) in patients with high BRCA-ness tumors; and

combination therapy with cytotoxic chemotherapy or radiation or targeted therapy in other tumors. These approaches will require, in many cases, a patient selection strategy utilizing either a molecular diagnostic or a clinical filter. Consistent with our strategy with other projects, we will consider partnering with a molecular diagnostic company to develop a companion diagnostic where it is needed. Some indications, as noted above, may be adequately explored using clinical selection criteria and obviate the need for a companion diagnostic.

#### Opportunity for Clovis

Within the universe of PARP inhibitors, we were particularly attracted to the profile of rucaparib from a variety of perspectives:

it is a very potent inhibitor of PARP-1 and PARP-2 proteins;

the oral formulation offers good bioavailability and low inter-individual pharmacokinetic variability;

it can be used as monotherapy in germ-line BRCA patients and has shown activity in this setting (with the IV formulation);

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it can be used in combination with cytotoxic chemotherapy and can be safely given at doses shown to be highly PARP inhibitory, as suggested by the trial results described below; and

it can likely be used as oral maintenance therapy after cytotoxic chemotherapy.

### Clinical Development of rucaparib

The IV formulation of rucaparib has been studied in two Phase I clinical trials and one Phase II clinical trial. The first Phase I clinical trial was designed to identify a dose of rucaparib that was both pharmaceutically active and well tolerated by patients and to identify the dose of temozolomide, or TMZ, a chemotherapy, that could be combined with rucaparib in a safe and well-tolerated manner. After appropriate dose-escalation, the study concluded that the recommended treatment dose of rucaparib was 12 mg/m2 each day with TMZ 200 mg/m2 each day.

A subsequent Phase II study evaluated the combination of rucaparib and TMZ in patients with metastatic melanoma. Forty-six patients were treated at the dose level of 12 mg/m2 each day for three cycles and TMZ 200 mg/m2 every 21 days. Seventeen percent of patients achieved a partial response, an additional 17% had stable disease of greater than or equal to 24 weeks, the median progression free survival was 3.5 months and median overall survival was 9.9 months. The most common adverse events for the rucaparib and temozolomide combination were gastrointestinal, including nausea and vomiting.

The second Phase I clinical trial is a tolerability and pharmacokinetic study of escalating doses of oral rucaparib (given for 2 of 3 weeks) administered in combination with carboplatin (given once every 3 weeks) in patients with solid tumors. The study previously evaluated the intravenous form of rucaparib (given for 3 days every 3 weeks) administered in combination with four different chemotherapy regimens (carboplatin, carboplatin/paclitaxel, pemetrexed/cisplatin and epirubicin/cyclophosphamide). The latter 3 chemotherapy combinations have since been discontinued. A total of 60 patients have been treated to date, including 6 patients in 2 dose cohorts on the extended treatment schedule (14 days) with oral rucaparib. No maximum tolerated dose in extended treatment has yet been reached and dose escalation is ongoing. In a preliminary assessment of efficacy, three patients had a partial response (30% decrease in the longest diameter of the target lesions), including one in a breast cancer patient with a BRCA defect, one in a breast cancer patient with no observable BRCA defect, and one in an ovarian cancer patient with a BRCA defect.

An oral, continuous daily dosing schedule has not been robustly established for rucaparib monotherapy. Therefore, in the fourth quarter of 2011 we initiated a Phase I monotherapy study of the oral formulation to determine the optimal dose and schedule. Once the appropriate dose and schedule has been determined, we intend to expand this study to enroll selected ovarian and breast cancer patients to assess the efficacy of rucaparib in these patient populations.

Our rucaparib clinical development plan is supplemented by two investigator-sponsored trials of rucaparib. One is a Phase I/II monotherapy trial in the treatment of germ-line BRCA mutation breast and ovarian cancer; the second is a Phase II randomized trial in the adjuvant treatment of patients with high risk germ-line BRCA-defective breast cancer and triple-negative breast cancer. In both of these studies, we have transitioned from the IV formulation to the oral dosage form for monotherapy, although the latter trial continues with IV formulation of rucaparib during the platinum-combination dosing period.

Upon analysis of the Phase I/II trial results, we may pursue future development of rucaparib as monotherapy and/or in combination with chemotherapy, most likely in serous ovarian and breast cancer indications. Other potential indications we may consider include NSCLC, endometrial cancer, and chronic lymphocytic leukemia. We may also study the inhibition of PARP in the maintenance setting after cytotoxic chemotherapy, which seems to be effective in the setting of certain cancers that are sensitive to platinum chemotherapy.

#### Competition

The commercialization of new drugs is competitive and we will face competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Our competitors may develop or market products or other novel technologies that are more effective, safer or less costly than any that have been or will be commercialized by us, or may obtain regulatory approval for their products more rapidly than we may obtain approval for ours.

The acquisition or licensing of pharmaceutical products is also very competitive, and a number of more established companies, which have acknowledged strategies to license or acquire products, may have competitive

advantages as may other emerging companies taking similar or different approaches to product acquisitions. In addition, a number of established research-based pharmaceutical and biotechnology companies may acquire products in late stages of development to augment their internal product lines. These established companies may have a competitive advantage over us due to their size, cash flows and institutional experience.

Many of our competitors will have substantially greater financial, technical and human resources than we have. Additional mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances made in the commercial applicability of technologies and greater availability of capital for investment in these fields. Our success will be based in part on our ability to build and actively manage a portfolio of drugs that addresses unmet medical needs and creates value in patient therapy.

#### **CO-101** Competition

There are currently two agents approved for the treatment of metastatic pancreatic cancer: Gemzar<sup>®</sup>/gemcitabine marketed by Eli Lilly, Teva Pharmaceutical Industries, APP Pharmaceuticals, Hospira, Inc. and Sandoz Inc. and Tarceva<sup>®</sup> (erlotinib) marketed by Genentech and Astellas Pharma in the US and Roche Pharmaceuticals outside of the US. Gemcitabine represents the current standard of care across all lines of pancreatic cancer therapy, either as monotherapy or as part of combination regimens. In addition, although not an approved therapy, the National Comprehensive Cancer Network includes FOLFIRINOX (5FU/leucovorin plus oxaliplatin and irinotecan) in its recommended first-line treatment options for good performance status patients with metastatic pancreatic cancer.

There are a number of companies with active clinical trials ongoing in pancreatic cancer. Companies in late stage pancreatic cancer clinical trials include AB Science SA, Amgen Inc., Astellas Pharma, BioSante Pharmaceuticals, Inc., Celgene Corporation, Immunomedics, Inc., Lorus Therapeutics, Merrimack Pharmaceuticals, Inc., NewLink Genetics Corporation and Threshold Pharmaceuticals, Inc. The majority of these companies have programs under development in combination with gemcitabine. We are not aware of any competitors with programs targeting low hENT1 expression in pancreatic cancer.

#### CO-1686 Competition

Tarceva<sup>®</sup> and Iressa<sup>®</sup> are two of the currently approved drugs that are used to treat EGFR mutant NSCLC. In addition, we are aware of two products in development targeting cancer-causing mutant forms of the epidermal growth factor receptor, or EGFR, for the treatment of NSCLC patients. These products include Boehringer Ingelheim s BIBW-2992 (afatinib), currently in Phase III trials, and Pfizer s PF-299804, currently in Phase II. We believe CO-1686 potentially offers several important advantages over the second generation EGFR inhibitors, including superior efficacy due to activity against the T790M resistance mutation and higher selectivity for the T790M mutation with relative sparing of normal EGFR, therefore avoiding the significant skin rash and gastro-intestinal toxicities associated with other first and second generation inhibitors, including Tarceva and Iressa. We also believe that other pharmaceutical companies may be seeking to develop EGFR mutant selective inhibitors that may enter clinical development on a similar time frame to CO-1686.

#### **Rucaparib** Competition

We believe the products in development targeting the PARP pathway consist of Abbott s ABT-888 (velaparib) currently in Phase II clinical trials, Merck s MK-4827 currently in Phase I trial, Eisai s E-7016 currently in Phase I trials, Cephalon s CEP-9722 currently in Phase I trials, and Biomarin s BMN-673 currently in Phase I trials.

#### License Agreements and Agreements for the Development of Companion Diagnostics

#### Clavis Pharma ASA

In November 2009, we entered into a license agreement with Clavis to obtain the exclusive rights to develop and commercialize CO-101 in North America, Central America, South America and Europe. The exclusive rights

are exclusive even as to Clavis and include the right to grant sublicenses. Under the terms of the license agreement, we made an up-front payment to Clavis of \$15.0 million, which was comprised of \$13.1 million for development costs incurred prior to the execution of the agreement, and recognized by us as acquired in-process research and development, and \$1.9 million for the prepayment of preclinical activities to be performed by Clavis. In November 2010, the license agreement was amended to expand the license territory to include exclusive rights in Asia and other international markets, in consideration for our making a payment of \$10.0 million, which again we recognized as acquired in-process research and development. As part of the amended license, Clavis agreed to reimburse us for up to \$3.0 million of costs incurred by us for CO-101 development activities. Under the amended license agreement, we are obligated to use commercially reasonable efforts to develop and commercialize CO-101, and with the exception of the specific amounts to be reimbursed by Clavis, we are responsible for all remaining development and commercialization costs for CO-101. When and if commercial sales of CO-101 begin, we will pay Clavis tiered royalties at percentage rates ranging from the mid-teens to the low twenties based on the volume of annual net sales achieved, with standard provisions for royalty offsets to the extent we need to obtain any rights from third parties to commercialize CO-101 and royalty reductions in the event of generic competition, each on a country by country basis. We are required to make regulatory milestone payments to Clavis of up to \$115.0 million if specified clinical study objectives and regulatory filings, acceptances and approvals are achieved. In addition, we are obligated to make sales milestone payments to Clavis if specified annual sales targets for CO-101 are met, the majority of which relate to annual sales targets of \$500.0 million and above, which, in the aggregate, could amount to total miles

Under the license agreement, for a limited period of time related to the timing of the filing of the first MAA for CO-101 in Europe, Clavis may elect to co-develop and co-promote CO-101 in Europe. If Clavis were to make this election, it would be required to reimburse us for either 35% or 40% of all development costs incurred by us up to the date of such election, depending on the timing of such election relative to the disclosure to Clavis of top line data from its first completed Phase II or Phase III clinical trial, and thereafter, Clavis would be required to pay us 25% of all ongoing development costs for CO-101. In addition, milestone payments described above would be reduced and, instead of receiving royalties on net sales in Europe, Clavis would share equally in the pretax profits or losses resulting from commercialization activities in Europe.

The license agreement will remain in effect until we or our sublicensees are no longer selling CO-101 in any country in our global licensed territory, unless we elect to terminate the license earlier. If we fail to meet our obligations under the agreement and are unable to cure such failure within specified time periods, Clavis can terminate the agreement, resulting in a loss of our rights to CO-101 and an obligation to assign or license to Clavis any intellectual property rights or other rights we may have in CO-101, including our regulatory filings, regulatory approvals, patents and trademarks for CO-101.

#### Avila Therapeutics, Inc.

In May 2010, we entered into an exclusive worldwide license agreement with Avila to discover, develop and commercialize a pre-clinical covalent inhibitor of mutant forms of the EGFR gene discovered by Avila and selected by us. As a result of the collaboration contemplated by the agreement, CO-1686 was identified as the lead inhibitor candidate which we are proceeding to develop under the terms of the license agreement. Under the agreement, we are required to use commercially reasonable efforts to develop and commercialize CO-1686, and we are responsible for all preclinical, clinical, regulatory and other activities necessary to develop and commercialize CO-1686. We made an up-front payment of \$2.0 million to Avila upon execution of the license agreement, which we recognized as an acquired in-process research and development expense. When and if commercial sales of CO-1686 commence, we will pay Avila tiered royalties at percentage rates ranging from mid-single digits to low-teens based on annual net sales achieved. Avila has the option to increase royalty rates on annual net sales in the United States and the European Union by electing to reimburse us for a share of our development expenses for CO-1686. This option must be exercised within a limited period of time of Avila s being notified by us of our intent to pursue regulatory approval of CO-1686 in the United States or the European Union as a first-line treatment. Under the agreement, we are required to make regulatory milestone payments to Avila of up to \$119.0 million if specified clinical study objectives and regulatory filings, acceptances and

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approvals are achieved. In addition, we are obligated to make sales milestone payments to Avila if specified annual sales targets for CO-1686 are met, the majority of which relate to annual sales targets of \$500.0 million and above, which, in the aggregate, could amount to total milestone payments of \$120.0 million. In January 2012, our IND to begin clinical investigation of CO-1686 became effective, which triggered the first development milestone payment to Avila of \$4.0 million.

We have full sublicensing rights under the license agreement with Avila, subject to our sharing equally with Avila any up-front payments from any sub-licensing arrangements relating to Japan, or Japan and any one or more of China, South Korea and Taiwan, which we refer to herein as an Asian Partnership, and subject to our paying Avila royalties on sales in Asia equal to the greater of the royalty rates contained in our license agreement with Avila or 50% of the royalties we receive from our Asian Partnership.

The license agreement with Avila will remain in effect until the expiration of all of our royalty and sublicense revenue obligations to Avila, determined on a product-by-product and country-by-country basis, unless we elect to terminate the license agreement earlier. If we fail to meet our obligations under the agreement and are unable to cure such failure within specified time periods, Avila can terminate the agreement, resulting in a loss of our rights to CO-1686 and an obligation to assign or license to Avila any intellectual property rights or other rights we may have in CO-1686, including our regulatory filings, regulatory approvals, patents and trademarks for CO-1686.

On March 8, 2012, Avila announced that it was acquired by Celgene Corporation.

## Pfizer Inc.

In June 2011, we entered into a license agreement with Pfizer, to obtain the exclusive global rights to develop and commercialize rucaparib. The exclusive rights are exclusive even as to Pfizer and include the right to grant sublicenses. Under the terms of the license agreement, we made an up-front payment by issuing to Pfizer \$7.0 million principal amount of a 5% convertible promissory note due 2012. This promissory note was converted into shares of our common stock in connection with our initial public offering. Under the license agreement, we will assume responsibility for an ongoing Phase I dose ranging clinical trial previously conducted by Pfizer examining the maximum tolerated dose of the oral form of rucaparib in combination with intravenous platinum chemotherapy in the treatment of solid tumors. We are obligated under the license agreement to use commercially reasonable efforts to develop and commercialize rucaparib, and with the exception of transfer to us, without cost, of Pfizer s existing inventory of rucaparib, we are responsible for all remaining development and commercialization costs for rucaparib. When and if commercial sales of rucaparib begin, we will pay Pfizer tiered royalties at a mid-teen percentage rate on our net sales, with standard provisions for royalty offsets to the extent we need to obtain any rights from third parties to commercialize rucaparib. We are required to make regulatory milestone payments to Pfizer of up to \$89.0 million if specified clinical study objectives and regulatory filings, acceptances and approvals are achieved. In addition, we are obligated to make sales milestone payments to Pfizer if specified annual sales targets for rucaparib are met, the majority of which relate to annual sales targets of \$500.0 million and above, which, in the aggregate, could amount to total milestone payments of \$170.0 million.

