LIGAND PHARMACEUTICALS INC
Form 10-K
March 14, 2013
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

Mark One

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

For the Fiscal Year Ended December 31, 2012

OR

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

For the transition period from to .

Commission File No. 001-33093

LIGAND PHARMACEUTICALS INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware	77-0160744
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
11119 North Torrey Pines Rd., Suite 200 La Jolla, CA	92037
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: (858) 550-7500

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $.001 per share	The NASDAQ Global Market of The NASDAQ Stock Market LLC
Preferred Share Purchase Rights	The NASDAQ Global Market of The NASDAQ Stock Market LLC

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

None

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934. Yes o No x

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer or a smaller reporting company. See definition of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer o	Accelerated Filer x (Do not check if a smaller reporting company)	Non-accelerated Filer o	Smaller reporting company o

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

The aggregate market value of the Registrant’s voting and non-voting stock held by non-affiliates was approximately $295.9 million based on the last sales price of the Registrant’s Common Stock on the NASDAQ Global Market of the NASDAQ Stock Market LLC on June 30, 2012. For purposes of this calculation, shares of Common Stock held by directors, officers and 10% stockholders known to the Registrant have been deemed to be owned by affiliates which should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant or that such person is controlled by or under common control with the Registrant.

As of March 1, 2013, the Registrant had 20,208,248 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the Registrant’s 2013 Annual Meeting of Stockholders to be filed with the Commission on or before April 30, 2013 are incorporated by reference in Part III of this Annual Report on Form 10-K. With the exception of those portions that are specifically incorporated by reference in this Annual Report on Form 10-K, such Proxy Statement shall not be deemed filed as part of this Report or incorporated by reference herein.

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AVAILABLE INFORMATION:

We file electronically with the Securities and Exchange Commission (or SEC) our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and, as necessary, amendments to these reports, pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended. The public may read or copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>.

You may obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports which are posted as soon as reasonably practicable after filing on our website at <http://www.ligand.com>, by contacting the Investor Relations Department at our corporate offices by calling (858) 550-7500 or by sending an e-mail message to investors@ligand.com. You may also request information via the Investor Relations page of our website.

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PART I

Caution: This discussion and analysis may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed in Item 1A. “Risk Factors.” This outlook represents our current judgment on the future direction of our business. These statements include those related to our royalty revenues, collaborative revenues and milestones, and product development. Actual events or results may differ materially from our expectations. For example, there can be no assurance that our revenues or expenses will meet any expectations or follow any trend(s), that we will be able to retain our key employees or that we will be able to enter into any strategic partnerships or other transactions. We cannot assure you that we will receive expected royalties or other revenues to support our ongoing business or that our internal or partnered pipeline products will progress in their development, gain marketing approval or achieve success in the market. In addition, future arbitration, litigation or disputes with third parties may have a material adverse effect on us. Such risks and uncertainties, and others, could cause actual results to differ materially from any future performance suggested. We undertake no obligation to release publicly the results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this annual report. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended.

References to “Ligand Pharmaceuticals Incorporated”, “Ligand”, the “Company”, “we” or “our” include our wholly owned subsidiaries - Ligand JVR, Allergan Ligand Retinoid Therapeutics, Seragen, Inc., or Seragen; Pharmacopeia, LLC; Neurogen Corporation, CyDex Pharmaceuticals, Inc., Metabasis Therapeutics, and Nexus Equity VI LLC, or Nexus.

We were incorporated in Delaware in 1987. Our principal executive offices are located at 11119 North Torrey Pines Road, Suite 200, La Jolla, California, 92037. Our telephone number is (858) 550-7500.

Item 1. Business

Overview

We are a biotechnology company that operates with a business model focused on developing or acquiring revenue generating assets and coupling them to a lean corporate cost structure. Our goal is to create a sustainably profitable business and generate meaningful value for our stockholders. Since a portion of our business model is based on the goal of partnering with other pharmaceutical companies to commercialize and market our assets, a significant amount of our revenue is based largely on payments made to us by partners for royalties, milestones and license fees. We recognized the important role of the drug reformulation segment in the pharmaceutical industry and in 2011 added Captisol® to our technology portfolio. Captisol is a powerful formulation technology that has enabled six FDA approved products, including Onyx’s Kyprolis® and Baxter International’s Nexterone® and is currently being developed in a number of clinical-stage partner programs. In comparison to our peers, we believe we have assembled one of the largest and most diversified asset portfolios in the industry with the potential to generate significant revenue in the future. The therapies in our development portfolio address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, muscle wasting, multiple myeloma, Alzheimer’s disease, dyslipidemia, diabetes, anemia, epilepsy, FSGS and osteoporosis. We have established multiple alliances with the world’s leading pharmaceutical companies including GlaxoSmithKline, Onyx Pharmaceuticals, Merck, Pfizer, Baxter International, Bristol-Myers Squibb, Celgene, Lundbeck Inc., Eli Lilly and Co., Spectrum Pharmaceuticals and The Medicines Company.

Business Strategy

Our business model is designed to create value for stockholders by assembling a diversified portfolio of biotech and pharmaceutical revenue streams and operating that business with an efficient and low corporate cost structure. Our goal is to become a sustainably profitable company that offers investors an opportunity to participate in the promise of the biotech industry in a diversified, lower-risk business than a typical biotech. Our business model is based on the concept of doing what we do best; drug discovery, reformulation and partnering with other pharmaceutical companies to leverage what they do best (late-stage development, regulatory management and commercialization) to ultimately generate our revenue. Our revenue consists mostly of license fees, milestones, royalties from the partners that license our drugs and technologies, and Captisol material sales. In addition to discovering our own proprietary drugs, we use

an aggressive acquisition strategy to bring in new assets, pipelines, and technologies to aid in generating additional potential new revenue streams. The principal elements of our strategy are set forth below.

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We are assembling a large portfolio of fully funded programs through acquisition and licensing to drive future profitability. We have assembled a portfolio of over 70 fully-funded partner programs that are in all stages of development, from preclinical research to awaiting commercialization. These assets represent the next wave of potential marketed drugs that could generate revenue for us. We assemble this portfolio by either licensing out our own proprietary drug development programs or acquiring existing partnered programs from other companies. For our internal programs, we generally plan to advance drug candidates through early-stage drug development and/or clinical proof-of-concept. We believe partnerships are not only a source of research funding, license fees, future milestone payments and royalties, but they also position our assets with companies that have the expertise to obtain regulatory approval and successfully launch and commercialize these assets. We believe that focusing on discovery and early-stage drug development while benefiting from our partners' proven development and commercialization expertise will reduce our internal expenses and allow us to have a larger number of drug candidates progress to later stages of drug development.

We sell Captisol material to a broad range of customers. We are the sole provider of a proprietary formulation technology known as Captisol. Captisol is a well validated chemically-modified cyclodextrin that improves the solubility, stability, and pharmicokinetics of many drugs. We receive revenue from the selling of Captisol material to our partners that have either licensed our proprietary Captisol-enabled drugs or have taken a license to use Captisol with their own internal programs.

We discover and develop compounds that are promising drug candidates. We discover, synthesize and test numerous compounds to identify those that are most promising for clinical development. We perform extensive target profiling and base our selection of promising development candidates on product characteristics such as initial indications of safety and efficacy. We believe that this focused strategy allows us to eliminate unpromising candidates from consideration sooner without incurring substantial clinical costs. Our goal is to partner our programs early in the development and regulatory life-cycle.

Our Asset Portfolio

We have a portfolio of over 80 current and future potential revenue generating programs, over 70 of which are fully funded by our partners. We expect to receive royalties from seven marketed products in 2013 and have multiple partnered programs at Phase IIb through NDA submission which represent our future upcoming potential revenue generating programs. While many of these programs have been disclosed publicly, a significant number of our partners and their programs remain undisclosed to protect competitive and proprietary information about these programs.

Select Late-Stage Development or Commercial Programs

We have multiple partnered programs in our portfolio that are either in or nearing the regulatory approval process. These programs represent the next series of potential royalty generating assets in our portfolio.

Promacta (GSK)

GSK's Promacta® (Eltrombopag) is the first oral thrombopoietin (TPO) receptor agonist therapy for the treatment of adult patients with chronic immune (idiopathic) thrombocytopenic purpura, or ITP. In late 2008, the U.S. Food and Drug Administration, or FDA, granted accelerated approval of Promacta for the treatment of thrombocytopenia in patients with chronic ITP, who have had an insufficient response to corticosteroids, immunoglobulins or splenectomy.

In 2010, GSK received approval for Revolade® (eltrombopag/Promacta) from the European Medicines Agency's Committee for Medicinal Products for Human Use (CHMP) and from the Japanese Ministry of Health, Labour and Welfare for the oral treatment of thrombocytopenia (reduced platelet count) in adults with the blood disorder chronic ITP.

In February 2011, the FDA granted GSK full approval status for Promacta in the US following the submission of long- term safety data from post-marketing clinical studies, as well as the completion of other commitments that verify the clinical benefit to patients. Additionally, it was reported in November 2011 that the Risk Evaluation and Mitgation Strategies (REMS) program that Promacta had been operating under in the US was being significantly reduced in scope by the FDA due to data that had been submitted by GSK demonstrating the long term safety of Promacta.

In May 2012, GSK submitted a variation to the existing Marketing Authorization Application to the European Medicines Agency for Promacta/Revolade as a treatment for thrombocytopenia in adult patients with chronic hepatitis C infection to enable the initiation of interferon-based therapy and during interferon-based therapy. That application is currently under review by the European Medicines Agency.

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In November 2012, the FDA approved Promacta for the treatment of thrombocytopenia (low blood platelet counts) in patients with chronic hepatitis C to allow them to initiate and maintain interferon-based therapy. Promacta is the first supportive care treatment available to patients who are ineligible or poor candidates for interferon-based therapy due to their low blood platelet counts. Promacta in combination with interferon-based therapy has been shown to improve a patient's chance of achieving a sustained virologic response (SVR) or viral cure.
Promacta is authorized for use in 92 countries. We are entitled to receive tiered royalties on annual net sales of Promacta. GSK has listed a patent in the FDA's Orange Book for Promacta with an expiration date in 2027.

AGGREGATE NET SALES IN EACH CALENDAR YEAR	ROYALTY RATE	
Less than $100M annual sales	4.7	%
On portion of sales in range of $100M - $200M	6.6	%
On portion of sales in range of $200M - $400M	7.5	%
On portion of sales greater than $400M	9.4	%
On portion of sales greater than $1.5B	9.3	%

* Net royalties due Ligand after payment to Rockefeller

Kyprolis (Onyx, Phase III/NDA, Multiple Myeloma)
Ligand (formerly CyDex) and Onyx Pharmaceuticals (formerly Proteolix) entered into a collaboration in 2005 to develop the Captisol-enabled IV formulation of Carfilzomib for refractory multiple myeloma. In July 2012, Onyx received accelerated approval from the FDA for Kyprolis (Carfilzomib) for injection. We earned a milestone payment of $0.6 million upon FDA approval. Kyprolis is formulated with Ligand's Captisol and is used for the treatment of patients with multiple myeloma who have received at least two prior therapies, including bortezomib and an immunomodulatory agent, and have demonstrated disease progression on or within 60 days of completion of the last therapy. The indication for Kyprolis is based on response rate. Under our agreement with Onyx, we are entitled to receive milestones, tiered royalties ranging between 1.5% and 3% as shown in the table below, and revenue from clinical and commercial Captisol material sales.