The license agreement with Pfizer will remain in effect until the expiration of all of our royalty and sublicense revenue obligations to Pfizer, determined on a product-by-product and country-by-country basis, unless we elect to terminate the license agreement earlier. If we fail to meet our obligations under the agreement and are unable to cure such failure within specified time periods, Pfizer can terminate the agreement, resulting in a loss of our rights to rucaparib and an obligation to assign or license to Pfizer any intellectual property rights or other rights we may have in rucaparib, including our regulatory filings, regulatory approvals, patents and trademarks for rucaparib.

## Ventana Medical Systems, Inc.

In March 2010, we entered into an agreement with Ventana with respect to the development and commercialization of an IVD to measure tissue hENT1 expression and enable prospective classification of patients as either hENT1-high or hENT1-low. Ventana will develop a hENT1 IHC assay, seek FDA approval of a

PMA for the IVD, arrange for the manufacture of the hENT1 IHC assay and develop a commercialization strategy for the hENT1 IHC assay. We will provide Ventana the access and data necessary for the PMA IVD submission. We are responsible for the costs and expenses associated with the development of the companion diagnostic. The companion diagnostic will be owned by Ventana, subject to certain rights we may retain in the event Ventana does not commercialize such companion diagnostic, and all revenues generated from the sale of the companion diagnostic will be retained by Ventana. The agreement has a three-year term. Either party may terminate the agreement for any reason upon prior written notice to the other party or immediately upon a material breach of the agreement by the other party that is not cured within a specified time or upon the other party s insolvency or bankruptcy.

#### Roche Molecular Systems, Inc.

In April 2011, we entered into an agreement with Roche with respect to the development and commercialization of a companion diagnostic test to detect and identify EGFR mutations, including the T790M mutation, in human samples. The companion diagnostic will be developed in stages pursuant to a mutually agreed development plan. Roche will be responsible for the technical development of the EGFR assay, including software development, technical validation and verification of the EGFR assay, clinical reproducibility studies of the EGFR assay and the manufacturability of the EGFR assay. We will be responsible for the validation of the clinical utility of the EGFR assay. We and Roche will jointly promote the EGFR assay once it is commercialized by Roche. We share with Roche the costs and expenses of the development of the companion diagnostic. We may terminate the agreement upon prior written notice to Roche. Roche may terminate the agreement if we breach any of our material obligations under the agreement and are unable to cure such breach within specified time periods or if we were to liquidate, dissolve, wind-up our business or be declared insolvent or bankrupt. The companion diagnostic will be owned by Roche and all revenues generated from the sale of the companion diagnostic will be retained by Roche.

#### **Government Regulation**

Government authorities in the United States (including federal, state and local authorities) and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, storage, distribution, post-approval monitoring and reporting, advertising and promotion, pricing and export and import of pharmaceutical products, such as those we are developing. 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. Moreover, failure to comply with applicable regulatory requirements may result in, among other things, warning letters, clinical holds, civil or criminal penalties, recall or seizure of products, injunction, disbarment, partial or total suspension of production or withdrawal of the product from the market. Any agency or judicial enforcement action could have a material adverse effect on us.

#### U.S. Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. Drugs are also subject to other federal, state and local statutes and regulations. The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

submission to the FDA of an IND which must become effective before human clinical trials may begin and must be updated annually;

completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with the FDA s Good Laboratory Practice, or GLP, regulations;

performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication;

submission to the FDA of an NDA after completion of all pivotal clinical trials;

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a determination by the FDA within 60 days of its receipt of an NDA to file the NDA for review;

satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities at which the active pharmaceutical ingredient, or API, and finished drug product are produced and tested to assess compliance with cGMP regulations; and

FDA review and approval of an NDA prior to any commercial marketing or sale of the drug in the United States. An IND is a request for authorization from the FDA to administer an investigational drug product to humans.

The central focus of an IND submission is on the general investigational plan and the protocol(s) for human studies. The IND also includes results of animal studies or other human studies, as appropriate, as well as manufacturing information, analytical data and any available clinical data or literature to support the use of the investigational new drug. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical trials can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence.

Clinical trials involve the administration of the investigational drug to human subjects under the supervision of qualified investigators in accordance with Good Clinical Practices, or GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical trial site s IRB before the trials may be initiated, and the IRB must monitor the study until completed. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

The clinical investigation of a drug is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined. The three phases of an investigation are as follows:

*Phase I.* Phase I includes the initial introduction of an investigational new drug into humans. Phase I clinical trials are typically closely monitored and may be conducted in patients with the target disease or condition or in healthy volunteers. These studies are designed to evaluate the safety, dosage tolerance, metabolism and pharmacologic actions of the investigational drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. During Phase I clinical trials, sufficient information about the investigational drug s pharmacokinetics and pharmacological effects may be obtained to permit the design of well-controlled and scientifically valid Phase II clinical trials. The total number of participants included in Phase I clinical trials varies, but is generally in the range of 20 to 80.

*Phase II.* Phase II includes controlled clinical trials conducted to preliminarily or further evaluate the effectiveness of the investigational drug for a particular indication(s) in patients with the disease or condition under study, to determine dosage tolerance and optimal dosage, and to identify possible adverse side effects and safety risks associated with the drug. Phase II clinical trials are typically well-controlled, closely monitored, and conducted in a limited patient population, usually involving no more than several hundred participants.

*Phase III.* Phase III clinical trials are generally controlled clinical trials conducted in an expanded patient population generally at geographically dispersed clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained, and are intended to further evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the investigational drug product, and to provide an adequate basis for product approval. Phase III clinical trials usually involve several hundred to several thousand participants.

A pivotal study is a clinical study which adequately meets regulatory agency requirements for the evaluation of a drug candidate s efficacy and safety such that it can be used to justify the approval of the product. Generally, pivotal studies are also Phase III studies but may be Phase II studies if the trial design provides a well-controlled and reliable assessment of clinical benefit, particularly in situations where there is an unmet medical need.

The FDA, the IRB or the clinical trial sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access to certain data from the study. We may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational drug product information is submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications.

The application includes all relevant data available from pertinent preclinical and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product s chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational drug product to the satisfaction of the FDA.

Once the NDA submission has been accepted for filing, the FDA s goal is to review applications within ten months of submission or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months from submission. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it typically follows such recommendations.

After the FDA evaluates the NDA and conducts inspections of manufacturing facilities where the drug product and/or its API will be produced, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may require additional clinical data and/or an additional pivotal Phase III clinical trial(s), and/or other significant, expensive and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. Even if such additional information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA could also approve the NDA with a Risk Evaluation and Mitigation Strategies, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. Such post-market testing may include Phase IV clinical trials and surveillance to further assess and monitor the product s safety and effectiveness after commercialization. Regulatory approval of oncology products often requires that patients in clinical trials be followed for long periods to determine the overall survival benefit of the drug.

After regulatory approval of a drug product is obtained, we are required to comply with a number of post-approval requirements. As a holder of an approved NDA, we would be required to report, among other things, certain adverse reactions and production problems to the FDA, to provide updated safety and efficacy information, and to comply with requirements concerning advertising and promotional labeling for any of our products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval to ensure and preserve the long term stability of the drug product. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes extensive procedural, substantive and record keeping

requirements. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our product candidates. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Newly discovered or developed safety or effectiveness data may require changes to a product s approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA s policies may change, which could delay or prevent regulatory approval of our products under development.

# Europe/Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In Europe, for example, a clinical trial application, or CTA, must be submitted to each country s national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country s requirements, clinical trial development may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug under European Union regulatory systems, we must submit a marketing authorization application. The application used to file the NDA in the United States is similar to that required in Europe, with the exception of, among other things, country-specific document requirements.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

# Available Special Regulatory Procedures

## Formal Meetings

We are encouraged to engage and seek guidance from health authorities relating to the development and review of investigational drugs, as well as marketing applications. In the United States, there are different types

of official meetings that may occur between us and the FDA. Each meeting type is subject to different procedures. Conclusions and agreements from each of these meetings are captured in the official final meeting minutes issued by the FDA.

The EMA also provides the opportunity for dialogue with us. This is usually done in the form of Scientific Advice, which is given by the Scientific Advice Working Party of the Committee for Medicinal Products for Human Use, or CHMP. A fee is incurred with each Scientific Advice meeting.

Advice from either the FDA or EMA is typically provided based on questions concerning, for example, quality (chemistry, manufacturing and controls testing), nonclinical testing and clinical studies, and pharmacovigilance plans and risk-management programs. Such advice is not legally binding on the sponsor. To obtain binding commitments from health authorities in the United States and the European Union, SPA or Protocol Assistance procedures are available. An SPA is an evaluation by the FDA of a protocol with the goal of reaching an agreement with the sponsor that the protocol design, clinical endpoints and statistical analyses are acceptable to support regulatory approval of the product candidate with respect to effectiveness in the indication studied. The FDA is agreement to an SPA is binding upon the FDA except in limited circumstances, such as if the FDA identifies a substantial scientific issue essential to determining the safety or effectiveness of the product after clinical studies begin, or if the study sponsor fails to follow the protocol that was agreed upon with the FDA. There is no guarantee that a study will ultimately be adequate to support an approval even if the study is subject to an SPA.

## Orphan Drug Designation

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making the drug for this type of disease or condition will be recovered from sales in the United States. In the European Union, the EMA s Committee for Orphan Medicinal Products, or COMP, grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the European Union Community. Additionally, designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biological product.

In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of 7 years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity.

In the European Union, orphan drug designation also entitles a party to financial incentives such as reduction of fees or fee waivers and 10 years of market exclusivity is granted following drug or biological product approval. This period may be reduced to 6 years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Orphan drug designation must be requested before submitting an application for marketing approval. Orphan dug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

## Pediatric Development

In the United States, the FDCA provides for an additional 6 months of marketing exclusivity for a drug if reports are filed of investigations studying the use of the drug product in a pediatric population in response to a written request from the FDA. Separate from this potential exclusivity benefit, NDAs must contain data (or a

proposal for post-marketing activity) to assess the safety and effectiveness of an investigational drug product for the claimed indications in all relevant pediatric populations in order to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers if certain criteria are met. Discussions about pediatric development plans can be discussed with the FDA at any time, but usually occur any time between the end-of-Phase II meeting and submission of the NDA.

For the EMA, a Pediatric Investigation Plan, and/or a request for waiver or deferral, is required for submission prior to submitting a marketing authorization application.

#### Authorization Procedures in the European Union

Medicines can be authorized in the European Union by using either the centralized authorization procedure or national authorization procedures.

*Centralized procedure.* The EMA implemented the centralized procedure for the approval of human medicines to facilitate marketing authorizations that are valid throughout the European Union. This procedure results in a single marketing authorization issued by the EMA that is valid across the European Union, as well as Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for human medicines that are: derived from biotechnology processes, such as genetic engineering, contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions, and officially designated orphan medicines.

For medicines that do not fall within these categories, an applicant has the option of submitting an application for a centralized marketing authorization to the EMA, as long as the medicine concerned is a significant therapeutic, scientific or technical innovation, or if its authorization would be in the interest of public health.

*National authorization procedures.* There are also two other possible routes to authorize medicinal products in several countries, which are available for investigational drug products that fall outside the scope of the centralized procedure:

*Decentralized procedure.* Using the decentralized procedure, an applicant may apply for simultaneous authorization in more than one European Union country of medicinal products that have not yet been authorized in any European Union country and that do not fall within the mandatory scope of the centralized procedure.

*Mutual recognition procedure.* In the mutual recognition procedure, a medicine is first authorized in one European Union Member State, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other European Union countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization.

Priority Review/Standard Review (United States) and Accelerated Review (European Union)

Based on results of the Phase III clinical trial(s) submitted in an NDA, upon the request of an applicant, the FDA may grant the NDA a priority review designation, which sets the target date for FDA action on the application at six months. Priority review is granted where preliminary estimates indicate that a product, if approved, has the potential to provide a safe and effective therapy where no satisfactory alternative therapy exists, or a significant improvement compared to marketed products is possible. If criteria are not met for priority review, the NDA is subject to the standard FDA review period of 10 months. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

Under the Centralized Procedure in the European Union, the maximum timeframe for the evaluation of a marketing authorization application is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP. Accelerated

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evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, defined by three cumulative criteria: the seriousness of the disease (e.g. heavy disabling or life-threatening diseases) to be treated; the absence or insufficiency of an appropriate alternative therapeutic approach; and anticipation of high therapeutic benefit. In this circumstance, EMA ensures that the opinion of the CHMP is given within 150 days, excluding clock stops.

#### Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drugs for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

In 2003, the United States government enacted legislation providing a partial prescription drug benefit for Medicare beneficiaries, which became effective at the beginning of 2006. Government payment for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval. However, to obtain payments under this program, we would be required to sell products to Medicare recipients through prescription drug plans operating pursuant to this legislation. These plans will likely negotiate discounted prices for our products. Further, the Healthcare Reform Law substantially changes the way healthcare is financed in the United States by both government and private insurers. Among other cost containment measures, the Healthcare Reform Law establishes:

An annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents;

A new Medicare Part D coverage gap discount program, in which pharmaceutical manufacturers who wish to have their drugs covered under Part D must offer discounts to eligible beneficiaries during their coverage gap period (the donut hole ); and

A new formula that increases the rebates a manufacturer must pay under the Medicaid Drug Rebate Program. We expect that federal, state and local governments in the United States will continue to consider legislation to limit the growth of healthcare costs, including the cost of prescription drugs. Future legislation could limit payments for pharmaceuticals such as the drug candidates that we are developing.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry

of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

#### Other Healthcare Laws and Compliance Requirements

If we obtain regulatory approval for any of our product candidates, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. For example, in the United States, there are federal and state anti-kickback laws that prohibit the payment or receipt of kickbacks, bribes or other remuneration intended to induce the purchase or recommendation of healthcare products and services or reward past purchases or recommendations. Violations of these laws can lead to civil and criminal penalties, including fines, imprisonment and exclusion from participation in federal healthcare programs.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The reach of the Anti-Kickback Statute was broadened by the Healthcare Reform Law, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes contained within 42 U.S.C. § 1320a-7b, effective March 23, 2010. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the Healthcare Reform Law provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below) or the civil monetary penalties statute. Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The federal False Claims Act imposes liability on any person who, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The qui tam provisions of the False Claims Act allow a private individual to bring civil actions on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any monetary recovery. In addition, various states have enacted false claims laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payer and not merely a federal healthcare program. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties of \$5,500 to \$11,000 for each separate false claim.

Also, the Health Insurance Portability and Accountability Act of 1996, or HIPAA, created several new federal crimes, including health care fraud, and false statements relating to health care matters. The health care fraud statute prohibits knowingly and willfully executing a scheme to defraud any health care benefit program, including private third-party payers. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for health care benefits, items or services.

In addition, we may be subject to, or our marketing activities may be limited by, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, which established uniform standards for certain covered entities (healthcare providers, health plans and healthcare clearinghouses) and their business associates governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information.

## **Regulation of Diagnostic Tests**

In the United States, the FDCA and its implementing regulations, and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Diagnostic tests are classified as medical devices under the FDCA. Unless an exemption applies, diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval, or PMA approval. Because the diagnostic tests being developed by our third-party collaborators are of substantial importance in preventing impairment of human health, they are subject to the PMA approval process.

PMA applications must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to demonstrate to the FDA s satisfaction the safety and effectiveness of the device. For diagnostic tests, a PMA application typically includes data regarding analytical and clinical validation studies. As part of its review of the PMA, the FDA will conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance with the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures. FDA review of an initial PMA application is required by statute to take between six to ten months, although the process typically takes longer, and may require several years to complete. If the FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions that must be met in order to secure the final approval of the PMA. If the FDA is evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. The FDA may also determine that additional clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. Once granted, PMA approval may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

We and our third-party collaborators who are developing the companion diagnostics will work cooperatively to generate the data required for submission with the PMA application, and will remain in close contact with the Center for Devices and Radiological Health, or CDRH, at FDA to ensure that any changes in requirements are incorporated into the development plans. We anticipate that meetings with the FDA with regard to our drug product candidates as well as companion diagnostic product candidates will include representatives from the Center for Drug Evaluation and Research, or CDER, and CDRH to ensure that the NDA and PMA submissions are coordinated to enable FDA to conduct a parallel review of both submissions. On July 14, 2011, the FDA issued for comment a draft guidance document addressing the development and approval process for In Vitro Companion Diagnostic Devices . According to the draft guidance, for novel therapeutic products such as our product candidates, the PMA for a companion diagnostic device should be developed and approved or cleared contemporaneously with the therapeutic. While this draft guidance is not yet finalized, we believe our programs for the development of our companion diagnostics are consistent with the draft guidance as proposed.

In the EEA, *in vitro* medical devices are required to conform with the essential requirements of the E.U. Directive on *in vitro* diagnostic medical devices (Directive No 98/79/EC, as amended). To demonstrate compliance with the essential requirements, the manufacturer must undergo a conformity assessment procedure. The conformity assessment varies according to the type of medical device and its classification. For low-risk devices, the conformity assessment can be carried out internally, but for higher risk devices it requires the intervention of an accredited EEA Notified Body. If successful, the conformity assessment concludes with the drawing up by the manufacturer of an EC Declaration of Conformity entitling the manufacturer to affix the CE mark to its products and to sell them throughout the EEA. The data generated for the U.S. registration will be sufficient to satisfy the regulatory requirements for the European Union and other countries.

# **Patents and Proprietary Rights**

The proprietary nature of, and protection for, our product candidates, processes and know-how are important to our business. Our success depends in part on our ability to protect the proprietary nature of our product candidates, technology, and know-how, to operate without infringing on the proprietary rights of others, and to prevent others from infringing our proprietary rights. We seek patent protection in the United States and internationally for our product candidates and other technology. Our policy is to patent or in-license the technology, inventions and improvements that we consider important to the development of our business. We also rely on trade secrets, know-how and continuing innovation to develop and maintain our competitive position. We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents granted to us in the future will be commercially useful in protecting our technology.

We have an exclusive, worldwide license from Clavis to a portfolio of patents related to CO-101. United States Patent 6,384,019 and its equivalent counterparts in 32 other countries, directed to the CO-101 composition of matter, expire in 2018 and are potentially eligible for up to five years patent term extension in various jurisdictions. We believe that patent term extension under the Hatch-Waxman Act could be available to extend our patent exclusivity for CO-101 to at least 2020-2021 in the United States depending on timing of our first approval. In Europe, we believe that patent term extension under a supplementary protection certificate could be available for an additional five years to 2023. A patent application directed to the CO-101 formulation is pending in the United States, PCT, and Taiwan and, if issued, would expire in 2030. We and Clavis have also filed patent applications for various aspects related to CO-101 administration and diagnostics to assess hENT1 levels.

We acquired an exclusive, worldwide license to CO-1686 from Avila in May 2010. Multiple patent applications are pending that claim CO-1686 generically and specifically (including with respect to composition of matter) that, if issued, would have expiration dates between 2029 and 2031.

We obtained an exclusive, worldwide license from Pfizer to develop and commercialize rucaparib in June 2011. U.S. Patent 6,495,541, and its equivalent counterparts issued or pending in dozens of countries, directed to the rucaparib composition of matter, expire in 2020 and are potentially eligible for up to five years patent term extension in various jurisdictions. We believe that patent term extension under the Hatch-Waxman Act could be available to extend our patent exclusivity for rucaparib to at least 2022-2024 in the United States depending on timing of our first approval. In Europe, we believe that patent term extension under a supplementary protection certificate could be available for an additional five years to 2025. Additionally, other patents and patent applications are directed to methods of making, methods of using, dosing regimens, and various salt and polymorphic forms have expiration dates ranging from 2020 through 2031.

We are aware of a family of patents and patent applications controlled by a third party that claim certain uses of PARP inhibitors that could potentially be asserted against our use of rucaparib in certain indications. We are conducting clinical trials for the treatment of solid tumors, a subset of which are ovarian cancer and breast cancer characterized as having positive germ-line BRCA mutations. Methods for treating such germ-line BRCA mutations. We are evaluating the validity of the patents and patent applications, including the scope or potential scope of the claims of these patents and patent applications, to determine whether to seek a license under such patents or patent applications, when and if they issue, or alternatively whether to initiate proceedings to challenge such patents. If we are unable to either license or successfully challenge such patents, we may consider shifting our development emphasis among alternative uses, and in so doing we could reduce the size of the aggregate potential market for rucaparib.

In addition, we intend to seek patent protection whenever available for any products or product candidates and related technology we acquire in the future.

The patent positions of pharmaceutical firms like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued. Consequently, we do not know whether any of the product candidates we acquire or license will gain patent protection or, if any patents are issued, whether they will provide significant

proprietary protection or will be challenged, circumvented or invalidated. Because patent applications in the United States and certain other jurisdictions are maintained in secrecy for 18 months, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings declared by the U.S. PTO or a foreign patent office to determine priority of invention, or in opposition proceedings in a foreign patent office, either of which could result in substantial cost to us, even if the eventual outcome is favorable to us. There can be no assurance that the patents, if issued, would be held valid by a court of competent jurisdiction. An adverse outcome could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using specific compounds or technology. To the extent prudent, we intend to bring litigation against third parties that we believe are infringing one or more of our patents.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application. In the United States, a patent s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. PTO in granting a patent, or may be shortened if a patent is terminally disclaimed over another patent.

The patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other non-U.S. jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our pharmaceutical products receive FDA approval, we expect to apply for patent term extensions on patents covering those products.

To protect our rights to any of our issued patents and proprietary information, we may need to litigate against infringing third parties, or avail ourselves of the courts or participate in hearings to determine the scope and validity of those patents or other proprietary rights. These types of proceedings are often costly and could be very time-consuming to us, and we cannot assure you that the deciding authorities will rule in our favor. An unfavorable decision could allow third parties to use our technology without being required to pay us licensing fees or may compel us to license needed technologies to avoid infringing third-party patent and proprietary rights. Such a decision could even result in the invalidation or a limitation in the scope of our patents or forfeiture of the rights associated with our patents or pending patent applications.

In addition we have sought and intend to continue seeking orphan drug status whenever it is available. If a product which has an orphan drug designation subsequently receives the first regulatory approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, meaning that the applicable regulatory authority may not approve any other applications to market the same drug for the same indication, except in certain very limited circumstances, for a period of seven years in the United States and ten years in the European Union. Orphan drug designation does not prevent competitors from developing or marketing different drugs for an indication.

We also rely on trade secret protection for our confidential and proprietary information. No assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technology, or that we can meaningfully protect our trade secrets. However, we believe that the substantial costs and resources required to develop technological innovations will help us to protect the competitive advantage of our products.

It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information developed or made known to the individual during the course of the individual s relationship with us is to be kept confidential and not

disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual shall be our exclusive property. There can be no assurance, however, that these agreements will provide meaningful protection or adequate remedies for our trade secrets in the event of unauthorized use or disclosure of such information.

## Manufacturing

We currently contract with third parties for the manufacture of our product candidates for preclinical studies and clinical trials and intend to do so in the future. We have not entered into long-term agreements with our current contract manufacturers. We currently obtain our supplies of finished drug product through individual purchase orders. We do not own or operate manufacturing facilities for the production of clinical quantities of our product candidates. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. To meet our projected needs for commercial manufacturing, third parties with whom we currently work will need to increase their scale of production or we will need to secure alternate suppliers. Although we rely on contract manufacturers, we have personnel with extensive manufacturing experience to oversee the relationships with our contract manufacturers.

One of our contract manufacturers has manufactured what we believe to be sufficient quantities of CO-101 s active pharmaceutical ingredient (or drug substance) to complete the ongoing clinical trials. We have engaged a second drug substance manufacturer to ensure continuity of supply and to increase overall production capacity. Improvements to the current drug substance manufacturing process are being implemented to further ensure production capacity adequate to meet future development and commercial demands. Another of our existing contract manufacturers continues to produce CO-101 drug product for use in ongoing clinical trials. We are implementing scale-up operations at this manufacturing site to provide additional quantities of CO-101 drug product. We have also identified a second drug product contract manufacturer to provide further capacity for clinical and commercial production. In addition a separate contract manufacturer labels, packages and distributes clinical supplies of CO-101. We believe the manufacturing processes for the active pharmaceutical ingredient and finished drug product for CO-101 have been developed to adequately support future development and commercial demands. While we believe that our existing suppliers of active pharmaceutical ingredient and drug product would be capable of continuing to produce materials in commercial quantities, we may need to identify additional third-party manufacturers capable of providing commercial quantities of drug product. If we are unable to arrange for such a third-party manufacturing source, or fail to do so on commercially reasonable terms, we may not be able to successfully produce and market CO-101.

The process for producing CO-1686 active pharmaceutical ingredient is currently being developed at a single third-party contract manufacturer. The current process has already been sufficiently developed to satisfy immediate clinical demands. Additional process development work and/or additional production capacity may be necessary to support larger clinical development or commercialization requirements. If we are unable to adequately develop a suitable process, or arrange for such a third-party manufacturing source, or fail to do so on commercially reasonable terms, we may not be able to successfully produce and market CO-1686. Drug product formulation development work for CO-1686 is in progress. We have engaged a third-party manufacturer capable of both formulation development and drug product manufacturing. Definition of an acceptable formulation and suitable manufacturing process to prepare that formulation are critical to the successful development of CO-1686. If we fail to define such a formulation and process, or fail to do so on commercially reasonable terms, we may be unable to successfully produce and market CO-1686.

We have developed the process for manufacturing rucaparib s active pharmaceutical ingredient to a degree sufficient to meet clinical demands and projected commercial requirements. Pfizer is currently performing manufacturing for rucaparib. Although we believe the licensor has available quantities of the active pharmaceutical ingredient to permit current production sufficient to allow us to conclude the currently pending trials for rucaparib, we will need to identify an alternate third-party contract manufacturer for preparation of the rucaparib active pharmaceutical ingredient. While we believe that sufficient capacity and capabilities for manufacture of this compound exists, failure to arrange such a third-party source, or failure to do so on commercially reasonable terms may prevent successful production and marketing of rucaparib. The rucaparib drug product formulation and manufacturing process to produce that formulation have been developed to a

degree sufficient to meet clinical demands and projected commercial requirements. While Pfizer will turn over to us its existing inventory of finished dosage form of rucaparib, and produce additional quantities for us, we will need to identify an alternate third-party contract manufacturer for preparation of rucaparib in finished dosage form. While we believe that sufficient capacity and capabilities for manufacture of this formulation exists, failure to arrange such a third-party source, or failure to do so on commercially reasonable terms may prevent successful production and marketing of rucaparib.

To date, our third-party manufacturers have met our manufacturing requirements. We expect third-party manufacturers to be capable of providing sufficient quantities of our product candidates to meet anticipated full scale commercial demands. We believe that there are alternate sources of supply that can satisfy our clinical and commercial requirements, although we cannot be certain that identifying and establishing relationships with such sources, if necessary, would not result in significant delay or material additional costs.

#### Sales and Marketing

We intend to build the commercial infrastructure in the United States and Europe necessary to effectively support the commercialization of CO-101, CO-1686 and rucaparib, if and when we believe a regulatory approval of the first of such product candidates in a particular geographic market appears imminent. The commercial infrastructure for oncology products typically consists of a targeted, specialty sales force that calls on a limited and focused group of physicians supported by sales management, internal sales support, an internal marketing group and distribution support. Additional capabilities important to the oncology marketplace include the management of key accounts such as managed care organizations, group-purchasing organizations, specialty pharmacies, oncology group networks, and government accounts. To develop the appropriate commercial infrastructure, we will have to invest significant amounts of financial and management resources, some of which will be committed prior to any confirmation that CO-101, CO-1686, or rucaparib will be approved.

Outside of the United States and Europe, where appropriate, we may elect in the future to utilize strategic partners, distributors, or contract sales forces to assist in the commercialization of our products. We are actively considering an Asian commercial presence, including establishing our own sales and marketing organization in Japan.