AGGREGATE NET SALES IN EACH CALENDAR YEAR	ROYALTY RATE	
Up to, and including, $250 million	1.5	%
$251 million to $500 million	2.0	%
$501 million to $750 million	2.5	%
Above $750 million	3.0	%

Avinza (Pfizer)
We currently receive royalty revenues from Pfizer, Inc., or Pfizer, for sales of the pain therapeutic Avinza®. In February 2007, we completed the sale of our Avinza product line to King Pharmaceuticals (or King). As a result of the sale, we receive royalties on the net sales of Avinza through 2017. Royalties are paid at a rate of 5% on sales up to $200 million and a higher rate above $200 million. In October 2010, Pfizer announced the acquisition of King.
Viviant/Conbriza (Pfizer)
In 2010, our partner Pfizer launched Viviant® (bazedoxifene) in Japan for the treatment of postmenopausal osteoporosis. The drug is also marketed in Spain under the brand name Conbriza® through a co-promotion with Almirall, an international pharmaceutical company based in Spain. Viviant was approved in 2009 by the European Commission (under the trade name Conbriza) for the treatment of postmenopausal osteoporosis in women at increased risk of fracture. Viviant, a selective estrogen receptor modulator (SERM), is a result of the successful research collaboration between Wyeth (now a subsidiary of Pfizer) and us that began in 1994. Pfizer is responsible for the registration and worldwide marketing of bazedoxifene, a synthetic drug specifically designed to reduce the risk of osteoporotic fractures while also protecting uterine tissue. We are entitled to receive tiered royalties on net sales of bazedoxifene. Any such royalties may be subject to reduction or offset for past milestone payments and/or may be subject to other terms and conditions set forth in our agreement with Pfizer.

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Nexterone (Baxter International)

In 2006, Ligand outlicensed Nexterone, an injectable formulation combining amiodarone and Captisol, to Baxter International, or Baxter (formerly Prism Pharmaceuticals, Inc.). Under the terms of the agreement, Baxter is responsible, under an exclusive worldwide license, for all development and commercialization of Nexterone at its sole expense. In 2010, Nexterone was approved by the FDA and launched in the United States in 2011. We are supplying Captisol to Baxter for use in accordance with the terms of the license agreement under a separate supply agreement. Baxter has paid milestone payments and is obligated to pay royalties to us on sales of Nexterone through early 2029.

Bazedoxifene/conjugated estrogens (BZA/CE)(Pfizer, Submitted in the US and EU, Post-Menopausal Symptoms)

In 2010, our partner Pfizer launched Viviant (bazedoxifene) in Japan for the treatment of postmenopausal osteoporosis. Pfizer has combined Viviant with Premarin to create a combination therapy for the treatment of post-menopausal symptoms in women. Pfizer has completed Phase III studies of bazedoxifene and filed an approval submission with the FDA and EMA in 2012. For the year ended December 31, 2012, we received $0.3 million for the filing submissions with the FDA and the EMA. We are entitled to receive tiered royalties on all net sales of bazedoxifene, whether alone or in combination with other products. Any such royalties may be subject to reduction or offset against past milestone payments and/or may be subject to other terms and conditions set forth in our agreement with Pfizer.

Promacta (GSK, Oncology)

GSK is conducting Phase II clinical studies of Promacta for oncology-related thrombocytopenia in patients with solid tumors, Myelodysplastic Syndrome (MDS), or Secondary Acute Myeloid Leukemia (AML) after MDS. Promacta is also in Phase II studies for patients with Aplastic Anemia.

Captisol-enabled Melphalan IV (Spectrum Pharmaceuticals, Pivotal, Stem Cell Transplant Conditioning)

In March 2013, we licensed the full world-wide rights to Captisol-enabled melphalan IV to Spectrum Pharmaceuticals, Inc. The Captisol-enabled, PG-free melphalan program uses a new intravenous formulation of melphalan for the multiple myeloma transplant setting, and has been granted Orphan designation by the FDA. The formulation avoids the use of propylene glycol, which has been reported to cause renal and cardiac side-effects that limit the ability to deliver higher quantities of therapeutic compounds. The use of the Captisol® technology to reformulate melphalan is anticipated to allow for longer administration durations and slower infusion rates, potentially enabling clinicians to safely achieve a higher dose intensity of pre-transplant chemotherapy.

Under the terms of the license agreement, we will receive a $3 million license fee and are eligible to receive more than $50 million in potential milestone payments. We are also eligible to receive significant double-digit royalties on future net sales of the Captisol-enabled melphalan product. This program is currently enrolling patients in a pivotal clinical trial.

Merck Captisol Program, Molecule Undisclosed(Merck, Phase III, Undisclosed Indication)

Ligand and Merck entered into a Captisol supply agreement in June 2011 for an undisclosed Merck program. Merck is currently conducting a pivitol study for this program and we expect Merck to potentially file a 505(b)(2) in 2013 for approval to market this Captisol program. Financial terms of the relationship remain undisclosed, but we expect to generate revenue through the supply of Captisol for this program.

Captisol-enabled Clopidogrel (The Medicines Company, Phase III, Anti-coagulant)

In June 2011, we licensed the full world-wide rights to our Captisol-enabled clopidogrel program to The Medicines Company. Clopidogrel is the active ingredient in Plavix®, the world’s leading anti-platelet medication which is currently only available in an oral formulation. The Captisol-enabled clopidogrel formulation is designed to provide an intravenous option in situations where the administration of oral platelet inhibitors is not feasible or desirable. We received an upfront payment of $1.8 million, $0.9 million of which was remitted to the former CyDex shareholders. We are eligible to receive up to $8 million in milestones, net of amounts owed and royalties on annual worldwide net sales. In addition, we will also supply both the clinical and commercial requirements of Captisol for this program, now known as MDCO-157, and if the intravenous formulation is approved for commercialization, we will be the exclusive supplier of Captisol for the product.

The Medicines Company is planning to initiate a pivotal study for the program in 2013 and is developing the product for global markets.

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RE-021 program (Retrophin, Phase II, FSGS)

In early 2012, we licensed the world-wide rights to RE-021 (formerly known as DARA-a Dual Acting Receptor Antagonist of Angiotension and Endothelin receptors) to Retrophin, Inc., or Retrophin. Retrophin intends to develop RE-021 for orphan indications of severe kidney diseases including Focal Segmental Glomerulosclerosis (FSGS) as well as conduct proof-of-concept studies in resistant hypertension and diabetic nephropathy. Certain patient groups with severely compromised renal function exhibit extreme proteinuria resulting in progression to dialysis and a high mortality rate. RE-021, with its unique dual blockade of angiotensin and endothelin receptors, is expected to provide meaningful clinical benefits in mitigating proteinuria in indications where there are no approved therapies. We received an upfront payment of $1 million, net of amounts owed to third parties.

In late 2012, we received a milestone payment of 620,000 shares of common stock in partner Retrophin, Inc. Former license holders are entitled to receive 15% of the proceeds received upon sale of the securities. We may receive over $75 million in milestones as well as 9% in royalties on potential future worldwide sales by Retrophin.

In early 2013 we received a $1.4 million milestone payment from Retrophin, Inc. We will remit $0.2 million to former license holders under the terms of a previous license agreement for RE-021.

Dinaciclib program (Merck, Phase IIb/III, Refractory CLL)

In October 2012, our licensee, Merck, initiated a Phase IIb/III adaptive clinical trial for Dinaciclib for the treatment of patients with refractory chronic lymphocytic leukemia (CLL). As a result, we received a $2 million milestone payment upon initiation of the clinical study. Under our collaboration and license agreement with Merck, we are entitled to receive future milestones and royalties. CLL is a slow-progressing disease, affecting the blood and bone marrow, as well as the lymph nodes or other organs, and is the most common type of leukemia affecting adults. Dinaciclib is derived from a collaboration initiated in 1998 by Pharmacopeia (now a wholly owned subsidiary of Ligand).

Beta-Secretase Inhibitor (Merck, Phase II/III, Alzheimer's Disease)

The development agreement for the beta-secretase inhibitor program (or BACE) was entered into in 2009 between Ligand (formerly Pharmacopeia) and Merck (formerly Schering-Plough), under a 1998 agreement, for the treatment of Alzheimer's disease. This disease is characterized by plaques of the toxic amyloid-beta protein within the brain. Beta secretase is believed to be a key enzyme in the production of amyloid-beta protein. Amyloid-beta is formed when the larger amyloid precursor protein (APP) is cleaved by two enzymes, beta-secretase and gamma-secretase, which releases the amyloid-beta fragment. A beta-secretase inhibitor is expected to reduce amyloid-beta generation in Alzheimer's disease patients.

In December 2012, Merck initiated a Phase II/III clinical trial for its lead BACE inhibitor product candidate, MK-8931, evaluating its safety and efficacy in patients with mild-to-moderate Alzheimer's disease. Ligand is entitled to royalties on potential future sales by Merck.

Captisol-enabled Carbamazepine-IV (Lundbeck, Phase III, Epilepsy)

The development and commercialization agreement for Captisol-enabled carbamazepine-IV began in 2004 between Lundbeck (formerly Ovation Pharmaceuticals) and us for the use of Captisol in the formulation of CE carbamazepine-IV. Lundbeck is developing CE carbamazepine-IV for the management of acute seizure disorder for hospital or emergency settings. CE carbamazepine-IV is currently being evaluated in a Phase III clinical trial.

Captisol-enabled Delafloxacin (Rib-X, Phase III, Infection)

The development and commercialization agreement for Captisol-enabled delafloxacin began in 2008 between Rib-X Pharmaceuticals and us for the use of Captisol in the formation of delafloxacin. Delafloxacin is a novel hospital-focused fluoroquinolone antibiotic candidate with potency against a variety of quinolone-resistant Gram-positive and Gram-negative bacteria, including quinolone-resistant, methicillin-resistant Staphylococcus aureus (MRSA). In the first half of 2013, Rib-X plans to initiate the first of two planned Phase III clinical trials of delafoxacin for the treatment of acute bacterial skin and skin structure infections (ABSSSI), including infections caused by MRSA.

Fructose-1,6-bisphosphatase Inhibitor (Undisclosed, Phase II)
In September 2012, Ligand entered into an option agreement with an undisclosed partner for the clinical development of an undisclosed novel inhibitor of the fructose-1,6-bisphosphatase (FBPase) enzyme for the treatment of type 2 diabetes. The undisclosed partner paid a $50,000 upfront option fee.

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Fablyn (Unpartnered, Estrogen receptor modulator)

In October 2011, we entered into a license agreement with Chiva Pharmaceuticals, Inc., or Chiva. We granted to Chiva an exclusive worldwide license, with sub-license rights, to our intellectual property rights related to Fablyn, a selective estrogen receptor modulator. In October 2012, we entered into a settlement agreement and mutual release with Chiva, pursuant to which we resolved all disputes, including our primary claim in arbitration relating to payments due under the License Agreement. We also agreed to terminate the Fablyn license agreement and all assets related to Fablyn, including all relevant patents, know-how, properties, rights, interests and other tangible and intangible assets owned or controlled by Chiva were returned to us. Under the settlement agreement, Chiva agreed to pay $0.1 million and we agreed to drop our claim for $1.7 million asserted in arbitration.

Under the Fablyn license agreement, we have been paid and will retain $2.5 million in license fees. Having reclaimed the rights to Fablyn per the settlement agreement, we will seek new potential partners or licensees for Fablyn.

Internal Product Development Programs

As summarized in the table below, we are developing several proprietary products for a variety of indications. These programs represent our future licensing opportunities to expand our partnered asset portfolio.

Program	Disease/Indication	Development Phase
Selective Androgen Receptor Modulator	Various	Phase II-ready
Captisol-enabled Topiramate	Epilepsy	Phase I/II
Glucagon Receptor Antagonist	Diabetes	Pre-IND
HepDirect	Liver Diseases	Preclinical
Oral Human Granulocyte Colony Stimulating Factor	Neutropenia	Preclinical
Oral Erythropoietin	Anemia	Preclinical

Selective Androgen Receptor Modulator (SARM)

Our LGD-4033 is a non-steroidal selective androgen receptor modulator (SARM) that is expected to produce the therapeutic benefits of testosterone with improved safety, tolerability and patient acceptance due to a tissue-selective mechanism of action and an oral route of administration. We have discovered several novel orally active, non-steroidal SARM compounds, including LGD-4033, based on tissue-specific gene expression and other functional, cell-based technologies. In animal models, LGD-4033 demonstrated anabolic activity in muscles, anti-resorptive and anabolic activity in bones and a robust selectivity for muscle and bone versus prostate and sebaceous glands. Phase I single and multiple dose escalation studies of LGD-4033 were conducted in a total of 116 healthy male subjects. The safety, tolerability and preliminary efficacy of LGD-4033 was evaluated in the double-blind, placebo-controlled Phase I multiple ascending dose study. Healthy male subjects were randomized to receive 0.1, 0.3 or 1.0 mg LGD-4033 or placebo once daily over 21 days. Key findings of this study included: LGD-4033 was safe and well tolerated at all doses following daily oral administration for three weeks in young healthy males; no clinically significant dose-related adverse events were reported; no clinically significant changes in liver function tests, PSA, hematocrit or ECG were seen; positive dose-dependent trends in lean muscle mass increase were observed with drug-treated subjects; positive dose-dependent trends in functional exercise and strength measures were consistent with anabolic activity. LGD-4033 is positioned to enter into Phase II development, and potential studies include evaluation of LGD-4033 in conditions such as muscle wasting associated with cancer (cachexia), acute rehabilitation (e.g. hip fracture), and acute illness.

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Captisol-enabled Topiramate IV

We are developing a proprietary Captisol-enabled formulation of topiramate for the treatment of acute epileptic seizures. Topiramate is sold under the trade name Topamax® and is currently only available in an oral formulation. The Captisol-enabled topiramate formulation is designed to provide an intravenous or intramuscular option for hospitalized epilepsy patients where oral topiramate is not an option. In completed Phase I studies, Captisol-enabled topiramate has demonstrated a faster onset of action than the orally administered drug.

Glucagon Receptor Antagonist Program

We are currently developing small molecule glucagon receptor antagonists for the treatment of Type II diabetes mellitus. Compounds that block the action of glucagon may reduce the hyperglycemia that is characteristic of this disease. Glucagon stimulates the production of glucose by the liver and its release into the blood stream. In diabetic patients, glucagon secretion is abnormally elevated and contributes to hyperglycemia in these patients. Clinical proof of concept studies with glucagon receptor antagonists in Type 2 diabetic patients were reported at the American Diabetes Association Annual Meeting in 2011 and 2012, supporting the potential benefit of this therapeutic target. Our advanced glucagon antagonist compound blocks glucagon action in human hepatocytes in vitro, reduces blood glucose in animal models of Type 1 and Type 2 diabetes, has demonstrated good oral bioavailability in rodents, and has a safety profile in preclinical studies suitable for further clinical development. We are preparing to file an IND for this program.

HepDirect HCV Inhibitor Program

We are developing novel small molecule inhibitors of the Hepatitis C virus using our HepDirect technology platform. Data from current lead molecules suggest that directing these molecules to the liver using the HepDirect technology could produce fewer side effects and has the potential for an overall superior risk-benefit ratio compared to non HepDirect therapies.

Oral Human Granulocyte Colony Stimulating Factor (GCSF) Program

We have discovered a novel series of small molecules that selectively activate human granulocyte colony stimulating factor (GCSF) receptor function in a manner distinct from GCSF, but similar to the mechanism of small-molecule human thrombopoietin receptor (hTPOR) agonists, such as eltrombopag (Promacta®). The goal of our GCSFR agonist program is to develop a non-peptide, small molecule, oral GCSFR agonist that is a convenient, cost-effective alternative as compared to recombinant human GCSF for the treatment of neutropenia and other related indications. The lead compound, LG7455, activates the GCSF-GCSFR signaling pathway and induces the differentiation of human bone marrow cells into granulocytes. Further optimization of the LG7455 structure series could lead to a first-in-class, once-daily, oral medication for the treatment of congenital, chronic or chemotherapy-induced neutropenia.

Oral EPO Program

Erythropoietin (EPO) acts on its receptor to stimulate the differentiation of bone marrow hematopoietic cells to form red blood cells. Various recombinant human EPO derivatives are marketed as erythropoiesis-stimulating agents (ESAs) for the treatment of anemia due to renal failure or cancer chemotherapy. We have discovered a series of orally-available, small molecule partial agonists of the EPO receptor with unique mechanism of action that should provide additional benefit in the treatment of anemia with improved safety, tolerability, and patient acceptance due to the convenience of oral administration and the lack of excessive erythropoietic stimulation. The lead compound, LG5640, has demonstrated high potency and oral bioavailability in the mouse, rat and monkey.

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Other Internal Programs Awaiting Further Development Funding, Either Through Ligand or a Partner

- Aplindore (Phase II, Restless Leg/Parkinson's)
- Captisol-enabled Nasal Budesonide (Phase I, Allergic Rhinitis)
- Thyroid Receptor-beta Agonist (Preclinical, Dyslipidemia)
- Histamine H3 Receptor Antagonist (Preclinical, Cognitive Disorders)
- Glucokinase Activator (Preclinical, Diabetes)
- DGAT Inhibitor (Preclinical, Diabetes)
- CCR1 Inhibitor (Preclinical, Oncology)
- CRTH2 Inhibitor (Preclinical, Inflammation)
- Topical JAK3 (Preclinical, Inflammation)
- Others

Technology

We employ various research laboratory methods to discover and conduct preclinical development of new chemical entities. These methods are performed either in our own laboratories or in those of contract research organizations under our direction.

Our discovery work is based on certain technologies and acquired special expertise related to intracellular receptors and the receptors for hematopoietic growth factors. Intracellular receptors are involved in the actions of non-peptide hormones and drugs such as selective estrogen receptor modulators, or SERMs, and SARMs. Hematopoietic growth factor receptors are involved in the differentiation and proliferation of blood cell progenitors, the formation of new blood cells, and the action of drugs such as Promacta, Epogen and Neumega. We use and have developed particular expertise in co-transfection assays, which measure gene transcription in response to the activation of a target receptor, and gene expression in cells selected for expression of particular receptors or transfected with cDNA for particular receptors. Some of these methods are covered by patents issued to or licensed by us, some are trade secrets, and some are methods that are in the public domain, but that we may use in novel ways to improve our efficiency in identifying promising leads and developing new chemical entities.

In connection with our merger with Metabasis, we acquired certain HepDirect technology. HepDirect technology supplements our core drug discovery technology platform of ligand-dependent gene expression. HepDirect is a prodrug technology that targets delivery of certain drugs to the liver by using a proprietary chemical modification that renders a drug biologically inactive until cleaved by a liver-specific enzyme.

In connection with our acquisition of CyDex, we acquired the Captisol drug formulation platform technology. We use this technology to improve the solubility, stability, and/or pharmacokinetics of drugs, whether in our own internal development pipeline or those of our partners.

Manufacturing

We currently have no manufacturing facilities and rely on third parties, including our collaborative partners, for clinical production of any products or compounds.

We currently outsource the production of Captisol to Hovione FarmaCiencia SA, or Hovione, a major supplier of APIs and API intermediates located in Portugal. In 2002, CyDex entered into a Captisol supply agreement with Hovione, under which Hovione is our exclusive supplier of Captisol and is restricted from supplying Captisol to third parties, so long as specified conditions are met. In addition to its main manufacturing site in Loures, Portugal, Hovione will qualify a second site in Macau if our forecast requirements for Captisol exceed the capabilities of the Loures site. We have ongoing minimum purchase commitments under the agreement and are required to pay Hovione an aggregate minimum amount during the agreement term. Hovione must supply amounts exceeding our forecasts by a fixed percent. In 2008, we entered into an amendment to the supply agreement, under which we and Hovione agreed to reduce our minimum annual purchase requirement of Captisol and to extend the term of the agreement.

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We pay Hovione unit prices, in U.S. dollars, for all Captisol supplied after the commercial production date, which prices may be adjusted for fluctuation in currency exchange rates, change in raw material prices and change in the Portuguese consumer price index. Additionally, prices may be adjusted based on requested changes to the Captisol manufacturing process or specifications.

In the event of a Captisol supply interruption, we are permitted to designate and, with Hovione's assistance, qualify one or more alternate suppliers. If the supply interruption continues beyond a designated period, we may terminate the agreement. In addition, if Hovione cannot supply our requirements of Captisol due to an uncured force majeure event or if the unit price of Captisol exceeds a set figure, we may obtain Captisol from a third party. To date, we have not qualified any alternate suppliers. In December 2011, the contract was amended to allow certain bulk quantities of Captisol to be distributed directly from Hovione. Additionally, in 2012, we qualified a Hovione site in Cork, Ireland to perform certain manufacturing steps to provide back-up and increased capacity to the Loures site.

Unless terminated earlier, the agreement will continue until it expires in December 2019. The term will automatically continue after the initial term for successive two year renewal terms, unless either party gives written notice of its intention to terminate the agreement no less than two years prior to the expiration of the initial term or renewal term. In addition, either party may terminate the agreement for the uncured material breach or bankruptcy of the other party or an extended force majeure event. We may terminate the agreement for extended supply interruption, regulatory action related to Captisol or other specified events.

For further discussion of these items, see below under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Research and Development Expenses

Research and development expenses from continuing operations were $10.8 million, $10.3 million, and $22.1 million in 2012, 2011 and 2010, respectively, of which 100%, 99%, and 61%, respectively, were sponsored by us.

There were no research and development expenses from discontinued operations in 2012, 2011 and 2010.

Competition

Some of the drugs we and our collaborative partners are developing may compete with existing therapies or other drugs in development by other companies. A number of pharmaceutical and biotechnology companies are pursuing intracellular receptor-related approaches to drug discovery and development. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competing products or technologies and may establish collaborative arrangements with our competitors.