#### Employees

As of March 12, 2012, we had 57 full-time employees. None of our employees is represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

#### **Research and Development**

We invested \$40.7 million, \$22.3 million and \$1.8 million in research and development in the years ended December 31, 2011 and 2010, and the period from April 20, 2009 (inception) through December 31, 2009, respectively.

#### Facilities

Our offices are located at three leased facilities, a 10,369 square foot facility in Boulder, Colorado used primarily for corporate functions, a 17,195 square foot facility in San Francisco, California used for clinical development operations and research laboratory space, and a 1,050 square foot facility in Cambridge, United Kingdom used for our European regulatory and clinical operations. These leases expire in December 2015, May 2013, and May 2012, respectively. We believe that our existing facilities are sufficient for our needs for the foreseeable future.

#### Legal Proceedings

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

## MANAGEMENT

#### **Executive Officers and Directors**

The following table sets forth the name, age and position of each of our executive officers and directors as of December 31, 2011:

Name	Age	Position
Patrick J. Mahaffy	48	President and Chief Executive Officer; Director
Erle T. Mast	49	Executive Vice President and Chief Financial
		Officer
Andrew R. Allen, Ph.D.	45	Executive Vice President of Clinical and Pre-Clinical Development and Chief
		Medical Officer
Gillian C. Ivers-Read	58	Executive Vice President of Technical Operations and Chief Regulatory Officer
Steven L. Hoerter	41	Senior Vice President of Commercial
Brian G. Atwood	59	Director
M. James Barrett, Ph.D.	69	Director
James C. Blair, Ph.D.	72	Director
Paul Klingenstein	56	Director
Edward J. McKinley	59	Director
John C. Reed, M.D., Ph.D.	53	Director
Thorlef Spickschen	70	Director
Executive Officers		

*Patrick J. Mahaffy* is one of our co-founders and has served as our President and Chief Executive Officer and a member of our board of directors since our inception. Previously, Mr. Mahaffy served as President and Chief Executive Officer and as a member of the board of directors at Pharmion Corporation, which he founded in 2000 and sold to Celgene Corporation in 2008. From 1992 through 1998, Mr. Mahaffy was President and Chief Executive Officer of NeXagen, Inc. and its successor, NeXstar Pharmaceuticals, Inc., a biopharmaceutical company. Prior to that, Mr. Mahaffy was a Vice President at the private equity firm E.M. Warburg Pincus and Co. Mr. Mahaffy also serves on the boards of directors of Orexigen Therapeutics, Inc. (NASDAQ: OREX) and Flexion Therapeutics, Inc. He is also a trustee of Lewis and Clark College. Mr. Mahaffy has a B.A. in international affairs from Lewis and Clark College and a M.A. in international affairs from Columbia University. We believe that Mr. Mahaffy possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the venture capital industry, his historical knowledge, his operational and management expertise and his years of leadership experience.

*Erle T. Mast* is one of our co-founders and has served as our Executive Vice President and Chief Financial Officer since our inception. Previously, Mr. Mast served in the same role at Pharmion Corporation, beginning in 2002. From 1997 through 2002, Mr. Mast worked for Dura Pharmaceuticals, Inc. and its successor, Elan Corporation. From 2000 to 2002, he served as Chief Financial Officer for the Global Biopharmaceuticals business unit for Elan. From 1997 to 2000, Mr. Mast served as Vice President of Finance for Dura Pharmaceuticals. Prior to that, Mr. Mast was a partner with Deloitte & Touche, LLP. Mr. Mast also serves on the boards of directors of Somaxon Pharmaceuticals, Inc. (NASDAQ: SOMX) and Zogenix, Inc. (NASDAQ: ZGNX). Mr. Mast received a B.Sc. in business administration from California State University Bakersfield.

*Dr. Andrew R. Allen* is one of our co-founders and has served as our Executive Vice President of Clinical and Pre-Clinical Development and Chief Medical Officer since our inception. Previously, Dr. Allen served in the same role at Pharmion Corporation, beginning in 2006. From 2004 through 2006, Dr. Allen served as Vice President of BioPharma Development and Head of the Oncology Therapeutic Unit for Chiron Corporation. Previously, Dr. Allen served as global project head in Abbott Laboratories oncology franchise, and prior to that he progressed through positions of increasing responsibility at the management consulting firm McKinsey & Company, with a focus on oncology strategy. Dr. Allen serves on the board of directors of Nodality, Inc., a

privately-held biotechnology company. Dr. Allen qualified in medicine at Oxford University and earned his Ph.D. from the Imperial College of Science, Technology and Medicine in London. Dr. Allen also obtained post-graduate internal medicine qualification as a Member of Royal College of Physicians (MRCP).

*Gillian C. Ivers-Read* is one of our co-founders and has served as our Executive Vice President of Technical Operations and Chief Regulatory Officer since our inception. Previously, Ms. Ivers-Read served as Executive Vice President, Development Operations at Pharmion Corporation, beginning in 2002. From 1996 to 2001, Ms. Ivers-Read held various regulatory positions with Hoechst Marion Roussel and its successor, Aventis Pharmaceuticals, Inc., where she most recently held the position of Vice President, Global Regulatory Affairs. From 1994 to 1996, Ms. Ivers-Read was Vice President, Development and Regulatory Affairs for Argus Pharmaceuticals, and from 1984 to 1994, she served as a regulatory affairs director for Marion Merrell Dow. Ms. Ivers-Read serves on the board of Bio-Path Holdings, Inc. (OTC BB: BPTH). Ms. Ivers-Read received a B.Sc. in pharmacology from University College London.

*Steven L. Hoerter* has served as our Senior Vice President of Commercial since August 2011. From 2010 to 2011, Mr. Hoerter was General Manager and Management Center Head at Hoffmann-LaRoche Ltd. for the Sub-Saharan Africa and Indian Ocean Region, based in Johannesburg, South Africa. From 2005 to 2010, Mr. Hoerter held a variety of positions at Genentech, Inc., including serving on the senior leadership team for Genentech s BioOncology business as Senior Director, Pipeline Development and Commercial Operations. Prior to that he worked at Chiron Corporation and Eli Lilly and Company. During Mr. Hoerter s 11-year career at Lilly, he held positions in sales, business development, marketing and business unit management in the US, Europe and Africa. Mr. Hoerter has a B.A. in Russian and Political Science from Bucknell University, an M.B.A. from Tilburg University and a M.S. in Management from Purdue University.

## Directors

*Brian G. Atwood* has served as a member of our board of directors since our inception. In 1999, he co-founded and currently serves as a Managing Director for Versant Ventures, a healthcare-focused venture capital firm. Prior to founding Versant Ventures, Mr. Atwood served as a general partner of Brentwood Associates, a venture capital firm. Mr. Atwood also serves on the boards of several pharmaceutical and biotechnology companies, including Cadence Pharmaceuticals, Inc. (NASDAQ: CADX), Five Prime Therapeutics, Immune Design Corp., Groove Biopharma Corporation (formerly known as Mirina Corporation), OpGen, Inc., PhaseRx, Inc., Spark Diagnostics, Trius Therapeutics, Inc. (NASDAQ: TSRX) and Veracyte, Inc. Mr. Atwood also served on the board of Pharmion Corporation from January 2000 until the company s acquisition in 2008. Mr. Atwood holds a B.S. in biological sciences from the University of California, Irvine, a M.S. in ecology from the University of California, Davis, and an M.B.A. from Harvard University. We believe that Mr. Atwood possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the venture capital industry, his years of business and leadership experience and his financial sophistication and expertise.

*Dr. M. James Barrett* has served as a member of our board of directors since our inception. Since September 2001, he has served as a general partner of New Enterprise Associates Inc., a venture capital firm focusing on the healthcare, information technology and energy technology industries. From 1997 to 2001, Dr. Barrett served as Chairman and Chief Executive Officer of Sensors for Medicine and Science, which he founded in 1997. Dr. Barrett serves on the boards of several pharmaceutical and biotechnology companies, including Amicus Therapeutics, Inc. (NASDAQ: FOLD), Blend Biosciences, Inc., Cardioxyl Pharmaceuticals, Inc., GlycoMimetics, Inc., PhaseBio Pharmaceuticals, Inc., Predictive Biosciences, Inc., Psyadon Pharmaceuticals, Inc. (formerly known as Ruxton Pharmaceuticals, Inc.), Roka Bioscience, Inc., Supernus Pharmaceuticals, Inc., Targacept, Inc. (NASDAQ: TRGT), and Zosano Pharma, Inc., as well as continuing to serve as Chairman of Sensors for Medicine and Science. Dr. Barrett previously served on the board of, among others, YM Biosciences, Inc. (NYSE AMEX: YMI), and also served on the board of Pharmion Corporation from December 2001 until the company s acquisition in 2008. Dr. Barrett received a Ph.D. in biochemistry from the University of Tennessee, his M.B.A. from the University of Santa Clara, and a B.S. in chemistry from Boston College. We believe that Dr. Barrett possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the venture capital industry and his years of business and leadership experience.

*Dr. James C. Blair* has served as a member of our board of directors since our inception. Since 1985, he has served as a general partner of Domain Associates, L.L.C., a venture capital management company focused on life sciences. Dr. Blair currently serves on the boards of Applied Proteomics, Inc., Astute Medical, Inc., aTyr Pharma, Inc., Cadence Pharmaceuticals, Inc. (NASDAQ: CADX), CoDa Therapeutics, Inc., IntegenX, Inc., Meritage Pharma Inc., NeuroPace, Inc., and Zogenix, Inc. (NASDAQ: ZGNX). He has previously served on the boards of over 40 life science ventures including Amgen Inc. (NASDAQ: AMGN), Aurora Biosciences Corp., Amylin Pharmaceuticals, Inc. (NASDAQ: AMLN), Applied Biosystems Inc., Dura Pharmaceuticals, Inc., Nuvasive, Inc. (NASDAQ: NUVA), and Volcano Corporation (NASDAQ: VOLC). Dr. Blair served on the board of Pharmion Corporation from January 2000 until the company s acquisition in 2008. Dr. Blair currently serves on the board of directors of the Prostate Cancer Foundation, and he is on the advisory boards of the Department of Molecular Biology at Princeton University, the USC Stevens Institute for Innovation, the Division of Chemistry and Chemical Engineering at the California Institute of Technology Innovation Initiative. He received a B.S.E. from Princeton University and M.S.E. and Ph.D. degrees from the University of Pennsylvania, all in electrical engineering. We believe that Dr. Blair possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the life science industry and his years of business and leadership experience.

*Paul Klingenstein* has served as a member of our board of directors since our inception. He is the Managing Partner of Aberdare Ventures, a healthcare-focused venture capital firm he formed in 1999. Prior to founding Aberdare, Mr. Klingenstein worked in venture capital and private equity with Warburg Pincus and Accel Partners, and was an advisor to the Rockefeller Foundation. Mr. Klingenstein currently serves on the boards of Anacor Pharmaceuticals, Inc. (NASDAQ: ANAC) and EnteroMedics Inc. (NASDAQ: ETRM). Mr. Klingenstein has previously served on the boards of Ablation Frontiers, Inc., Alibris, Ample Medical Corporation, Aviron, Conatus Pharmaceuticals Inc., EP Technologies, Glycomed Inc., Idun Pharmaceuticals Inc., Isis Pharmaceuticals, Inc. (NASDAQ: ISIS), Nevro Corp., Pharmion Corp., Posit Science Corporation, U.S. Behavioral Health, VertiFlex Inc., Viagene Inc., and Xomed Surgical Products Inc. He is currently the Chairman of the Board of the International AIDS Vaccine Initiative, and is an advisory board member of the University of California Berkeley School of Public Health. He has also served on the boards of various educational and non-profit institutions. Mr. Klingenstein received an A.B. in anthropology from Harvard University and an M.B.A. from Stanford University. We believe that Mr. Klingenstein possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the venture capital industry and his years of business and leadership experience.

*Edward J. McKinley* has served as a member of our board of directors since our inception. Mr. McKinley spent 20 years serving in various roles at the private equity firm Warburg Pincus, including managing the firm s private equity activity in Europe and serving on the firm s Management Committee. Before joining Warburg Pincus, he was with the management consulting firm McKinsey & Company. Mr. McKinley also served on the board of Pharmion Corporation from October 2004 until the company s acquisition in 2008 and currently serves and on the boards of several private companies, and as an advisor or investment committee head for several investment management firms. He also serves on the investment committee of several endowments, and on the boards or advisory boards of several non-profit organizations. He graduated Phi Beta Kappa with honors from Stanford University and holds a graduate management degree from Yale University. We believe that Mr. McKinley possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in the venture capital industry, his years of business and leadership experience and his financial sophistication and expertise.

*Dr. John C. Reed* has served as a member of our board of directors since our inception. Dr. Reed served as the President and Chief Executive Officer since January 2002, and in 2010 he became Chief Executive Officer, Professor, and Donald Bren Chief Executive Chair, of Sanford-Burnham Medical Research Institute, an independent, nonprofit, public benefit organization dedicated to biomedical research. Dr. Reed has been with Sanford-Burnham Medical Research Institute for the past 19 years, serving as the Deputy Director of the Cancer Center beginning in 1994, as Scientific Director of the Institute beginning in 1995, and as Cancer Center Director in 2002. He also currently serves as an adjunct professor in the medical schools at University of California San Diego School of Medicine and University of Central Florida, and in the graduate Schools of Arts and

Sciences at the University of Florida and San Diego State University s Biology department. Dr. Reed was recognized as the world s most highly cited scientist in the field of cell biology for the decade 1995-2005. He is the author of approximately 800 scientific and medical journal publications and more than 50 book chapters. Dr. Reed currently serves on the board of Isis Pharmaceuticals, Inc. (NASDAQ: ISIS). He has previously served on the boards of Stratagene Inc., Repros Therapeutics Inc. (NASDAQ: RPRX), Pharmion Corporation and the Independent Citizen s Oversight Committee of the California Institute for Regenerative Medicine. Dr. Reed graduated Phi Beta Kappa from the University of Virginia and earned an M.D. and Ph.D. from the University of Pennsylvania School of Medicine. He completed his residency in pathology and laboratory medicine at the Hospital of the University of Pennsylvania and was a postdoctoral fellow in molecular biology at the Wistar Institute of Anatomy and Biology. We believe that Dr. Reed possesses specific attributes that qualify him to serve as a member of our board of directors, including his scientific background and experience as the Chief Executive Officer of the prestigious Sanford-Burnham Medical Research Institute, as well as his expertise reflected in his significant scientific and medical journal publications.