Many of our existing or potential competitors, particularly large pharmaceutical companies, have greater financial, technical and human resources than we do and may be better equipped to develop, manufacture and market products. Many of these companies also have extensive experience in preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products.

Our competitive position also depends upon our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources for the often substantial period between technological conception and commercial sales. For a discussion of the risks associated with competition, see below under "Item 1A. Risk Factors."

Government Regulation

The manufacturing and marketing of our products, our ongoing research and development activities and products being developed by our collaborative partners are subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries. In the United States, pharmaceuticals are subject to rigorous regulation by federal and various state authorities, including the FDA. The Federal Food, Drug and Cosmetic Act and the Public Health Service Act govern the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of our products. There are often comparable regulations that apply at the state level. Product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources.

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The steps required before a pharmaceutical agent may be marketed in the United States include (1) preclinical laboratory tests, (2) the submission to the FDA of an IND, which must become effective before human clinical trials may commence, (3) adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug, (4) the submission of an NDA to the FDA and (5) the FDA approval of the NDA prior to any commercial sale or shipment of the drug. In addition to obtaining FDA approval for each product, each domestic drug-manufacturing establishment must be registered with the FDA and, in California, with the Food and Drug Branch of California. Domestic manufacturing establishments are subject to pre-approval inspections by the FDA prior to marketing approval, then to biennial inspections, and must comply with current Good Manufacturing Practices (cGMP). To supply products for use in the United States, foreign manufacturing establishments must comply with cGMP and are subject to periodic inspection by the FDA or by regulatory authorities in such countries under reciprocal agreements with the FDA.

For both currently marketed and future products, failure to comply with applicable regulatory requirements after obtaining regulatory approval can, among other things, result in the suspension of regulatory approval, as well as possible civil and criminal sanctions. In addition, changes in existing regulations could have a material adverse effect on us.

We are also increasingly subject to regulation by the states. A number of states now regulate, for example, pharmaceutical marketing practices and the reporting of marketing activities, controlled substances, clinical trials and general commercial practices. We have developed and are developing a number of policies and procedures to ensure our compliance with these state laws, in addition to the federal regulations described above. Significant resources are now required on an ongoing basis to ensure such compliance. For a discussion of the risks associated with government regulations, see below under “Item 1A. Risk Factors.”

Patents and Proprietary Rights

We believe that patents and other proprietary rights are important to our business. Our policy is to file patent applications to protect technology, inventions and improvements to our inventions that are considered important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position.

Royalties we currently receive from Pfizer on Avinza represent a portion of our ongoing revenue. The United States patent on Avinza is not expected to expire until November 2017; however, applications for generic forms of Avinza have been submitted to the FDA. The last to expire United States patents relating to Promacta is not expected to expire until August 2027. The last to expire United States patents related to Captisol is not expected to expire until 2029. Subject to compliance with the terms of the respective agreements, our rights to receive royalty payments under our licenses with our exclusive licensors extend for the life of the patents covering such developments. For a discussion of the risks associated with patent and proprietary rights, see below under “Item 1A. Risk Factors.”

Human Resources

As of February 1, 2013, we had 21 full-time employees, of whom 6 are involved directly in scientific research and development activities. Of these employees, 5 hold Ph.D. or M.D. degrees.

ITEM 1A. RISK FACTORS

The following is a summary description of some of the many risks we face in our business. You should carefully review these risks in evaluating our business, including the businesses of our subsidiaries. You should also consider the other information described in this report.

Revenues based on sales of Promacta represent a substantial portion of our overall current and/or expected future revenues.

GSK is obligated to pay us royalties on its sales of Promacta. These payments are expected to be a substantial portion of our ongoing revenues for some time. As a result, any setback that may occur with respect to Promacta could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for Promacta could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, safety

issues, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products, as well as higher than expected total rebates, returns or discounts.

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Revenues based on sales of Kyprolis represent a substantial portion of our overall expected future revenues.

Revenue from Onyx based on sales of Kyprolis are expected to be a substantial portion of our revenue in the future and any setbacks that occur with respect to Kyprolis could significantly impair our future operating results and/or reduce the market price of our stock. Setbacks for Kyprolis could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, safety issues, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products, as well as higher than expected total rebates, returns or discounts.

Revenue from sales of Captisol material to our collaborative partners represents a significant portion of our current revenue and our continued development and supply of Captisol is subject to a number of risks.

In January 2011, we completed our merger with CyDex, in which we obtained exclusive rights to the Captisol technology, in addition to other product candidates. All of CyDex's products and product candidates, as well as the technology that it outlicenses, are based on Captisol. We must coordinate with our collaborative partners concerning the development, manufacturing, regulatory and intellectual property protection strategies for Captisol and new development product candidates. In addition, we rely on our collaborative partners for many aspects of our Captisol developmental and commercialization activities, and we are subject to risks related to their financial stability and solvency.

In addition, Ligand or its partners are attempting to develop product candidates that may contain significantly higher levels of Captisol than in any currently-approved product and has directed developers to demonstrate an adequate safety margin and specifically acceptable renal safety. If products or product candidates incorporating Captisol technology were to cause any unexpected adverse events, whether in preclinical studies, clinical trials or as commercialized products, whether as a result of Captisol or otherwise, the perception of Captisol safety could be seriously harmed. If this were to occur, we may not be able to market Captisol products unless and until we are able to demonstrate that the adverse event was unrelated to Captisol, which we may not be able to do. Further, whether or not the adverse event was a result of Captisol, we could be required by the FDA to submit to additional regulatory reviews or approvals, including extensive safety testing or clinical testing of products using Captisol, which would be expensive and, even if we were to demonstrate that the adverse event was unrelated to Captisol, would delay our marketing of Captisol-enabled products and receipt of revenue related to those products, which could significantly impair our operating results and/or reduce the market price of our stock.

Our product candidates face significant development and regulatory hurdles prior to marketing which could delay or prevent sales and/or milestone revenue.

Before we or our partners obtain the approvals necessary to sell any of our potential products, we must show through preclinical studies and human testing that each product is safe and effective. We and our partners have a number of products moving toward or currently awaiting regulatory action. Failure to show any product’s safety and effectiveness could delay or prevent regulatory approval of a product and could adversely affect our business. The clinical trials process is complex and uncertain. For example, the results of preclinical studies and initial clinical trials may not necessarily predict the results from later large-scale clinical trials. In addition, clinical trials may not demonstrate a product’s safety and effectiveness to the satisfaction of the regulatory authorities. Recently, a number of companies have suffered significant setbacks in advanced clinical trials or in seeking regulatory approvals, despite promising results in earlier trials. The FDA may also require additional clinical trials after regulatory approvals are received. Such additional trials may be expensive and time-consuming, and failure to successfully conduct those trials could jeopardize continued commercialization of a product.

The rates at which we complete our clinical trials depends on many factors, including, but are not limited to, our ability to obtain adequate supplies of the products to be tested and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial and other potential drug candidates being studied. Delays in patient enrollment for our trials may result in increased costs and longer development times. In addition, our collaborative partners have rights to control product development and clinical programs for products developed under the collaborations. As a result, these collaborative partners may conduct these programs more slowly or in a different manner than expected. Moreover, even if clinical trials are completed, we or our collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

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We rely heavily on collaborative relationships, and any disputes or litigation with our collaborative partners or termination or breach of any of the related agreements could reduce the financial resources available to us, including research and development funding, milestone payments and future royalty revenues.

Our strategy for developing and commercializing many of our potential products, including products aimed at larger markets, includes entering into collaborations with corporate partners and others. These collaborations have provided us with funding and research and development resources for potential products for the treatment of a variety of diseases. However, the funding provided to us by our existing collaborative partners for ongoing research and development under our existing collaborative agreements has ceased. These agreements also give our collaborative partners significant discretion when deciding whether or not to pursue any development program. Our existing collaborations may not continue or be successful, and we may be unable to enter into future collaborative arrangements to develop and commercialize our product candidates.

In addition, our collaborators may develop drugs, either alone or with others that compete with the types of drugs they are developing with us. This would result in increased competition for our programs. If products are approved for marketing under our collaborative programs, revenues we receive will depend on the manufacturing, marketing and sales efforts of our collaborative partners, who generally retain commercialization rights under the collaborative agreements. Generally, our current collaborative partners also have the right to terminate their collaborations under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully (for example, by not making required payments when due, or at all), our product development under these agreements will be delayed or terminated. Disputes or litigation may also arise with our collaborators, including disputes or litigation over ownership rights to intellectual property, know-how or technologies developed with our collaborators. Such disputes or litigation could adversely affect our rights to one or more of our product candidates. Any such dispute or litigation could delay, interrupt or terminate the collaborative research, development and commercialization of certain potential products, create uncertainty as to ownership rights of intellectual property, or could result in litigation or arbitration. The occurrence of any of these problems could be time-consuming and expensive and could adversely affect our business.

We obtain Captisol from a sole source supplier, and if this supplier were to cease to be able to supply Captisol to us, or decline to supply Captisol to us, we would be unable to continue to derive revenue or continue to develop our product candidates until we obtained an alternative source, which could take a considerable length of time.

We currently have one supplier of Captisol, Hovione FarmaCiencia SA, or Hovione, through its agent Hovione LLC. Hovione is a major supplier of APIs and API intermediates located in Portugal. Hovione has other production sites in Cork, Ireland, Macau, China, and Zhejiang, China, but those sites are not yet fully qualified to make Captisol. If a major disaster were to happen at Hovione or Hovione were to suffer major production problems or were to fail to deliver Captisol to us for any other reason, there could be a significant interruption of our Captisol supply. While we carry a significant inventory of Captisol for this type of occurrence, which should permit us to satisfy our existing supply obligations through 2013 under current and anticipated demand conditions, a series of unusually large orders could rapidly deplete that inventory and cause significant problems with our licensees and disrupt our business. In addition, if we fail to supply Captisol under our supply agreements, our customers could obtain the right to have Captisol manufactured by other suppliers, which would significantly harm our business.

We rely on contract manufacturers for the manufacture of Captisol and product candidates, and if these contract manufacturers fail to perform as we expect, we will incur delays in our ability to generate revenue and substantial additional expenses in obtaining new contract manufacturers.

We do not manufacture products or product candidates, but rather contract with contract manufacturers for the manufacture of products and product candidates. With respect to any specific product or product candidate, we only

contract with one contract manufacturer due to the high cost of compliance with good manufacturing practices prior to the contract manufacturer being permitted to manufacture the product or product candidate for use in humans. If a contract manufacturer is unable or unwilling to continue to manufacture for us in the future, we would be required to contract with a new contract manufacturer for the specific product or product candidate. In the case of products, this would cause us to lose revenue during the qualification process, and in the case of product candidates, this could cause a delay in the commercialization of the product candidate. In addition, in either case we would incur substantial additional expenses as a result of the new contract manufacturer becoming qualified. Further, if a contract manufacturer were to experience a delay in producing products or product candidates due to a failure to meet strict FDA manufacturing requirements or otherwise, we would also experience a delay in development and commercialization of the product candidate or, in the case of products, sales of the product. This risk is exacerbated in the case of manufacture of injectables, which require heightened sterility and other conditions as well as specialized facilities for preparation.