*Dr. Thorlef Spickschen* has served as a member of our board of directors since our inception. From 1994 to 2001, Dr. Spickschen was chairman and Chief Executive Officer of BASF Pharma/Knoll AG. From 1984 to 1994, Dr. Spickschen worked with Boehringer Mannheim GmbH, where he was responsible for sales and marketing and has been Chairman of its Executive Board since 1990. From 1976 to 1984, Dr. Spickschen was Managing Director, Germany and Central Europe for Eli Lilly & Co. Dr. Spickschen is currently Chairman of BIOTEST AG, a publicly traded company in Germany and on the board of Cytos Biotechnology AG, which is publicly-traded in Switzerland. Dr. Spickschen also served on the board of Pharmion Corporation from December 2001 through the company s acquisition in 2008. Dr. Spickschen received a Doctorate in business management from the University of Cologne. We believe that Dr. Spickschen possesses specific attributes that qualify him to serve as a member of our board of directors, including his business and leadership experience in the biomedical industry.

## **Composition of the Board of Directors**

Our board of directors consists of eight directors, seven of whom, including Drs. Barrett, Blair, Reed and Spickschen and Messrs. Atwood, Klingenstein and McKinley, qualify as independent directors under the corporate governance standards of the NASDAQ Global Select Market.

## **Board Committees and Independence**

Rule 5605 of the NASDAQ Marketplace Rules requires a majority of a listed company s board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ Marketplace Rules require that, subject to specified exceptions, each member of a listed company s audit, compensation and nominating and governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an independent director if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In June 2011, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that none of Drs. Barrett, Blair, Reed and Spickschen or Messrs. Atwood, Klingenstein and McKinley, representing seven of our eight directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is independent as that term is defined under Rule 5605(a)(2) of the NASDAQ Marketplace Rules. Our board of directors also determined that Messrs. Atwood, Klingenstein and McKinley, who comprise our audit committee,

Drs. Barrett, Blair and Spickschen, who comprise our compensation committee, and Drs. Barrett and Blair and Mr. Atwood, who comprise our nominating and corporate governance committee, satisfy the independence standards for such committees established by the SEC and the NASDAQ Marketplace Rules, as applicable. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

#### Role of the Board in Risk Oversight

Our audit committee is primarily responsible for overseeing our risk management processes on behalf of the full board of directors. The audit committee receives reports from management at least quarterly regarding our assessment of risks. In addition, the audit committee reports regularly to the full board of directors, which also considers our risk profile. The audit committee and the full board of directors focus on the most significant risks we face and our general risk management strategies. While our board of directors oversees our risk management, company management is responsible for day-to-day risk management processes. Our board of directors expects company management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the audit committee and the board of directors. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our board leadership structure, which also emphasizes the independence of the board in its oversight of our business and affairs, supports this approach.

#### **Term and Class of Directors**

Our board of directors is divided into three staggered classes of directors of the same or nearly the same number, designated Class I, Class II and Class III. Messrs. Barrett, Mahaffy and Spickschen serve as Class I directors whose terms expire at the 2012 annual meeting of stockholders. Messrs. Atwood, Blair and Klingenstein serve as Class II directors whose terms expire at the 2013 annual meeting of stockholders. Messrs. McKinley and Reed serve as Class III directors whose terms expire at the 2014 annual meeting of stockholders. Messrs. McKinley and Reed serve as Class III directors whose terms expire at the 2014 annual meeting of stockholders. At each annual meeting of stockholders beginning in 2012, successors to the class of directors whose term expires at that annual meeting will be elected for a three-year term.

Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one-third of the directors. The division of the board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control. Our directors may be removed for cause only by the affirmative vote of the holders of at least a majority of our voting stock.

## **Term of Executive Officers**

Each of our executive officers is appointed and serves at the discretion of our board of directors and is appointed by the board of directors to serve until a successor is appointed and qualified or until his or her death, resignation, retirement or removal, if earlier.

#### **Director Compensation**

For a discussion of our director compensation arrangements, see Executive and Director Compensation Director Compensation.

#### **Board Committees**

Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. Our board of directors may from time to time establish other committees.

#### Audit Committee

The members of the audit committee are Messrs. Atwood, Klingenstein and McKinley, each of whom qualifies as an independent director under the corporate governance standards of the NASDAQ Stock Market and the independence requirements of Rule 10A-3 of the Exchange Act. Mr. McKinley serves as chairman of this committee. Our board of directors has determined that Mr. McKinley qualifies as an audit committee financial expert as such term is defined in Item 407(d)(5) of Regulation S-K.

Our audit committee oversees a broad range of issues surrounding our accounting and financial reporting processes and audits of our financial statements, and assists our board of directors by: (1) overseeing and monitoring the quality and integrity of our financial statements, our compliance with legal and regulatory requirements and our internal accounting procedures and systems of internal controls (2) assuming direct responsibility for the appointment, compensation, retention and oversight of work of any independent registered public accounting firm engaged for the purpose of performing any audit, review or attestation services, for overseeing and monitoring our independent registered public accounting firm s qualifications and independence, and for dealing directly with any such accounting firm, including resolving disagreements between management and our independent auditor; (3) providing a medium for consideration of matters relating to any audit issues; and (4) preparing the audit committee report that the rules require be included in our filings with the SEC. The written charter for the audit committee is available on our website.

#### **Compensation Committee**

The members of the compensation committee are Drs. Barrett, Blair and Spickschen, each of whom qualifies as an independent director under the corporate governance standards of the NASDAQ Stock Market. Each member of our compensation committee is a non-employee director, as defined in Rule 16b-3 promulgated under the Exchange Act and is an outside director, as defined pursuant to Section 162(m) of the Code. Dr. Blair serves as chairman of this committee. The purpose of the compensation committee is to assist our board of directors in discharging its responsibilities relating to (1) setting our compensation program and compensation and benefits of all of our executive officers and directors; (2) providing oversight for our incentive and equity-based compensation plans; (3) establishing and reviewing general policies relating to compensation and benefits of our employees; and (4) preparing the compensation committee report required to be included in our proxy statement under the rules and regulations of the SEC. The compensation committee reviews and evaluates, at least annually, the performance of the compensation committee and its members, including compliance of the compensation committee with its charter. The written charter for the compensation committee is available on our website.

#### Nominating and Corporate Governance Committee

The members of the nominating and corporate governance committee are Drs. Barrett and Blair and Mr. Atwood, each of whom qualifies as an independent director under the corporate governance standards of the NASDAQ Stock Market. Dr. Barrett serves as chairman of this committee. The purpose of our nominating and corporate governance committee is to assist our board of directors in discharging its responsibilities relating to (1) developing and recommending criteria for selecting new directors, and identifying, screening and recommending nominees for election as directors; (2) screening and recommending to the board of directors individuals qualified to become executive officers; (3) evaluating our board of directors and its dealings with management; (4) developing, reviewing and recommending corporate governance guidelines and a code of business ethics; and (5) generally advising our board of directors on other corporate governance and related matters. The written charter for the nominating and corporate governance committee is available on our website.

#### **Compensation Committee Interlocks and Insider Participation**

No member of our compensation committee has ever been an executive officer or employee of ours. For a description of certain transactions between us and certain members of our compensation committee and their affiliated entities, see Certain Relationships and Related Party Transactions. None of our officers currently serves, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more officers serving as a member of our board of directors or compensation committee.

#### Limitation on Liability and Indemnification of Directors and Officers

Our amended and restated certificate of incorporation and bylaws limits our directors and officers liability to the fullest extent permitted under Delaware corporate law. Specifically, our directors and officers will not be liable to us or our stockholders for monetary damages for any breach of fiduciary duty by a director or officer, except for liability:

for any breach of the director s or officer s duty of loyalty to us or our stockholders;

for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

under Section 174 of the Delaware General Corporation Law (unlawful dividends or stock repurchases); or

for any transaction from which a director or officer derives an improper personal benefit. If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of our directors or officers shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The provision regarding indemnification of our directors and officers in our amended and restated certificate of incorporation will generally not limit liability under state or federal securities laws.

Delaware law and our amended and restated certificate of incorporation and bylaws provide that we will, in certain situations, indemnify any person made or threatened to be made a party to a proceeding by reason of that person s former or present official capacity with us against judgments, penalties, fines, settlements and reasonable expenses. Any person is also entitled, subject to certain limitations, to payment or reimbursement of reasonable expenses (including attorneys fees and disbursements and court costs) in advance of the final disposition of the proceeding.

We maintain a directors and officers insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

In addition, we have entered into indemnification agreements with each of our directors and named executive officers, which also provide, subject to certain exceptions, for indemnification for related expenses, including, among others, reasonable attorney s fees, judgments, fines and settlements incurred in any action or proceeding.

There is currently no pending material litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought.

## **Code of Business Ethics**

We have adopted a written Code of Business Ethics that is reviewed and published annually and contains the ethical principles by which our chief executive officer and chief financial officer, among others, are expected to conduct themselves when carrying out their duties and responsibilities. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding amendments to, or waivers from, a provision of our Code of Business Ethics by posting such information on our website at *www.clovisoncology.com*. Our Code of Business Ethics

is available on our website.

#### EXECUTIVE AND DIRECTOR COMPENSATION

#### **Compensation Discussion and Analysis**

Our named executive officers for our fiscal year ending December 31, 2011 consisted of the following individuals:

Patrick J. Mahaffy, our President and Chief Executive Officer;

Erle T. Mast, our Executive Vice President and Chief Financial Officer;

Gillian C. Ivers-Read, our Executive Vice President of Technical Operations and Chief Regulatory Officer;

Andrew R. Allen, our Executive Vice President of Clinical and Pre-Clinical Development and Chief Medical Officer; and

Steven L. Hoerter, our Senior Vice President of Commercial. Compensation Overview and Objectives

Compensation decisions with respect to our named executive officers have generally been made based on the need to attract, motivate and retain talented executives, to align executive interests with those of our stockholders, and to motivate the achievement of individual objectives and key strategic financial and operational goals. To that end, our compensation programs are designed to provide fixed compensation within market competitive ranges, to incentivize our executives to achieve performance goals that maximize rational growth, and to motivate our executives to achieve the greatest possible returns for our stockholders. The fixed aspects of our compensation program including base salary and benefits enable us to compensate our executives at market compensation levels, which is necessary to attract and retain top talent. Our annual incentive programs allow us to pay for performance, based on achievement of company-wide performance targets, as well as individual goals. Finally, our stock incentive plans enable us to promote executive retention and to directly link the value of the compensation paid to our executive officers to the value of our common stock.

#### **Determination of Compensation**

The compensation committee of our board of directors, which meets regularly to discuss compensation matters as they arise, is primarily responsible for reviewing compensatory arrangements with, and determining appropriate compensation levels and arrangements for, our named executive officers in light of our compensation philosophies and objectives. Our named executive officers frequently provide input and recommendations to the compensation committee on compensation matters, and our President and Chief Executive Officer periodically reviews each named executive officer s overall performance and makes recommendations to the compensation committee on the elements of the named executive officers compensation. However, our President and Chief Executive Officer does not participate in discussions regarding his compensation, and recuses himself from meetings when his compensation is discussed.

In determining the levels and mix of compensation, our compensation committee has not generally relied on formulaic guidelines, but rather has maintained a flexible approach to compensation determinations which allows it to adapt the various elements of compensation to motivate individual executives and achieve our specific strategic and financial goals. The compensation committee considered both individual performance and contributions to our growth and success, as well as overall achievement of performance goals, in making its compensation determinations.

In 2011, the compensation committee engaged Radford, an Aon Hewitt company, to review and advise on our compensation practices. Radford prepared a report surveying the compensation policies of our peer group, including compensation and benefits of key employees, and comparing the results of the survey with our existing compensation practices. The compensation committee used Radford s report as one factor for determining the compensation of our named executive officers during 2011 in order to ensure that the compensation for our named executive officers was set at competitive levels. The compensation committee also relied on its members collective experience and expertise in

determining the appropriate levels of compensation.

With respect to compensation determinations made in 2011, our peer group consisted of the following companies, which were determined to be (i) biotechnology companies with Phase II & III compounds in development, (ii) generally of a similar size to us, and (iii) located in technology hubs or higher cost of living areas (to reflect the recruiting challenges of the San Francisco/Bay Area and Boulder, Colorado):

Aegerion Pharmaceuticals Affymax Alimera Sciences Anacor Pharmaceuticals Anthera Pharmaceuticals Ardea Biosciences **ARIAD** Pharmaceuticals Arrav BioPharma **AVEO Pharmaceuticals** Endocyte Enzon Pharmaceuticals Exelixis Geron Infinity Pharmaceuticals Ligand Pharmaceuticals MAP Pharmaceuticals Micromet **OncoGenex Pharmaceuticals** Oncothyreon **Trius Therapeutics** ZIOPHARM Oncology

In setting 2011 compensation, the compensation committee reviewed the market data presented in the Radford report and compared each named executive officer s base salary, target annual performance bonus and equity compensation value, separately and in the aggregate, to amounts paid to similarly-situated executives at our peer companies. The compensation committee s determinations with respect to 2011 compensation were intended generally to target base salary, annual performance bonus value, equity compensation value and overall compensation for each named executive officer to be between the median and 75<sup>th</sup> percentile of the compensation packages offered by our peer companies. The compensation committee believes that targeting compensation within this range helps achieve the compensation objectives described above. However, compensation for each executive may vary from this range depending on other factors the compensation committee considers relevant, such as internal pay equity amongst our named executive officers or levels of authority, responsibility and experience of our named executive officers that exceed the norms for individuals holding comparably-titled positions at other companies.

## **Components of Compensation for Fiscal 2011**

Compensation packages of our named executive officers generally consist of base salary, an annual performance bonus, retirement and health benefits, and equity compensation. We believe that the relationship of fixed to performance-based compensation was properly balanced and provided us with an effective means to attract, motivate and retain our named executive officers, as well as reward them for increase in the value of our common stock.

## **Base Salary**

The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive s skill set, experience, roles, and responsibilities. Base salary amounts for each named executive officer were originally determined at the time of the named executive officer s appointment to their position with us. The compensation committee periodically reviews the base salary of each named executive officer and may make adjustments as and when appropriate, consistent with our compensation objectives and based on the compensation committee s consideration of an executive s individual performance and our overall performance. In 2011, in order to provide each of our named executive officers with base salaries that are competitive with our publicly traded peer companies, the annual base salaries of each of Messrs. Mahaffy, Mast, and Allen and Ms. Ivers-Read were increased, as of March 1, 2011, to \$450,000, \$350,000, \$375,000, and \$350,000,

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respectively. Mr. Hoerter s 2011 base salary of \$310,000 was established by the compensation committee at his time of hire based on its consideration of factors such as the scope of his roles and responsibilities, our overall compensation program, market standards for compensation paid to similarly-situated executives at other companies and their general knowledge of the competitive market.

#### Annual Performance Bonuses

Annual performance bonuses are intended to reward our executives for achieving annual company-wide performance goals that are important to our success. In the initial establishment of compensation packages for the named executive officers in 2009, the board of directors reviewed the advisability of, and approved the use of, a proposed structure of bonuses to be paid to the named executive officers based on the achievement of certain corporate goals. As part of that process, the board of directors determined that Mr. Mahaffy s target annual bonus for each calendar year should equal 50% of his annual base salary and that the target annual bonuses for Messrs. Mast and Allen and Ms. Ivers-Read should equal 40% of their respective annual base salaries. The 2011 target bonus percentages for Messrs. Mahaffy, Mast, and Allen and Ms. Ivers-Read have not changed from their 2009 levels, as they are generally between the median and 75<sup>th</sup> percentile of the target bonus percentages offered by our peer companies. Mr. Hoerter s 2011 target bonus percentage of 35% was established by the compensation committee at his time of hire based on its consideration of factors such as the scope of his roles and responsibilities, our overall compensation program, market standards for compensation paid to similarly-situated executives at other companies and their general knowledge of the competitive market.

For 2011, the compensation committee did not set any specific individual performance targets for the payment of bonuses to our named executive officers. Instead, in the first quarter of 2012, the compensation committee subjectively reviewed our overall performance against our 2011 corporate goals and business development progress and determined to pay bonus awards in an amount equal to 100% of target levels based on our overall performance during 2011. The 2011 corporate goals established by our board of directors consisted of (i) the enrollment of a certain number of patients for CO-101 (with actual achievement by January 2, 2012), (ii) the establishment of the methodology to determine hENT1 status of patients in the CO-101 LEAP trial (which was established in the fourth quarter of 2011), (iii) the completion of all IND enabling studies for CO-1686 to allow for an IND filing in the first quarter of 2012 (which was submitted in December 2011 and accepted for filing by the FDA in January 2012), (iv) the in-licensing of a third development program (which was completed in June 2011 with our entry into a license agreement with Pfizer for rights to rucaparib), (v) the achievement of a 2011 cash burn target of less than \$47 million (which actual cash burn was \$40.5 million), and (vi) the completion of an initial public offering with new capital of at least \$50 million (which initial public offering resulted in \$139.1 million in gross proceeds, \$55.5 million of which are gross proceeds from persons who were our stockholders prior to our initial public offering and \$83.6 of which are gross proceeds from new investors).

#### **Equity Compensation**

We maintain the Clovis Oncology, Inc. 2009 Equity Incentive Plan, or the 2009 Plan, the terms of which are described below. On March 8, 2011, Mr. Mahaffy was granted options to purchase 206,897 shares of common stock pursuant to the 2009 Plan, and Messrs. Mast and Allen and Ms. Ivers-Read were each granted options to purchase 68,965 shares of common stock pursuant to the 2009 Plan, in each case at an exercise price per share of \$3.28 (which the compensation committee determined was the fair market value per share on the date of grant). The compensation committee determined that, because no new equity grants were made to our named executive officers in 2010, it was appropriate to grant awards in 2011 to provide sufficient incentive to maximize value for our stockholders, as well as a sufficient retention incentive for named executive officers. On August 29, 2011, in connection with the commencement of his employment, Mr. Hoerter was granted options to purchase 86,206 shares of common stock pursuant to the 2009 Plan, with an exercise price per share of \$11.02 (which the compensation committee determined was the fair market value per share on the date of grant). The compensation committee determined the number of options awarded to Mr. Hoerter based upon his roles and responsibilities and based on a desire to align his interests with those of our stockholders at the outset of his employment by providing him with a grant of equity compensation. Twenty-five percent of the shares of common stock subject to the options will vest on the one-year anniversary of the date of grant, and the remainder will vest in substantially equal installments over the 36 months immediately following such anniversary, subject to continued employment through such date. The options may be exercised by the named executive officers prior to vesting in exchange for shares of restricted stock with the same vesting schedule as the options. The shares of our common stock acquired upon exercise of an option (or upon vesting of any restricted shares acquired upon an exercise prior to the vesting) are subject to a 180-day lock-up period following an initial public offering of the Company.

## **Employment Agreements**

On August 24, 2011, we entered into employment agreements (described in more detail below) with Messrs. Mahaffy, Mast, and Allen and Ms. Ivers-Read to replace each of their existing at-will employment, confidential information, invention assignment and arbitration agreements. With the assistance of our compensation consultants, the compensation committee determined that it was advisable to enter into new employment agreements with each executive with a title of executive vice president or higher to ensure that the compensation and benefits provided to such executives was competitive with our publicly traded peer companies and to ensure that we have adequate protection in the form of restrictive covenants following a termination of employment.

Additionally, to attract Mr. Hoerter to join the Company, in August 2011, we entered into an offer letter with Mr. Hoerter which included standard confidential information, invention assignment and non-solicitation provisions. The offer letter has been superseded by an employment agreement (described in more detail below).

# **Retirement Benefits**

In 2011, we provided retirement benefits to our named executive officers through the Clovis Oncology, Inc. 401(k) plan, a defined contribution pension plan, on the same basis as our other employees. We make matching contributions to the account of each eligible employee under the 401(k) plan of 100% of the first 4% of an employee s contributions to his or her account.

# Other Benefits

In 2011, our named executive officers were eligible to receive the same basic benefits, including health benefits and a gross up payment on taxable life insurance payments, that were available to our other employees. We also provided certain additional perquisites to our named executive officers, including supplemental long term disability coverage and health club expenses, which we believe are necessary in light of the competitive market for talent in our industry. We also paid Mr. Hoerter s expenses associated with his relocation upon joining the Company, which we believed was a necessary inducement for him to join the Company.

## **Compensation Decisions Relating to Fiscal Year 2012**

## 2012 Option Grants

On March 1, 2012, Mr. Mahaffy was granted options to purchase 150,000 shares of common stock pursuant to the Clovis Oncology, Inc. 2011 Equity Incentive Plan, or the 2011 Plan, the terms of which are described below, Mr. Hoerter was granted options to purchase 60,000 shares of common stock pursuant to the 2011 Plan, and Messrs. Mast and Allen and Ms. Ivers-Read were each granted options to purchase 50,000 shares of common stock pursuant to the 2011 Plan, in each case at an exercise price per share of \$24.74 (which was the closing price per share of our common stock on the date of grant). Twenty-five percent of the shares of common stock subject to the options will vest on the one-year anniversary of the date of grant, and the remainder will vest in substantially equal installments over the 36 months immediately following such anniversary, subject to continued employment through such date. In the event that the executive semployment is terminated by us other than on account of the executive s misconduct or if the executive resigns for good reason, in each case within twelve months following a change in control, all unvested options will vest.

We adopted the 2011 Plan to afford our compensation committee with more flexibility by allowing grants of a wide variety of equity awards to our key employees, directors and consultants, including incentive and nonqualified stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards, and other stock-based awards. The 2011 Plan is designed to assist us in attracting, retaining, motivating and rewarding key employees, directors, and consultants, and promoting the creation of long-term value for our stockholders by closely aligning the interests of the participants with those of our stockholders.

The 2011 Plan initially reserved for issuance a number of shares of common stock equal to the sum of (x) 1,250,000, and (y) the number of shares of our common stock that were available for grant under the 2009 Plan as of the effective date of our initial public offering. No future grants are being made pursuant to the 2009 Plan. The number of shares of our common stock reserved for issuance under the 2011 Plan will be increased

(i) from time to time by the number of shares of our common stock forfeited upon the expiration, cancellation, forfeiture, cash settlement or other termination of awards under the 2009 Plan, and (ii) at the discretion of our board of directors, on the date of each annual meeting of our stockholders, by up to the lesser of (x) a number of additional shares of our common stock representing 4% of our then-outstanding shares of common stock on such date and (y) 2,758,621 shares of our common stock (8,000,000 shares of our common stock prior to a 1 for 2.9 reverse stock split in September 2011).

#### Increase to Base Salaries

On January 27, 2012, in order to provide each of our named executive officers with base salaries that are competitive with our publicly traded peer companies, the annual base salaries of each of Messrs. Mahaffy, Mast, Allen, and Hoerter and Ms. Ivers-Read were increased effective March 1, 2012 to \$500,000, \$360,500, \$386,500, \$315,000 and \$360,500, respectively.

#### Employment Agreement with Steven L. Hoerter

On March 22, 2012, we entered into an employment agreement with Steven L. Hoerter which contains substantially similar terms to the employment agreements we previously entered into with Messrs. Mast and Allen and Ms. Ivers-Read, except that Mr. Hoerter s employment agreements provides for an annual base salary of no less than \$315,000 and a target bonus equal to 35% of his then-current base salary. Our board of directors determined that it was advisable and appropriate to enter into this agreement with Mr. Hoerter to ensure that the compensation and benefits provided to Mr. Hoerter was competitive with our publicly traded peer companies and to ensure that we have adequate protection in the form of restrictive covenants following a termination of employment.

#### **Compensation Risk Management**

Our compensation committee has reviewed our overall compensation policies and practices to determine whether those policies and practices are reasonably likely to have a material adverse effect on us and has concluded that they are not reasonably likely to have a material effect on us. In conducting its analysis, the compensation committee considered the following factors:

Base salary: Base salary is a fixed portion of overall compensation that is set based on factors such as the scope of an employee s responsibilities, and which provides income regardless of our short-term performance. Our compensation committee does not believe that base salary creates an incentive for our employees to take undue risks.

Bonus programs: Bonuses are designed to reward employees for achieving annual company-wide performance goals that are important to our success, and intended to compensate our employees for achieving such goals. Although the compensation committee (and previously the board of directors) has historically based bonuses on the achievement of company-wide goals, the actual amount of any bonus is subject to board of directors discretion. For these reasons, our compensation committee does not believe that our bonus programs encourage employees to take risks which could have an adverse effect on us.

Equity compensation: Equity awards are designed to encourage our employees to align their interests with the long-term interests of our stockholders. Our compensation committee believes that equity compensation discourages our employees from taking unnecessary risks because the ultimate value of the equity awards is determined based on the long-term appreciation in the value of our stock.

After considering the risk implications of each element of the above elements of our overall compensation program, our compensation committee concluded that our overall compensation policies and practices are not likely to have a material adverse effect on us.

## **Executive Compensation**

The following table shows the compensation of our principal executive officer, our principal financial officer and our other named executive officers for 2010 and 2011.

## Summary Compensation Table

Name and principal position	Year	Salary (\$)	Bonus (\$)	Option awards <sup>(1)</sup> (\$)	All Other compensation <sup>(2)</sup> (\$)	Total (\$)
Patrick J. Mahaffy	2011	437,500	225,000	448,987	13,873	1,125,360
President and Chief Executive Officer	2010	375,000	75,000		12,554	462,554
Erle T. Mast	2011	345,833	140,000	149,661	14,473	649,967
EVP, Chief Financial Officer	2010	325,000	52,000		12,562	389,562
Gillian C. Ivers-Read	2011	345,833	140,000	149,661	24,182	659,676
EVP of Technical Operations and Chief Regulatory Officer	2010	325,000	52,000		19,768	396,769
Andrew R. Allen	2011	366,667	150,000	149,661	15,685	682,012
EVP of Clinical and Pre-Clinical Development and Chief	2010	325,000	52,000		13,332	390,332
Medical Officer						
Steven L. Hoerter	2011	106,910	86,270(4)	612,600	59,404	865,185
Senior Vice President of Commercial <sup>(3)</sup>						

- (1) Amount represents the aggregate grant date fair value of option awards granted to our named executive officers in 2011 computed in accordance with FASB ASC Topic 718. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements included elsewhere in this prospectus. The amounts above reflect the Company s aggregate accounting expense for these awards and do not necessarily correspond to the actual value that will be recognized by the named executive officers.
- (2) Represents the matching contributions made during 2011 to our 401(k) plan on behalf of each named executive officer, as well as gross up payments on taxable life insurance payments of \$117, \$117, \$1,017 and \$26 for Messrs. Mahaffy, Mast, Allen and Hoerter, respectively, and \$2,915 for Ms. Ivers-Read. The amounts also reflect perquisites and benefits including supplemental long term disability coverage, health club expenses for Messrs. Mast and Allen and relocation expenses of \$59,188 for Mr. Hoerter.
- (3) Mr. Hoerter joined the Company on August 29, 2011.
- (4) Represents a \$50,000 signing bonus paid to Mr. Hoerter under the terms of his offer letter and a \$36,270 annual discretionary performance bonus earned by Mr. Hoerter for 2011.
   *Grant of Plan Based Awards Table*

The following table sets forth summary information regarding all grants of plan-based awards made to our named executive officers for the year ended December 31, 2011.

Grant Date

All Other Option Awards: Number of Exercise or Base Price of Option Awards<sup>(2)</sup> Grant Date Fair Value of Option Awards<sup>(3)</sup>

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		Securities Under- lying Options <sup>(1)</sup> (#)	(\$/Sh)	(\$)
Patrick J. Mahaffy	3/8/2011	206,897	3.28	448,987
Erle T. Mast	3/8/2011	68,965	3.28	149,661
Gillian C. Ivers-Read	3/8/2011	68,965	3.28	149,661
Andrew R. Allen	3/8/2011	68,965	3.28	149,661
Steven L. Hoerter	8/29/2011	86,206	11.02	612,600

<sup>(1)</sup> Twenty-five percent of the shares of common stock subject to the options will vest on the one-year anniversary of the date of grant, and the remainder will vest in substantially equal installments over the 36 months immediately following such anniversary, subject to continued employment through such date.