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Expirations of, challenges to or failure to secure patents and other proprietary rights may significantly hurt our business.

The initially filed patents relating to Captisol expired in 2010, 2011 and 2012 in the U.S. and will expire between 2013 and 2016 in most countries outside the U.S. We have also obtained patent protection in the U.S. through 2025 on one or more Agglomerated forms of Captisol and through 2029 on one or more High Purity forms of Captisol. We have obtained patent protection on a number of combinations of APIs and Captisol through three combination patents in the U.S., and we have applied for six additional combination patents in the U.S. relating to the combination of Captisol with specific APIs. Our U.S. combination patent relating to Fosphenytoin expires June 12, 2018 and our U.S. combination patent relating to Amiodarone expires May 4, 2022. Our U.S. combination patent relating to one of our early-stage product candidates expires March 19, 2022. There is no guarantee that these patents will be sufficient to prevent competitors from creating a generic form of Captisol after 2010 and competing against us, or from developing combination patents for products that will prevent us from developing products using those APIs. In addition, most of the agreements in our Captisol outlicensing business, provide that once the relevant patent expires, the amount of royalties we receive will be reduced or eliminated.

Generally, our success will depend on our ability and the ability of our licensors to obtain and maintain patents and proprietary rights for our potential products both in the United States and in foreign countries. Patents may not be issued from any of these applications currently on file, or, if issued, may not provide sufficient protection. Our patent position, like that of many biotechnology and pharmaceutical companies, is uncertain and involves complex legal and technical questions for which important legal principles are unresolved. We may not develop or obtain rights to products or processes that are patentable. Even if we do obtain patents, such patents may not adequately protect the technology we own or have licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents we own or license and rights we receive under those patents may not provide competitive advantages to us. For example, our European patent related to Agglomerated forms of Captisol is currently being opposed and observations have been filed against our European patent application related to high purity Captisol.

Any conflicts resulting from the patent rights of others could significantly reduce the coverage of our patents and limit our ability to obtain meaningful patent protection. We have had and will continue to have discussions with our current and potential collaborative partners regarding the scope and validity of our patents and other proprietary rights. If a collaborative partner or other party successfully establishes that our patent rights are invalid, we may not be able to continue our existing collaborations beyond their expiration. Any determination that our patent rights are invalid also could encourage our collaborative partners to seek early termination of our agreements. Such invalidation could adversely affect our ability to enter into new collaborations.

We may also need to initiate litigation, which could be time-consuming and expensive, to enforce our proprietary rights or to determine the scope and validity of others' rights. If litigation occurs, a court may find our patents or those of our licensors invalid or may find that we have infringed on a competitor's rights. In addition, if any of our competitors have filed patent applications in the United States which claim technology we also have invented, the United States Patent and Trademark Office may require us to participate in expensive interference proceedings to determine who has the right to a patent for the technology.

We also rely on unpatented trade secrets and know-how to protect and maintain our competitive position. We require our employees, consultants, collaborative partners and others to sign confidentiality agreements when they begin their relationship with us. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our competitors may independently discover our trade secrets.

Our collaborative partners may change their strategy or the focus of their development and commercialization efforts with respect to our alliance products; the success of our alliance products could be adversely affected.

If our collaborative partners terminate their collaborations with us or do not commit sufficient resources to the development, manufacture, marketing or distribution of our alliance products, we could be required to devote additional resources to our alliance products, seek new collaborative partners or abandon such alliance products, all of which could have an adverse effect on our business.

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We are currently dependent upon out-licensing our technologies and we may not be successful in entering into additional out-license agreements on favorable terms, which may adversely affect our liquidity or require us to alter development plans on our products.

We have entered into several out-licensing agreements for the development and commercialization of our products. We currently depend on our arrangements with our outlicensees to sell products using our Captisol technology. These agreements generally provide that outlicensees may terminate the agreements at will. If our outlicensees discontinue sales of products using our Captisol technology, fail to obtain regulatory approval for their products using our Captisol technology, fail to satisfy their obligations under their agreements with us, or otherwise choose to utilize a generic form of Captisol should it become available, or if we are unable to establish new licensing and marketing relationships, our financial results and growth prospects would be materially affected. Further, under most of our Captisol outlicenses, the amount of royalties we receive will be reduced or will cease when the relevant patent expires. While we have other more recent patents relating to Captisol with later expiration dates (for example, our high purity patent, U.S. Patent No. 7,635,773 is not expected to expire until 2029 and our morphology patent, U.S. Patent No. 7,629,331 is not expected to expire until 2025), the initially filed patents relating to Captisol expired in 2010 and 2011 in the U.S. and will expire between 2012 and 2016 in most countries outside the U.S. If our other intellectual property rights are not sufficient to prevent a generic form of Captisol from coming to market and if in such case our outlicensees choose to terminate their agreements with us, the source of the vast majority of our Captisol revenue may cease to exist.

Although we expend considerable resources on internal research and development for our proprietary programs, we may not be successful in entering into additional out-licensing agreements under favorable terms due to several factors including:

- the difficulty in creating valuable product candidates that target large market opportunities;
- research and spending priorities of potential licensing partners;
- willingness of and the resources available to pharmaceutical and biotechnology companies to in-license product candidates for their clinical pipelines; or
- differences of opinion with potential partners on the valuation of products we are seeking to out-license.

The inability to enter into out-licensing agreements under favorable terms and to earn milestone payments, license fees and/or upfront fees may adversely affect our liquidity and may force us to curtail or delay development of some or all of our proprietary programs, which in turn may harm our business and the value of our stock.

Third party intellectual property may prevent us or our partners from developing our potential products and we may owe a portion of any payments we receive from our collaborative partners to one or more third parties.

Our success will depend on our ability and the ability of our collaborative partners to avoid infringing the proprietary rights of others, both in the United States and in foreign countries. In addition, disputes with licensors under our license agreements may arise which could result in additional financial liability or loss of important technology and potential products and related revenue, if any. Further, the manufacture, use or sale of our potential products or our collaborative partners' products or potential products may infringe the patent rights of others. This could impact Captisol, Promacta, Kyprolis, Avinza, Viviant and Conbriza (bazedoxifene), Fablyn, and other products or potential products.

Several drug companies and research and academic institutions have developed technologies, filed patent applications or received patents for technologies that may be related to our business. Others have filed patent applications and received patents that conflict with patents or patent applications we have licensed for our use, either by claiming the same methods or compounds or by claiming methods or compounds that could dominate those licensed to us. In addition, we may not be aware of all patents or patent applications that may impact our ability to make, use or sell any

of our potential products. For example, US patent applications may be kept confidential while pending in the United States Patent and Trademark Office and patent applications filed in foreign countries are often first published six months or more after filing.

Disagreements or litigation with our collaborative partners could delay our ability and the ability of our collaborative partners to achieve milestones or our receipt of other payments. In addition, other possible disagreements or litigation could delay, interrupt or terminate the research, development and commercialization of certain potential products being developed by either our collaborative partners or by us. The occurrence of any of the foregoing problems could be time-consuming and expensive and could adversely affect our business.

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Third parties have not directly threatened an action or claim against us, although we do periodically receive other communications or have other conversations with the owners of other patents or other intellectual property. If others obtain patents with conflicting claims, we may be required to obtain licenses to those patents or to develop or obtain alternative technology. We may not be able to obtain any such licenses on acceptable terms, or at all. Any failure to obtain such licenses could delay or prevent us from pursuing the development or commercialization of our potential products.

In general, litigation claims can be expensive and time consuming to bring or defend against and could result in settlements or damages that could significantly impact our results of operations and financial condition. We cannot predict or determine the outcome of these matters or reasonably estimate the amount or range of amounts of any fines or penalties that might result from a settlement or an adverse outcome. However, a settlement or an adverse outcome could have a material adverse effect on our financial position, liquidity and results of operations.

If our business does not perform according to our expectations, we may not be able to pay off our existing debt. Our operations have consumed substantial amounts of cash since inception. As of December 31, 2012, we had negative working capital of $11.6 million. Clinical and preclinical development of drug candidates is a long, expensive and uncertain process. Also, we may acquire companies, businesses or products and the consummation of such acquisitions may consume additional cash. For example, in connection with our 2011 acquisition of CyDex, we entered into a $20 million Loan and Security Agreement, or the Loan Agreement, with a lender. The loan was amended in January 2012 to increase the secured credit facility to $27.5 million. The original $20 million borrowed under the facility bears interest at a fixed rate of 8.6%. The additional $7.5 million bears interest at a fixed rate of 8.9%. Under the terms of the secured debt, we will make interest only payments through March 2013. Subsequent to the interest only payments, the note will amortize with principal and interest payments through the remaining term of the loan. Additionally, we must also make an additional final payment equal to 6% of the total amount borrowed which is due at maturity and is being accreted over the life of the loan. The maturity date of the term loan is August 1, 2014.

We also have a cash-collateralized revolving credit facility under which we may elect to borrow up to $10 million. Amounts borrowed under the revolving credit facility bear interest at a floating rate equal to 200 basis points above the prime rate. All outstanding amounts under the credit facility may become due and payable if we fail to maintain a cash balance equal to the amount outstanding under the credit facility. The maturity date of the revolving credit facility is March 28, 2013.

In October 2011, we filed a Registration Statement on Form S-3 with the Securities and Exchange Commission (“SEC”) for the issuance and sale of up to $30 million of equity or other securities, proceeds from which will be used for general corporate purposes. The Form S-3 provides additional financial flexibility for us to sell shares or other securities as needed at any time. As of December 31, 2012, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately $5.5 million.

We believe that our capital resources, including our currently available cash, cash equivalents, and short-term investments as well as our current and future royalty revenues, will be adequate to fund our operations at their current levels at least for the next 12 months. However, changes may occur that would cause us to consume available capital resources before that time and we may need to complete additional equity or debt financings to fund our operations. Our inability to obtain additional financing could adversely affect our business. Financings may not be available at all or on terms favorable to us. In addition, these financings, if completed, may not meet our capital needs and could result in substantial dilution to our stockholders. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or drug development programs. We may also be required to liquidate our business or file for bankruptcy protection. Alternatively, we may be forced to attempt to continue development by entering into arrangements with collaborative partners or others that require us to relinquish some or

all of our rights to technologies or drug candidates that we would not otherwise relinquish.

Our product development involves a number of uncertainties, and we may never generate sufficient collaborative payments and royalties from the development of products to become profitable.

We were founded in 1987. We have incurred significant losses since our inception. As of December 31, 2012, our accumulated deficit was $682.8 million.

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Most of our products in development will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before they can be marketed. We cannot predict if or when any of the products we are developing or those being developed with our partners will be approved for marketing. There are many reasons why we or our collaborative partners may fail in our efforts to develop our potential products, including the possibility that: preclinical testing or human studies may show that our potential products are ineffective or cause harmful side effects; the products may fail to receive necessary regulatory approvals from the FDA or foreign authorities in a timely manner, or at all; the products, if approved, may not be produced in commercial quantities or at reasonable costs; the products, if approved, may not achieve commercial acceptance; regulatory or governmental authorities may apply restrictions to our products, which could adversely affect their commercial success; or the proprietary rights of other parties may prevent us or our partners from marketing the products.