- (2) The exercise price of the options was set at the fair market value of one share of our common stock at the time of the grant, with fair market value being determined by our board of directors in good faith.
- (3) Amount represents the aggregate grant date fair value of option awards granted to our named executive officers in 2011 computed in accordance with FASB ASC Topic 718. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements included elsewhere in this prospectus.
  Narrative Disclosure Relating to Summary Compensation Table and Grant of Plan Based Awards Table

## Employment Agreements with Messrs. Mahaffy, Mast and Allen, and Ms. Ivers-Read

We are a party to employment agreements with Messrs. Mahaffy, Mast and Allen, and Ms. Ivers-Read, which agreements are substantially the same other than differences in base salary, target annual bonus percentages and severance. The employment agreements for Messrs. Mahaffy, Mast and Allen and Ms. Ivers-Read provide for an annual base salary of no less than \$450,000, \$350,000, \$375,000, and \$350,000, respectively. Additionally, the target annual bonuses are set at 50% of his annual base salary for Mr. Mahaffy and 40% of their respective annual base salaries for Messrs. Mast and Allen and Ms. Ivers-Read. In the event that a named executive officer s employment is terminated by us without just cause (as defined in the employment agreement) or by the executive for good reason (as defined in the employment agreement), the executive will, subject to his or her execution of a general release of claims and continued compliance with any restrictive covenants, be entitled to (i) any earned but unpaid bonus for the calendar year immediately preceding the calendar year of termination, (ii) continuation of his or her then-current base salary during the severance period and (iii) payment of an applicable percentage (the percentage of employee health care premium costs covered by us as of the date of termination) of the executive s COBRA premiums during the severance period. For purposes of the employment agreements, the term severance period generally means 9 months for Mr. Mahaffy and 6 months for Messrs. Mast and Allen and Ms. Ivers-Read, except that the severance period will increase to 24 months for Mr. Mahaffy and 12 months for Messrs. Mast and Allen and Ms. Ivers-Read in the event that such termination occurs during the 12 months following a change in control (as defined in the employment agreement). Additionally, in the event that such termination occurs within 12 months following a change in control, the executives will also be entitled to (x) accelerated vesting of all outstanding equity awards, and (y) an amount equal to the executive s then-current target bonus, payable in equal monthly installments during the severance period. In such a circumstance, each named executive officer will also be entitled to a gross-up payment for payments that result in an excise tax imposed by Section 4999 of the Internal Revenue Code, subject to a maximum gross-up payment of \$2,000,000.

Following any termination of a named executive officer s employment, he or she will be subject to customary noncompete restrictions for 6 months (or in the case of Mr. Mahaffy, 9 months) and also a customary 12 month nonsolicit period with respect to employees and customers.

## Offer Letter with Mr. Hoerter

In 2011, we entered into an at-will employment letter agreement with Mr. Hoerter, pursuant to which Mr. Hoerter became our Senior Vice President of Commercial. Pursuant to the letter agreement, Mr. Hoerter was entitled to an initial base salary of \$310,000 per year and a one-time bonus of \$100,000, of which \$50,000 was paid on his start date and the remaining \$50,000 will be paid on the first anniversary of his start date, if he remains employed through such date. The letter agreement also provided for the grant to Mr. Hoerter of an option to purchase 86,206 shares of our common stock. As a condition to his employment, Mr. Hoerter also executed our standard confidential information, invention assignment and non-solicitation agreement. This offer letter has been superseded by an employment agreement (described in more detail above).

#### 2009 Equity Incentive Plan

We maintain the 2009 Plan, pursuant to which 903,816 shares of our common stock are reserved for grant to our employees, consultants and directors. Pursuant to the 2009 Plan, we may make grants of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock, and restricted stock units to our employees, consultants, and directors.

Upon the occurrence of a corporate event (such as a merger, recapitalization, stock split, reorganization, consolidation, or other similar event), the board of directors may adjust the number, class, and price of shares covered by each award granted under the 2009 Plan. In the event of a merger or a change in control (as defined in the 2009 Plan), the board of directors may determine that awards will (i) be assumed or substituted by the acquiring company, (ii) be terminated, (iii) become fully vested and exercisable, (iv) be terminated and cashed out, or (v) be treated in any combination thereof.

The board of directors may amend, suspend, alter, or terminate the 2009 Plan or awards granted under the 2009 Plan at any time, provided that a participant s rights with respect to outstanding awards may not be impaired without their express written consent. Absent earlier termination by the board of directors, the 2009 Plan will expire in February 2021. However, the board of directors has determined that no additional grants will be made under the 2009 Plan.

For an explanation of the amount of bonus paid to our named executive officers, please see the discussion of Annual Performance Bonuses in the Compensation Discussion and Analysis and the disclosure provided in the Summary Compensation Table, above.

## 2011 Employee Stock Purchase Plan

We maintain an employee stock purchase plan, the ESPP, that provides our employees, including our named executive officers, and employees of certain designated subsidiaries with an opportunity to purchase our ordinary shares at a discount on a tax-qualified basis through payroll deductions following the effective date of this registration statement. The ESPP is designed to qualify as an employee stock purchase plan under Section 423 of the U.S. Internal Revenue Code.

A total of 189,656 shares of our common stock, as the same may, at the discretion of our board of directors, be increased annually on the date of each annual meeting of our stockholders, by up to the lesser of (x) a number of additional shares of our common stock representing 1% of our then-outstanding shares of common stock and (y) 344,828 shares of our common stock have been reserved for issuance under the ESPP. The number of shares of our common stock reserved for issuance pursuant to the ESPP is also subject to adjustment in the event of certain changes in our corporate structure or ordinary shares. The ESPP provides for consecutive 6-month offering periods, during which participating employees may elect to have between 1% and 10% of their compensation withheld and applied to the purchase of ordinary shares at the end of the period. Unless otherwise determined by our compensation committee before an offering period, the purchase price will be the lesser of (x) 85% of the fair market value on the last day of the offering period.

In the event that there is a proposed merger or amalgamation with or into another corporation or a proposed sale of all or substantially all of our assets, all outstanding options under the ESPP will either be assumed by the successor corporation, parent or surviving corporation or the offering period then in effect will be shortened to end prior to the closing of such merger, amalgamation, or sale.

The ESPP is administered by our compensation committee. Our board of directors has the ability to suspend, terminate, or amend the ESPP at any time, although the board of directors generally may not amend the ESPP in such a way that would adversely affect the rights of any participating employee without that employee s consent or stockholder approval. Unless sooner terminated, the ESPP will terminate in August 2021.

## 2011 Cash Bonus Plan

We maintain a cash bonus plan pursuant to which annual performance-based cash bonuses (up to a maximum of \$10.0 million per year per employee) may be paid to our named executive officers at the discretion of our compensation committee. Bonuses that are paid pursuant to the cash bonus plan are intended to be considered performance-based compensation within the meaning of Section 162(m) of the Internal Revenue Code of 1986. The cash bonus plan is administered by our compensation committee, which has the discretion to grant awards under the cash bonus plan, set and adjust performance targets, and certify whether the applicable performance targets have been satisfied. The performance goals with respect to any bonus under the cash bonus

plan may be based on any one or more of the following business criteria: (i) enterprise value or value creation targets; (ii) after-tax or pre-tax profits or net income; (iii) after-tax or pre-tax margins; (iv) revenues; (v) operational cash flow or earnings before income tax or other exclusions; (vi) reduction of, or limiting the level of increase in, all or a portion of our bank debt or other long-term or short-term public or private debt or other similar financial obligations; (vii) consummation of debt and equity offerings; (viii) equity capital raised; (ix) earnings per share, earnings per diluted share or earnings per share from continuing operations; (x) return on capital employed; (xi) market share; (xii) the fair market value of our common stock; (xiii) the growth in the value of an investment in our common stock; (xiv) reduction of, or limiting the level of increase in, all or a portion of controllable expenses or costs or other expenses or costs; (xv) economic value added targets based on a cash flow return on investment formula; (xvi) customer satisfaction or service measures or indices; (xvii) employee satisfaction; (xviii) efficiency or productivity measures; (xix) asset management (e.g., inventory and receivable levels); (xx) compliance goals (e.g., regulatory and legal compliance); or (xxi) strategic business objectives, goals or initiatives.

Our board of directors or our compensation committee may amend or terminate our cash bonus plan at any time, although the cash bonus plan generally may not be amended in such a way that would adversely affect the rights of any participating employee without that employee s consent or stockholder approval or if such amendment would result in any bonus failing to be deductible under Section 162(m) of the Internal Revenue Code of 1986. No bonuses may be granted pursuant to the cash bonus plan on or after our first stockholder meeting that occurs after the close of the 2014 calendar year, unless our stockholders reapprove the business criteria on or before such stockholder meeting.

#### Outstanding Equity Awards at Fiscal Year End

The following table sets forth summary information regarding the outstanding equity awards held by our named executive officers at December 31, 2011.

Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable <sup>(3)</sup>	Option exercise		Option exercise Option expiration		Market value of shares or units of stock that have not vested (\$) <sup>(2)</sup>
Patrick J. Mahaffy	ener ensurere		\$	rice (\$) 3.28	date 3/8/2021	(#) <sup>(1)</sup> 367.188	5,173,679
Erle T. Mast		68,965	\$	3.28	3/8/2021	53.430	752.829
Gillian C. Ivers-Read		68,965	\$	3.28	3/8/2021	,	752,829
		)				53,430	,
Andrew R. Allen		68,965	\$	3.28	3/8/2021	53,430	752,829
Steven L. Hoerter		86,206	\$	11.02	8/29/2021		

- (1) The restricted stock held by the named executive officers was granted in May 2009 and was 25% vested as of the date of grant, and thereafter 1/48th of the remaining restricted stock vests on each monthly anniversary of the date of grant thereafter. Mr. Mahaffy s total also includes 206,897 unvested options which were granted in March 2011 and were exercised for shares of restricted stock pursuant to the terms of Mr. Mahaffy s award agreement. 25% of Mr. Mahaffy s restricted stock will vest on the one-year anniversary of the date of grant, and the remainder will vest in substantially equal installments over the 36 months immediately following such anniversary, subject to his continued employment through such date. In the event that a named executive officer s employment is terminated by us without just cause or a resignation for good reason within twelve months following a change in control of the Company, 100% of all outstanding equity awards will immediately vest upon such termination.
- (2) Represents the market value of the shares based on a closing price on December 30, 2011 of \$14.09 per share.
- (3) Pursuant to the terms of the award agreements, unvested options may be exercised for shares of restricted stock.

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**Option Exercises and Stock Vested** 

	Stoc	Stock Awards		
	Number of shares			
Name	acquired on vesting (#)	Value realized on vesting (\$) <sup>(1)</sup>		
Patrick J. Mahaffy	113,147	824,187		
Erle T. Mast	37,716	274,729		
Gillian C. Ivers-Read	37,716	274,729		
Andrew R. Allen	37,716	274,729		
Steven L. Hoerter				

Represents the aggregate value realized upon vesting based on the estimated market value on each applicable vesting date. The weighted average value during 2011 was \$7.28 per share.

# Potential Payments Upon a Termination or Change in Control

Pursuant to their employment agreements, upon certain terminations of employment, Messrs. Mahaffy, Mast and Allen, and Ms. Ivers-Read are entitled to payments of compensation and benefits as described above under Narrative Disclosure to Summary Compensation Table and Grant of Plan-Based Awards Table Employment Agreements. The table below reflects the amount of compensation and benefits payable to each named executive officer in the event of (i) an involuntary termination without just cause or a resignation for good reason and (ii) an involuntary termination without just cause or a resignation for good reason within twelve months following a change in control. The amounts shown assume that the applicable triggering event occurred on December 31, 2011, and therefore are estimates of the amounts that would be paid to the named executive officers upon the occurrence of such triggering event. Mr. Hoerter was employed on an at-will basis as of December 31, 2011 and would not have been entitled to receive any severance benefits had his employment terminated on December 31, 2011.

Name	Type of payment	Involuntary termination (\$)	Triggering Event Involuntary termination within twelve months following a change in control (\$)
Patrick J. Mahaffy	Cash severance Benefit continuation	$337,500^{(1)} \\ 1,797^{(2)}$	$1,125,000^{(3)}$ $4.791^{(4)}$
	Equity acceleration <sup>(5)</sup> Gross-up <sup>(6)</sup>	1,797	4,495,056 2,000,000
Erle T. Mast	Cash severance Benefit continuation Equity acceleration <sup>(5)</sup> Gross-up <sup>(6)</sup>	175,000 <sup>(1)</sup> 2,008 <sup>(2)</sup>	$\begin{array}{r} 490,000^{(3)} \\ 4,016^{(4)} \\ 1,498,340 \\ 962,561 \end{array}$
Gillian C. Ivers-Read	Cash severance Benefit continuation Equity acceleration <sup>(5)</sup> Gross-up <sup>(6)</sup>	$\frac{175,000^{(1)}}{1,365^{(2)}}$	$\begin{array}{r} 490,000^{(3)}\\ 2,730^{(4)}\\ 1,498,340\\ 969,835\end{array}$
Andrew R. Allen	Cash severance Benefit continuation Equity acceleration <sup>(5)</sup> Gross-up <sup>(6)</sup>	$\frac{187,500^{(1)}}{2,008^{(2)}}$	$525,000^{(3)}$ 4,016 <sup>(4)</sup> 1,498,340 982,561

- (1) Includes the value of base salary continuation for nine months, in the case of Mr. Mahaffy, and six months, in the case of our other named executive officers.
- (2) Includes the value of payment of an applicable percentage of the executive s COBRA premiums for nine months, in the case of Mr. Mahaffy, and six months, in the case of our other named executive officers.
- (3) Includes the value of (i) base salary continuation for 24 months, in the case of Mr. Mahaffy, and 12 months, in the case of our other named executive officers and (ii) an amount equal to the named executive officer s target bonus.
- (4) Includes the value of payment of an applicable percentage of the executive s COBRA premiums for 24 months, in the case of Mr. Mahaffy, and 12 months, in the case of our other named executive officers.
- (5) Includes the value of accelerated vesting of all outstanding equity awards, which the executives are entitled to upon an involuntary termination without just cause or a resignation for good reason within twelve months following a change in control.
- (6) Includes the value of a gross-up payment for payments that result in an excise tax imposed by Section 4999 of the Internal Revenue Code (subject to a maximum gross-up payment of \$2,000,000). The gross-up payments were calculated assuming a 45% tax rate and taking into account the full value of accelerated vesting of all outstanding equity awards and may be higher than the gross-up payments the named executive officers actually would have received.

## **Director Compensation**

#### **Director Compensation Table**

The following table summarizes the compensation received by our directors for the year ended December 31, 2011.

	Fees earned or paid	<b>Option awards</b>	
Name	in cash (\$)	(\$)(1)(2)	Total (\$)
Brian G. Atwood	6,625	88,214	94,839
M. James Barrett	7,125	88,214	95,339
James C. Blair	7,500	88,214	95,714
Paul Klingenstein	6,000	88,214	94,214
Edward J. McKinley	7,000	88,214	95,214
John C. Reed	5,000	88,214	93,214
Thorlef Spickschen	5,625	88,214	93,839

(1) The directors each received a grant of options to purchase 12,413 shares of our common stock on August 24, 2011. As of December 31, 2011, Mr. Blair had 12,413 options outstanding, and each of the other directors had 45,171 options outstanding.

(2) Amount represents the fair value of the awards on the date of grant computed in accordance with FASB ASC Topic 718. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements included elsewhere in this prospectus.

# Narrative Disclosure relating to Director Compensation Table

## Stock Option Grants

On August 24, 2011, we made grants of options to purchase 12,413 shares of our stock to each of our directors pursuant to the 2009 Plan, at an exercise price per share of \$11.02. The stock options will vest in August 2012. The option agreements provide that the directors may exercise their options prior to vesting, in which case the directors will receive grants of restricted stock upon exercise of the options and the purchase price of such restricted stock will be the exercise price paid by the directors for the options.

## **Director Compensation**

Each non-executive director is entitled to receive a \$40,000 (or \$50,000 in the case of our chairman) annual cash retainer. Further, the chairman of each of our audit, compensation, and nominating and corporate governance committees receives an additional annual cash retainer of \$16,000, \$10,000, and \$7,000, respectively. Other members of our audit, compensation, and nominating and corporate governance committees receive an additional annual cash retainer of \$8,000, \$5,000, and \$5,000, respectively. New directors will receive a one-time initial grant of a stock option to purchase 27,587 shares of common stock upon joining the board of directors, with one-third of the grant vesting on each of the first three anniversaries of the date of grant. In addition, each non-executive director receives an annual grant of a stock option to purchase 12,413 shares of common stock, which vests on the first anniversary of the date of grant, subject to continued service through the vesting date.

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## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions, since our formation in April 2009, to which we have been a party, in which the amount involved exceeded or will exceed \$120,000, and in which any of our executive officers, directors or holders of more than 5% of our voting securities, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than compensation, termination and change in control arrangements, which are described under Executive and Director Compensation. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm s-length transactions with unrelated third parties.

#### Preferred Stock and Convertible Promissory Note Issuances

Since our inception, we have sold shares of our restricted common stock, shares of our Series A-1 convertible preferred stock, shares of our Series A-2 convertible preferred stock, shares of our Series B convertible preferred stock and the aggregate principal amount of convertible promissory notes to our executive officers, directors or holders of more than 5% of our voting securities in the amounts and as of the dates shown below:

		Series A-1	Series A-2	Series B	Principal Amount of
	Restricted	Convertible	Convertible	Convertible	Convertible
	Common Stock	Preferred Stock	Preferred Stock	Preferred Stock	Promissory Notes
Stockholders beneficially owning 5% or more of our voting securities					
Entities affiliated with Domain Associates		1,206,897	1,206,897	2,612,330	\$4,784,000
Entities affiliated with New Enterprise Associates		1,206,897	1,206,897	2,612,330	\$4,784,000
Entities affiliated with Versant Ventures		862,069	862,069	1,865,950	\$3,418,000
Entities affiliated with Aberdare Ventures		517,241	517,241	1,119,570	\$2,050,000
Abingworth Bioventures V, L.P. Directors and Executive Officers		517,241	517,241	1,119,570	\$2,050,000
Patrick J. Mahaffy Erle T. Mast	603,449 201,150	51,724 6,897	51,724 6,897	111,957 14,928	\$206,000 \$28,000
Andrew R. Allen	201,150	10,345	10,345	22,391	\$40,000
Gillian C. Ivers-Read Brian G. Atwood	201,150	6,897	6,897	14,928	\$28,000
M. James Barrett James C. Blair					
Paul Klingenstein Edward J. McKinley		103,448	103,448	223,914	\$410,000
John C. Reed Thorlef Spickschen		17,241	17,241	37,319	\$68,000
Price Per Share Conversion Price Per Share	\$0.0029 N/A	\$2.00 \$5.80	\$3.00 \$8.70	\$4.62 \$13.40	N/A \$13.00
Date of Purchase	May 12, 2009	May 15, 2009	November 9, 2009	November 18, 2009	May 25, 2011

#### **Restricted Stock Purchase Agreements**

Certain of our named executive officers purchased restricted shares of our common stock in May 2009 pursuant to restricted stock purchase agreements between the named executive officers and us. Pursuant to these agreements, Mr. Mahaffy purchased 603,449 shares of restricted stock, Mr. Mast, Dr. Allen and Ms. Ivers-Read each purchased 201,150 shares of restricted stock. Until such time as the shares vest (as described below), the shares are subject to repurchase by us following a termination of the named executive officer s employment for any reason at a purchase price equal to the lesser of the then-current fair market value and the purchase price paid for such shares. The restricted stock was 25% vested as of the date of grant, and 1/48th of the remaining shares of stock vest on each monthly anniversary thereafter, subject to continued employment through such date. In the event that a named executive officer s employment is terminated by us without cause within six months following a change in control of the Company, 100% of the unvested shares of restricted stock will immediately vest upon such termination. The agreements impose restrictions on transfer of the restricted stock and a lock-up period for 180 days following our initial public offering.

#### **Convertible Promissory Notes**

On May 25, 2011, we issued to existing holders of our convertible preferred stock on a pro rata basis with their respective ownership of our convertible preferred stock, at face value, \$20.0 million aggregate principal amount of our 5% convertible promissory notes due 2012. On June 2, 2011, we issued to Pfizer \$15.0 million aggregate principal amount of our 5% convertible promissory notes due 2012, \$7.0 million of which were issued as consideration for the up-front payment under our license agreement with Pfizer for rucaparib and \$8.0 million of which were issued for an investment of \$8.0 million of cash by Pfizer. The notes accrued interest at an annual rate of 5% which was not due until maturity. The outstanding principal amount and all accrued and unpaid interest thereon converted into shares of our common stock immediately prior to the closing of our initial public offering at a price per share equal to \$13.00 per share.

#### Participation in our Initial Public Offering

The holders of our convertible preferred stock purchased an aggregate of 4,272,239 shares of our common stock in our initial public offering, allocated substantially pro rata among them based on each such stockholder s ownership of the shares of our convertible preferred stock outstanding immediately prior to the initial public offering, at the initial public offering price of \$13.00 per share.

## **Voting Agreement**

We entered into a voting agreement with holders of our convertible preferred stock and certain other stockholders that contained agreements with respect to the election of our board of directors and its composition. All of our current directors were elected pursuant to the terms of this voting agreement. The voting agreement terminated upon the closing of our initial public offering.

#### **Right of First Refusal and Co-Sale Agreement**

We entered into a right of first refusal and co-sale agreement with holders of our convertible preferred stock and certain other stockholders. This agreement provided the holders of convertible preferred stock a right of purchase and of co-sale in respect of sales of securities by certain holders of our common stock. These rights of purchase and co-sale terminated upon the closing of our initial public offering.

#### **Investors** Rights Agreement

We and our founders and holders of our convertible preferred stock entered into an agreement under which such security holders have registration rights with respect to their shares of common stock. Upon the closing of our initial public offering, all of our then-outstanding shares of convertible preferred stock converted into shares of our common stock at the conversion prices set forth in the table above, and the outstanding principal amount of our convertible promissory notes and all accrued and unpaid interest thereon converted into shares of our common stock at a price of \$13.00 per share. For more information regarding these agreements, see Description of Capital Stock Registration Rights.

#### **Director Compensation**

For a discussion of the director compensation arrangements that were in effect prior to our initial public offering, see Executive and Director Compensation Director Compensation.

#### **Employment Agreements**

We have entered into employment agreements with each of Messrs. Mahaffy, Mast and Hoerter, Dr. Allen and Ms. Ivers-Read. For more information regarding these agreements, see Executive and Director Compensation.

#### **Indemnification Agreements**

We have entered into indemnification agreements with each of our directors and named executive officers. For more information regarding these agreements, see Management Limitation on Liability and Indemnification of Directors and Officers.

#### **Stock Option Awards**

We have granted stock options to our executive officers and directors. For more information regarding these stock option awards, see Executive and Director Compensation.

In addition, in August 2009, we made grants of options to purchase 25,863 shares of our common stock to each of our non-executive directors, at an exercise price per share of \$0.29. Twenty-five percent of the options were fully vested as of the date of grant and 25% will vest on each of the first three anniversaries of the date of grant. The options may be exercised by the directors prior to vesting in exchange for shares of restricted stock with the same vesting schedule as the options.

In addition, in December 2010, we made grants of options to purchase 6,896 shares of our common stock to each of our non-executive directors pursuant to the 2009 Plan, at an exercise price per share of \$3.08. Twenty-five percent of the options were fully vested as of the date of grant and 25% will vest on each of the first three anniversaries of August 26, 2010. The options may be exercised by the directors prior to vesting in exchange for shares of restricted stock with the same vesting schedule as the options.

The shares of our common stock acquired upon exercise of an option (or upon vesting of any restricted shares acquired upon an exercise prior to vesting) by our executive officers and directors are subject to a 60-day lock-up period following this offering.

#### Policies and Procedures Regarding Transactions with Related Persons

We have a written policy that sets forth our policies regarding the identification, review, consideration, approval and oversight of related-person transactions . For purposes of our policy only, a related-person transaction is a past, present or future transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any related person are participants, the amount involved exceeds \$120,000 and a related person has a direct or indirect material interest. Transactions involving compensation for services provided to us as an employee, director, consultant or similar capacity by a related person are not covered by this policy. A related person, as determined since the beginning of our last fiscal year, is any executive officer, director or nominee to become director, a holder of more than 5% of our common stock, including any immediate family members of such persons or any entity in which such a person has a 10% or greater equity interest. Any related-person transaction may only be consummated if our audit committee has approved or ratified the transaction in accordance with the policy guidelines set forth below.

The policy imposes an affirmative duty upon each director and executive officer to identify, and we will request that significant stockholders identify, any transaction involving them, their affiliates or immediate family members that may be considered a related party transaction before such person engages in the transaction. Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our audit committee (or, where review by our

audit committee would be inappropriate, to another independent body of our board of directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval process.

#### PRINCIPAL STOCKHOLDERS

The following table and accompanying footnotes set forth certain information regarding the beneficial ownership of our common stock as of March 12, 2012 and as adjusted to reflect the sale of shares of common stock in this offering, by:

each person or group of affiliated persons who are known by us to own beneficially more than 5% of our common stock;

each member of our board of directors and each of our named executive officers; and

all members of our board of directors and our named executive officers as a group.

The amounts and percentages of shares beneficially owned are reported on the basis of SEC regulations governing the determination of beneficial ownership of securities. Under SEC rules, a person is deemed to be a beneficial owner of a security if that person has or shares voting power or investment power over the security, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Securities that can be so acquired are deemed to be outstanding for purposes of computing such person s ownership percentage, but not for purposes of computing any other person s percentage. Under these rules, more than one person may be deemed to be a beneficial owner of the same securities as to which such person has no economic interest.

The number of shares of our common stock beneficially owned prior to this offering set forth below is based on 22,375,757 shares of our common stock outstanding as of March 12, 2012. The number of shares of our common stock beneficially owned after this offering set forth below is based on 25,261,482 shares of our common stock to be issued and outstanding immediately after the closing of this offering, assuming a public offering price of \$25.99 per share, the reported last sale price of our common stock on the NASDAQ Global Select Market on March 21, 2012.

Except as indicated in the footnotes below and subject to applicable community property laws, each of the beneficial owners named in the table below has, and upon the closing of this offering will have, to our knowledge, sole voting and investment power with respect to all shares of common stock listed as beneficially owned by them. Unless otherwise indicated, the address for each of the stockholders in the table below is c/o Clovis Oncology, Inc., 2525 28th Street, Suite 100, Boulder, Colorado 80301.

Prior to This Offering			After This Offering		
Number of		Percent of	Number of	Percent of	
Shares		Shares	Shares	Shares	
Beneficially	Y	Beneficially	Beneficially	Beneficially	
Owned		Owned	Owned	Owned	
3,074,710	(1)	13.7%	3,074,710	12.2%	
3,426,567	(2)	15.3%	3,426,567	13.6%	
2,172,889	(3)	9.7%	2,172,889	8.6%	
1,303,665	(4)	5.8%	1,303,665	5.2%	
1,303,668	(5)	5.8%	1,303,668	5.2%	
1,181,190	(6)	5.3%	1,181,190	4.7%	
2,815,781	(7)	12.6%	2,815,781	11.1%	
940,787		4.2%	940,787	3.7%	
287,548	(8)	1.3%	287,548	1.1%	
272,709	(9)	1.2%	272,709	1.1%	
287,548					
	Number of Shares Beneficially Owned 3,074,710 3,426,567 2,172,889 1,303,665 1,303,665 1,303,668 1,181,190 2,815,781 940,787 287,548 272,709	Number of           Shares           Beneficially Owned           3,074,710         (1)           3,426,567         (2)           2,172,889         (3)           1,303,665         (4)           1,303,665         (5)           1,181,190         (6)           2,815,781         (7)           940,787         287,548         (8)           272,709         (9)	Number of         Percent of           Shares         Shares           Beneficially Owned         Beneficially Owned           3,074,710         (1)         13.7%           3,426,567         (2)         15.3%           2,172,889         (3)         9.7%           1,303,665         (4)         5.8%           1,303,665         (4)         5.8%           1,181,190         (6)         5.3%           2,815,781         (7)         12.6%           940,787         4.2%           287,548         (8)         1.3%           272,709         (9)         1.2%	Number of Shares         Percent of Shares         Number of Shares           Beneficially Owned         Beneficially Owned         Beneficially Owned           3,074,710         (1)         13.7%         3,074,710           3,426,567         (2)         15.3%         3,426,567           2,172,889         (3)         9.7%         2,172,889           1,303,665         (4)         5.8%         1,303,665           1,303,665         (5)         5.8%         1,303,668           1,181,190         (6)         5.3%         1,181,190           2,815,781         (7)         12.6%         2,815,781           940,787         4.2%         940,787           287,548         (8)         1.3%         287,548           272,709         (9)         1.2%         272,709	