Any product development failures for these or other reasons, whether with our products or our partners' products, may reduce our expected revenues, profits, and stock price.

Any future material weaknesses or deficiencies in our internal control over financial reporting could harm stockholder and business confidence on our financial reporting, our ability to obtain financing and other aspects of our business.

As described in Item 9A, we identified material weaknesses as a result of improper accounting for non-routine transactions and the controls over the determination of fair value of contingent liabilities. Our audit committee, after consultation with management has determined that the material weaknesses were a result of inadequate staffing and review processes. As a result of the material weaknesses associated with non-routine transactions, we have added a corporate controller to our finance and accounting staff. While we had processes to identify and apply accounting standards to complex transactions, we enhanced these processes with the addition of a resource with the ability to research and understand the nuances of complex accounting standards. Additionally, we plan to enhance our controls over the determination of the fair value of contingent liabilities by including a formal review of mathematical calculations and completeness of such calculations. Given the material weaknesses, our audit committee, after consultation with management determined that we did not maintain effective internal control over financial reporting. The existence of one or more material weaknesses or significant deficiencies could result in errors in our consolidated financial statements. Substantial costs and resources may be required to rectify any internal control deficiencies. If we fail to achieve and maintain the adequacy of our internal controls in accordance with applicable standards, we may be unable to conclude on an ongoing basis that we have effective internal controls over financial reporting. If we cannot produce reliable financial reports, our business and financial condition could be harmed, investors could lose confidence in our reported financial information, or the market price of our stock could decline significantly. In addition, our ability to obtain additional financing to operate and expand our business, or obtain additional financing on favorable terms, could be materially and adversely affected, which, in turn, could materially and adversely affect our business, our financial condition and the market value of our securities. Moreover, our reputation with customers, lenders, investors, securities analysts and others may be adversely affected.

We may undertake strategic acquisitions in the future and any difficulties from integrating such acquisitions could adversely affect our stock price, operating results and results of operations.

We may acquire companies, businesses and products that complement or augment our existing business. We may not be able to integrate any acquired business successfully or operate any acquired business profitably. Integrating any newly acquired business could be expensive and time-consuming. Integration efforts often take a significant amount of time, place a significant strain on managerial, operational and financial resources and could prove to be more difficult or expensive than we predict. The diversion of our management's attention and any delay or difficulties encountered in connection with any future acquisitions we may consummate could result in the disruption of our on-going business or inconsistencies in standards and controls that could negatively affect our ability to maintain third-party relationships. Moreover, we may need to raise additional funds through public or private debt or equity

financing, or issue additional shares, to acquire any businesses or products, which may result in dilution for stockholders or the incurrence of indebtedness.

As part of our efforts to acquire companies, business or product candidates or to enter into other significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or evaluating all such risks and, as a result, might not realize the intended advantages of the transaction. If we fail to realize the expected benefits from acquisitions we may consummate in the future, whether as a result of unidentified risks, integration difficulties, regulatory setbacks and other events, our business, results of operations and financial condition could be adversely affected. If we acquire product candidates, we will also need to make certain assumptions about, among other things, development costs, the likelihood of receiving regulatory approval and the market for such product candidates. Our assumptions may prove to be incorrect, which could cause us to fail to realize the anticipated benefits of these transactions.

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In addition, we will likely experience significant charges to earnings in connection with our efforts, if any, to consummate acquisitions. For transactions that are ultimately not consummated, these charges may include fees and expenses for investment bankers, attorneys, accountants and other advisors in connection with our efforts. Even if our efforts are successful, we may incur, as part of a transaction, substantial charges for closure costs associated with elimination of duplicate operations and facilities and acquired IPR&D charges. In either case, the incurrence of these charges could adversely affect our results of operations for particular quarterly or annual periods.

Revenues based on sales of Avinza could decrease or be eliminated.
Pfizer, as successor to King, is obligated to pay us royalties based on the sales of Avinza. Any setback that may occur with respect to Avinza could reduce our revenue. Setbacks for Avinza could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products, as well as higher than expected total rebates, returns or discounts. Avinza could also face regulatory action and product safety issues and is also subject to generic competition.

If plaintiffs bring product liability lawsuits against us or our partners, we or our partners may incur substantial liabilities and may be required to limit commercialization of our approved products and product candidates, and we may be subject to other liabilities related to the sale of our prior commercial product lines.

We and our partners face an inherent risk of product liability as a result of the clinical testing of our product candidates in clinical trials and face an even greater risk for commercialized products. Although we are not currently a party to product liability litigation, if we are sued, we may be held liable if any product or product candidate we develop causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Regardless of merit or eventual outcome, liability claims may result in decreased demand for any product candidates or products that we may develop, injury to our reputation, discontinuation of clinical trials, costs to defend litigation, substantial monetary awards to clinical trial participants or patients, loss of revenue and the inability to commercialize any products that we develop. We have product liability insurance that covers our clinical trials up to a $5.0 million annual limit. We intend to expand product liability insurance coverage to include the sale of commercial products if we obtain marketing approval for any products that we may develop. However, this insurance may be prohibitively expensive, or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or delay the commercialization of our product candidates. If we are sued for any injury caused by our product candidates or any future products, our liability could exceed our total assets.

In addition, we agreed to indemnify Eisai and King under certain circumstances pursuant to the asset purchase agreements we entered into with Eisai and King in connection with the sale of our prior commercial product lines. Some of our indemnification obligations still remain and our potential liability in certain circumstances is not limited to specific dollar amounts. We cannot predict the liabilities that may arise as a result of these matters. Any claims related to our indemnification obligations to King or Eisai could materially and adversely affect our financial condition.

In addition, King assumed our obligation to make payments to Organon based on net sales of Avinza (the fair value of which was $12.5 million as of December 31, 2012). We remain liable to Organon in the event King defaults on this obligation. Any requirement to pay a material amount to Organon, could adversely affect our business and the price of our securities.

The sale of our prior commercial product lines does not relieve us of exposure to product liability risks on products we sold prior to divesting these product lines. A successful product liability claim or series of claims brought against us

may not be insured and could result in payment of significant amounts of money and divert management's attention from running our business.

If our partners do not reach the market with our alliance products before our competitors offer products for the same or similar uses, or if our partners are not effective in marketing our alliance products, our revenues from product sales, if any, will be reduced.

We face intense competition in our development activities. Our competitors might succeed in obtaining regulatory approval for competitive products more rapidly than our partners can for our products. In addition, competitors might develop technologies and products that are less expensive and perceived to be safer or more effective than those being developed by us or our partners, which could impair our product development and render our technology obsolete.

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We may not be able to hire and/or retain key employees.

If we are unable to hire and/or retain key employees, we may not have sufficient resources to successfully manage our assets or our business, and we may not be able to perform our obligations under various contracts and commitments. Furthermore, there can be no assurance that we will be able to retain all of our key management and scientific personnel. If we fail to retain such key employees, we may not realize the anticipated benefits of our mergers. Either of these could have substantial negative impacts on our business and our stock price.

We use hazardous materials, which may expose us to significant liability.

In connection with our research and development activities, we handle hazardous materials, chemicals and various radioactive compounds. To properly dispose of these hazardous materials in compliance with environmental regulations, we are required to contract with third parties. We believe that we carry reasonably adequate insurance for toxic tort claims. However, we cannot eliminate the risk or predict the exposure of accidental contamination or injury from the handling and disposing of hazardous materials, whether by us or our third-party contractors. Any accident in the handling and disposing of hazardous materials may expose us to significant liability.

Our shareholder rights plan and charter documents may hinder or prevent change of control transactions.

Our shareholder rights plan and provisions contained in our certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in our ownership. In addition, our Board of Directors may issue shares of preferred stock without any further action by the stockholders. Such restrictions and issuances may have the effect of delaying or preventing a change in our ownership. If changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current Board of Directors to be removed and replaced, even if you or our other stockholders believe that such actions are in the best interests of us and our stockholders.

We may lose some or all of the value of some of our short-term investments.

The investments are intended to maintain safety of principal while providing liquidity adequate to meet projected cash requirements. Risks of principal loss are to be minimized through diversified short and medium term investments of high quality, but the investments are not in every case guaranteed or fully insured. From time to time we may suffer other losses on our short-term investment portfolio.

Funding of our drug development programs will make those funds unavailable for other uses.

Our drug development programs may require substantial additional capital to successfully complete them, arising from costs to: conduct research, preclinical testing and human studies; establish pilot scale and commercial scale manufacturing processes and facilities; and establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support these programs. While we expect to fund our research and development activities from cash generated from royalties and milestones from our partners in various past and future collaborations to the extent possible, if we are unable to do so, we may need to complete additional equity or debt financings or seek other external means of financing. These financings could depress our stock price. If additional funds are required to support our operations and we are unable to obtain them on terms favorable to us, we may be required to cease or reduce further development or commercialization of our products, to sell some or all of our technology or assets or to merge with another entity.

Our results of operations and liquidity needs could be materially negatively affected by market fluctuations and economic downturn.

Our results of operations could be materially negatively affected by economic conditions generally, both in the U.S. and elsewhere around the world. Continuing concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, and the U.S. financial markets have contributed to increased volatility and diminished expectations for the economy and the markets going forward. These factors, combined with volatile oil prices, declining business and consumer confidence and increased unemployment, have precipitated an economic recession and fears of a possible depression. Domestic and international equity markets continue to experience heightened volatility and turmoil. These events and the continuing market upheavals may have an adverse effect on us. In the event of a continuing market downturn, our results of operations could be adversely affected by those factors in many ways, including making it more difficult for us to raise funds if necessary, and our stock price may further decline.

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Our investment securities consist primarily of money market funds, corporate debt obligations and U.S. government agency securities. We do not have any auction rate securities. Recently, there has been concern in the credit markets regarding the value of a variety of mortgage-backed securities and the resultant effects on various securities markets. We cannot provide assurance that our investments are not subject to adverse changes in market value. If our investments experience adverse changes in market value, we may have less capital to fund our operations.

Our stock price has been volatile and could experience a sudden decline in value.

Our common stock has experienced significant price and volume fluctuations and may continue to experience volatility in the future. As a result, you may not be able to sell your shares quickly or at the latest market price if trading in our stock is not active or the volume is low. Many factors may have a significant impact on the market price of our common stock, including, but not limited to, the following factors: results of or delays in our preclinical studies and clinical trials; the success of our collaboration agreements; publicity regarding actual or potential medical results relating to products under development by us or others; announcements of technological innovations or new commercial products by us or others; developments in patent or other proprietary rights by us or others; comments or opinions by securities analysts or major stockholders; future sales of our common stock by existing stockholders; regulatory developments or changes in regulatory guidance; litigation or threats of litigation; economic and other external factors or other disaster or crises; the departure of any of our officers, directors or key employees; period-to-period fluctuations in financial results; and limited daily trading volume.

Impairment charges pertaining to goodwill, identifiable intangible assets or other long-lived assets from our mergers and acquisitions could have an adverse impact on our results of operations and the market value of our common stock.

The total purchase price pertaining to our acquisitions of Pharmacopeia, Neurogen, Metabasis and CyDex have been allocated to net tangible assets, identifiable intangible assets, in process research and development and goodwill. To the extent the value of goodwill or identifiable intangible assets or other long-lived assets become impaired, we will be required to incur material charges relating to the impairment. Any impairment charges could have a material adverse impact on our results of operations and the market value of our common stock.

The occurrence of a catastrophic disaster could damage our facilities beyond insurance limits or we could lose key data which could cause us to curtail or cease operations.

We are vulnerable to damage and/or loss of vital data from natural disasters, such as earthquakes, tornadoes, power loss, fire, floods and similar events. If any disaster were to occur, our ability to operate our business could be seriously impaired. We have property, liability, and business interruption insurance which may not be adequate to cover our losses resulting from disasters or other similar significant business interruptions, and we do not plan to purchase additional insurance to cover such losses due to the cost of obtaining such coverage. Any significant losses that are not recoverable under our insurance policies could seriously impair our business, financial condition and prospects.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We currently occupy premises consisting of approximately 16,500 square feet of office and laboratory space in San Diego through June 2019 to serve as our corporate headquarters. We believe this facility is adequate to meet our space requirements for the foreseeable future.

We lease approximately 1,500 square feet of laboratory space located at the Bioscience and Technology Business Center in Lawrence, Kansas leased through December 2014.

We lease approximately 99,000 square feet in three facilities in Cranbury, New Jersey under leases that expire in 2016. We also sublease approximately 16,700 square feet of these facilities with subleases expiring in 2014 through 2016. We fully vacated these facilities in September 2010.

We also lease a 52,800 square foot facility in San Diego that is leased through July 2015. In January 2008, we began subleasing the 52,800 square foot facility under a sublease agreement through July 2015. We fully vacated this facility in February 2008.

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Item 3. Legal Proceedings

From time to time we are subject to various lawsuits and claims with respect to matters arising out of the normal course of our business. Due to the uncertainty of the ultimate outcome of these matters, the impact on future financial results is not subject to reasonable estimates.

Securities Litigation

On June 8, 2012, a federal securities class action and shareholder derivative lawsuit was filed in the Eastern District of Pennsylvania against Genaera Corporation and its officers, directors, major shareholders and trustee ("Genaera Defendants") for allegedly breaching their fiduciary duties to Genaera shareholders. The lawsuit also names the Company and its CEO John Higgins as additional defendants for allegedly aiding and abetting the Genaera Defendants' various breaches of fiduciary duties based on the Company's purchase of a licensing interest in a development-stage pharmaceutical drug program from the Genaera Liquidating Trust in May 2010 and its subsequent sale of half of its interest in the transaction to Biotechnology Value Fund, Inc. On December 19, 2012, plaintiff filed an amended complaint asserting substantially similar claims against the Company and Mr. Higgins. The amended complaint seeks unspecified damages, disgorgement, punitive damages, attorneys' fees and costs. The Company intends to vigorously defend against the claims against it and Mr. Higgins in the lawsuit. Due to the complex nature of the legal and factual issues involved, however, the outcome of this matter is not presently determinable.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock is traded on the NASDAQ Global Market (formerly NASDAQ National Market) under the symbol "LGND".

The following table sets forth the high and low intraday sales prices for our common stock on the NASDAQ Global Market for the periods indicated:

	Price Range	
	High	Low
Year Ended December 31, 2012:		
1st Quarter	$18.74	$11.44
2nd Quarter	17.27	11.21
3rd Quarter	19.85	15.80
4th Quarter	21.75	14.75
Year Ended December 31, 2011:		
1st Quarter	$11.10	$8.64
2nd Quarter	12.06	9.39
3rd Quarter	16.24	10.16
4th Quarter	15.91	10.50

As of February 14, 2013, the closing price of our common stock on the NASDAQ Global Market was $22.07.

Holders

As of February 14, 2013, there were approximately 709 holders of record of the common stock.

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Performance Graph

The graph below shows the five-year cumulative total stockholder return assuming the investment of $100 and is based on the returns of the component companies weighted monthly according to their market capitalizations. The graph compares total stockholder returns of our common stock, of all companies traded on the NASDAQ Stock market, as represented by the NASDAQ Composite® Index, and of the NASDAQ Biotechnology Stock Index, as prepared by The NASDAQ Stock Market Inc. The NASDAQ Biotechnology Stock Index tracks approximately 168 domestic biotechnology stocks.

The stockholder return shown on the graph below is not necessarily indicative of future performance and we will not make or endorse any predictions as to future stockholder returns.

	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012
Ligand	100 %	57 %	45 %	31 %	41 %	72 %
NASDAQ Market (U.S. Companies) Index	100 %	60 %	87 %	103 %	102 %	120 %
NASDAQ Biotechnology Stocks	100 %	88 %	102 %	117 %	131 %	174 %

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Item 6. Selected Consolidated Financial Data

The following selected historical consolidated financial and other data are qualified by reference to, and should be read in conjunction with, our consolidated financial statements and the related notes thereto appearing elsewhere herein and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our selected statement of operations data set forth below for each of the years ended December 31, 2012, 2011, 2010, 2009 and 2008, and the balance sheet data as of December 31, 2012, 2011, 2010, 2009 and 2008, are derived from our consolidated financial statements.

	Year Ended December 31, (in thousands, except share data)				
	2012	2011	2010	2009	2008
Consolidated Statement of Operations Data:					
Royalties	$14,073	$9,213	$7,279	$8,334	$20,305
Material sales	9,432	12,123	—	—	—
Collaborative research and development and other revenues	7,883	8,701	16,259	30,606	7,000
Total revenues	31,388	30,037	23,538	38,940	27,305
Cost of material sales	3,601	4,909	—	—	—
Research and development expenses	10,790	10,291	22,067	39,870	30,770
General and administrative expenses	16,108	14,977	12,829	15,211	23,785
Lease exit and termination costs	315	(22)	16,894	15,235	—
Write-off of acquired in-process research and development	—	2,282	2,754	442	72,000
Total operating costs and expenses	30,814	32,437	54,544	70,758	126,555
Accretion of deferred gain on sale leaseback	—	1,702	1,702	21,851	1,964
Income (loss) from operations	574	(698)	(29,304)	(9,967)	(97,286)
(Loss) income from continuing operations	(2,674)	9,712	(12,786)	(8,337)	(97,460)
Discontinued operations (1)	2,147	3	2,413	6,389	(654)
Net (loss) income	(527)	9,715	(10,373)	(1,948)	(98,114)
Basic per share amounts:					
(Loss) income from continuing operations	$(0.13)	$0.49	$(0.65)	$(0.44)	$(6.12)
Discontinued operations (1)	0.11	—	0.12	0.34	(0.04)
Net (loss) income	$(0.03)	$0.49	$(0.53)	$(0.10)	$(6.16)
Weighted average number of common shares	19,853,095	19,655,632	19,613,201	18,862,751	15,917,570
Diluted per share amounts:					
(Loss) income from continuing operations	$(0.13)	$0.49	$(0.65)	$(0.44)	$(6.12)
Discontinued operations (1)	0.11	—	0.12	0.34	(0.04)
Net (loss) income	$(0.03)	$0.49	$(0.53)	$(0.10)	$(6.16)
Weighted average number of common shares	19,853,095	19,713,320	19,613,201	18,862,751	15,917,570

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	December 31, 2012	2011	2010	2009	2008
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents, short-term investments and restricted cash and investments	$15,148	$18,382	$24,038	$54,694	$82,012
Working capital	(11,616)	(11,413)	3,531	15,994	23,315
Total assets	104,260	120,583	75,559	141,807	171,448
Current portion of deferred revenue, net	486	1,240	—	4,989	10,301
Current portion of deferred gain	—	—	1,702	1,702	1,964
Long-term obligations (excludes long-term portions of deferred revenue, net and deferred gain)	39,967	56,945	36,030	72,350	58,743
Long-term portion of deferred revenue, net	2,369	3,466	2,546	3,495	16,819
Long-term portion of deferred gain	—	—	—	1,702	23,292
Common stock subject to conditional redemption	—	8,344	8,344	8,344	12,345
Accumulated deficit	(682,759)	(682,232)	(691,947)	(681,574)	(679,626)
Total stockholders' equity (deficit)	26,485	8,185	(4,849)	3,744	(10,365)

(1) We sold our Oncology Product Line ("Oncology") on October 25, 2006 and our Avinza Product Line ("Avinza") on February 26, 2007. The operating results for Oncology and Avinza have been presented in our consolidated statements of operations as "Discontinued Operations."

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

Caution: This discussion and analysis may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed in Item 1A. "Risk Factors." This outlook represents our current judgment on the future direction of our business. These statements include those related to our Captisol related revenue, our Avinza, Promacta and other product royalty revenues, product returns, and product development. Actual events or results may differ materially from our expectations. For example, there can be no assurance that our revenues or expenses will meet any expectations or follow any trend(s), that we will be able to retain our key employees or that we will be able to enter into any strategic partnerships or other transactions. We cannot assure you that we will receive expected Avinza, Promacta, Captisol and other product revenues to support our ongoing business or that our internal or partnered pipeline products will progress in their development, gain marketing approval or achieve success in the market.In addition, ongoing or future arbitration, or litigation or disputes with third parties may have a material adverse effect on us. Such risks and uncertainties, and others, could cause actual results to differ materially from any future performance suggested. We undertake no obligation to release publicly the results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this annual report. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended.

Our trademarks, trade names and service marks referenced herein include Ligand. Each other trademark, trade name or service mark appearing in this annual report belongs to its owner.

References to "Ligand Pharmaceuticals Incorporated", "Ligand", the "Company", "we" or "our" include our wholly owned subsidiaries—Ligand JVR, Allergan Ligand Retinoid Therapeutics, Seragen, Inc., or Seragen; Pharmacopeia, LLC; Neurogen Corporation, CyDex Pharmaceuticals, Inc., Metabasis Therapeutics, and Nexus Equity VI LLC, or Nexus.

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We are a biotechnology company that operates with a business model focused on developing or acquiring revenue generating assets and coupling them to a lean corporate cost structure. Our goal is to create a sustainably profitable business and generate meaningful value for our stockholders. Since a portion of our business model is based on the goal of partnering with other pharmaceutical companies to commercialize and market our assets, a significant amount of our revenue is based largely on payments made to us by partners for royalties, milestones and license fees. We recognized the important role of the drug reformulation segment in the pharmaceutical industry and in 2011 added Captisol® to our technology portfolio. Captisol is a powerful formulation technology that has enabled six FDA approved products, including Onyx's Kyprolis® and Baxter International's Nexterone® and is currently being developed in a number of clinical-stage partner programs. In comparison to our peers, we believe we have assembled one of the largest and most diversified asset portfolios in the industry with the potential to generate significant revenue in the future. The therapies in our development portfolio address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, muscle wasting, multiple myeloma, Alzheimer's disease, dyslipidemia, diabetes, anemia, epilepsy, FSGS and osteoporosis. We have established multiple alliances with the world's leading pharmaceutical companies including GlaxoSmithKline, Onyx Pharmaceuticals, Merck, Pfizer, Baxter International, Bristol-Myers Squibb, Celgene, Lundbeck Inc., Eli Lilly and Co., Spectrum Pharmaceuticals and The Medicines Company.

In early 2012, we licensed the world-wide rights to RE-021 (formerly known as DARA-a Dual Acting Receptor Antagonist of Angiotension and Endothelin receptors) to Retrophin, Inc., or Retrophin. Retrophin intends to develop RE-021 for orphan indications of severe kidney diseases including Focal Segmental Glomerulosclerosis (FSGS) as well as conduct proof-of-concept studies in resistant hypertension and diabetic nephropathy. Certain patient groups with severely compromised renal function exhibit extreme proteinuria resulting in progression to dialysis and a high mortality rate. RE-021, with its unique dual blockade of angiotensin and endothelin receptors, is expected to provide meaningful clinical benefits in mitigating proteinuria in indications where there are no approved therapies. We received an upfront payment of $1 million, net of amounts owed to third parties.

In December 2012, we received a milestone payment of 620,000 shares of common stock in partner Retrophin, Inc. The milestone arose under the previously executed license agreement for the development and commercialization of Retrophin's lead clinical candidate RE-021 and was triggered by the completion of Retrophin's merger with Desert Gateway, Inc. and its transition to a publicly traded company. We recorded milestone revenue equal to the estimated fair value of the shares received, net of amounts owed to a third party, which was determined by an independent valuation firm. The shares issued to us represent approximately 7% of Retrophin's outstanding capital stock and are subject to a one year trading restriction.

In early 2013 we received a $1.4 million milestone payment from Retrophin, Inc.. Ligand will remit $0.2 million to former license holders under the terms of a previous license agreement for RE-021.

In July 2012, our licensee, Onyx Pharmaceuticals, Inc. ("Onyx"), received accelerated approval from the U.S. Food and Drug Administration, or FDA, for Kyprolis (Carfilzomib) for injection. We received a milestone of $0.6 million upon approval by the FDA. Kyprolis is formulated with Ligand's Captisol and is used for the treatment of patients with multiple myeloma who have received at least two prior therapies, including bortezomib and an immunomodulatory agent, and have demonstrated disease progression on or within 60 days of completion of the last therapy. Under our agreement with Onyx, we are entitled to receive milestones, tiered royalties ranging between 1.5% and 3%.

In September 2012, the Company filed a demand for arbitration against Chiva Pharmaceuticals, Inc. ("Chiva") with the American Arbitration Association. The demand asserted claims for damages resulting from Chiva's breach of the October 7, 2011 Fablyn License Agreement ("Fablyn License Agreement") for failure to tender a milestone payment and failure to pay certain patent prosecution expenses. In October 2012, the Company reached a settlement with

Chiva, whereby the parties resolved all disputes that had arisen between them, including Ligand's primary claim in arbitration relating to payments due under the Fablyn License Agreement. As part of the settlement, the parties executed mutual releases and Ligand agreed to seek dismissal of all claims asserted in the arbitration. In return, Chiva agreed to pay Ligand $0.1 million, which has been received by the Company.

In October 2012, our licensee, Merck, initiated a Phase IIb/III adaptive clinical trial for Dinaciclib for the treatment of patients with refractory chronic lymphocytic leukemia (CLL). As a result, during the fourth quarter of 2012, we recognized a $2 million milestone payment upon initiation of the clinical study. Under our collaboration and license agreement with Merck, we are entitled to receive future milestones and royalties.

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In November 2012, the FDA approved Promacta® for the treatment of thrombocytopenia (low blood platelet counts) in patients with chronic hepatitis C to allow them to initiate and maintain interferon-based therapy. Promacta is the first supportive care treatment available to patients who are ineligible or poor candidates for interferon-based therapy due to their low blood platelet counts. Promacta in combination with interferon-based therapy has been shown to improve a patient's chance of achieving a sustained virologic response (SVR) or viral cure.
As a result of the regulatory approvals of Promacta, pursuant to the terms of a license agreement with GSK, we are entitled to receive tiered royalties on annual net sales of Promacta. GSK has listed a patent in the FDA's Orange Book for Promacta with an expiration date in 2024.

In March 2013, we entered into a License Agreement with Spectrum Pharmaceuticals, Inc. ("Spectrum"). Under the License Agreement, we granted to Spectrum an exclusive, nontransferable, worldwide license to such intellectual property rights that will enable Spectrum to develop and potentially commercialize Captisol-enabled® propylene glycol-free melphalan. Contemporaneously with the entry into the license agreement, we entered into a supply agreement to provide Captisol to Spectrum. Under the Supply Agreement, Spectrum agreed to purchase its Captisol requirements for the development of the compound contemplated by the license agreement, as well as any Captisol required for any product that is successfully commercialized. We are entitled to receive a non-refundable license issuance fee of $3 million. Additionally, we are entitled to milestone payments and royalties on future net sales of the Captisol-enabled melphalan product. This program is currently enrolling patients in a pivotal clinical trial.
Metabasis Contingent Value Rights

In January 2010, we completed our acquisition of Metabasis. In addition to cash consideration, we issued four tradable Contingent Value Rights ("CVRs"), one CVR from each of four respective series of CVRs, for each Metabasis share. The CVRs will entitle the holder to cash payments as frequently as every six months as cash is received by us from the sale or partnering of any of the Metabasis drug development programs, among other triggering events. We have also committed to spend at least $7 million within 30 months and $8 million within 42 months, in new research and development funding on the Metabasis programs. Through December 31, 2012, we estimate that we have spent approximately $7.7 million of the committed amount.

In January 2011, we granted licenses to Chiva to begin immediate development in China of two clinical-stage HepDirect programs, Pradefovir for hepatitis B and MB01733 for hepatocellular carcinoma. Additionally, we granted Chiva a non-exclusive HepDirect technology license for the discovery, development and worldwide commercialization of new compounds in hepatitis B (HepB), hepatitis C (HepC) and hepatocellular carcinoma (HCC). Under the terms of the agreement, we are entitled to milestones and royalties on potential sales. In addition, we are entitled to receive a portion of any sublicensing revenue generated from sublicensing of collaboration compounds to third parties in a major world market. We received a $0.5 million license payment in March 2011, of which $0.1 million was remitted to CVR holders.

In August 2011, we entered into an amendment to the license agreement which required that a second $0.5 million licensing fee be paid in September 2011. In addition, the amendment increased royalty rates which we may receive under the license agreement to 6% of net sales of products (other than Pradefovir) and 9% of net sales for Pradefovir. In addition, the amendment removed from the license agreement a provision that afforded us the potential to earn a 10% equity position in Chiva as a milestone payment. In September 2011, Chiva paid us the $0.5 million licensing fee called for by the amendment, of which $0.1 million was remitted to CVR holders.

In September 2012, we entered into an option agreement with an undisclosed partner, which required our partner to pay a $50,000 upfront option opening fee, 50% of which is required to be remitted to the Metabasis CVR holders pursuant to the CVR agreement. In October 2012, we remitted $6,000 to the Metabasis CVR holders, equivalent to the option fee less costs and expenses incurred in connection with the option agreement.

Results of Operations

Total revenues for 2012 were $31.4 million compared to $30.0 million in 2011 and $23.5 million in 2010. Our loss from continuing operations for 2012 was $2.7 million or $0.13 per share, compared to income from continuing operations of $9.7 million in 2011, or $0.49 per share, and loss from continuing operations of $12.8 million, or $0.65 per share in 2010.

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Royalty Revenue

Royalty revenues were $14.1 million in 2012, compared to $9.2 million in 2011 and $7.3 million in 2010. The increase in royalty revenue of $4.9 million and $1.9 million for the year ended December 31, 2012 and 2011, respectively is primarily due to an increase in Promacta sales.

Material Sales

We recorded material sales of $9.4 million in 2012 compared to $12.1 million in 2011. No material sales were recorded in 2010. The decrease in material sales for the year ended December 31, 2012 compared to 2011 is due to timing of customer purchases of Captisol.

Collaborative Research and Development and Other Revenue

We recorded collaborative research and development and other revenues of $7.9 million in 2012 compared to $8.7 million in 2011 and $16.3 million in 2010. The decrease of $0.8 million for the year ended December 31, 2012, compared to the same period in 2011 is due to the recognition of $1.3 million of deferred revenue related to the previous sale of royalty rights for the year ended December 31, 2011, partially offset by an increase in license fees and milestones of $0.5 million for the year ended December 31, 2012. The decrease in collaborative research and development and other revenue of $7.6 million for the year ended December 31, 2011, compared to 2010 is primarily due to the termination of the research funded stage of a majority of the Company's then-existing collaboration agreements.

Research and Development Expenses

Research and development expenses for 2012 were $10.8 million compared to $10.3 million in 2011 and $22.1 million in 2010.

The increase in research and development expenses of $0.5 million for the year ended December 31, 2012 is primarily due to an increase in costs associated with internal programs. The decrease of $11.8 million for the year ended December 31, 2011, compared with 2010 was primarily due to $8.7 million of costs associated with collaboration agreements that were terminated as well as $3.1 million of other costs associated with internal research programs.

As summarized in the table below, we are developing several proprietary products for a variety of indications. Our programs are not limited to the following, but are representative of a range of future licensing opportunities to expand our partnered asset portfolio.

Program	Disease/Indication	Development Phase
Selective Androgen Receptor Modulator	Various	Phase II-ready
Captisol-enabled Topiramate	Epilepsy	PhaseI/II
Glucagon Receptor Antagonist	Diabetes	Pre-IND
HepDirect	Liver Diseases	Preclinical
Oral Human Granulocyte Colony Stimulating Factor	Neutropenia	Preclinical

Oral Erythropoietin	Anemia	Preclinical

We do not provide forward-looking estimates of costs and time to complete our ongoing research and development projects as such estimates would involve a high degree of uncertainty. Uncertainties include our inability to predict the outcome of complex research, our inability to predict the results of clinical studies, regulatory requirements placed upon us by regulatory authorities such as the FDA and EMA, our inability to predict the decisions of our collaborative partners, our ability to fund research and development programs, competition from other entities of which we may become aware in future periods, predictions of market potential from products that may be derived from our research and development efforts, and our ability to recruit and retain personnel or third-party research organizations with the necessary knowledge and skills to perform certain research. Refer to “Item 1A. Risk Factors” for additional discussion of the uncertainties surrounding our research and development initiatives.

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General and Administrative Expenses

General and administrative expenses were $16.1 million for the year ended December 31, 2012 compared to $15.0 million for 2011 and $12.8 million for 2010. The increase in general and administrative expenses of $1.1 million is primarily due to an increase in tax consulting projects and legal expenses in 2012. The increase in expenses for the year ended December 31, 2011 compared with 2010 is primarily due to costs to operate the CyDex business and an increase in non-cash stock based compensation expenses.

Lease Exit and Termination Costs

In September 2010, we ceased use of our facility located in Cranbury, New Jersey. As a result, during the quarter ended September 30, 2010, we recorded lease exit costs of $9.7 million for costs related to the difference between the remaining lease obligations of the abandoned operating leases, which run through August 2016, and management's estimate of potential future sublease income, discounted to present value. Actual future sublease income may differ materially from our estimate, which would result in us recording additional expense or reductions in expense. In addition, we wrote-off approximately $5.4 million of property and equipment related to the facility closure and recorded approximately $1.8 million of severance related costs. We recorded an increase of $0.3 million in lease exit and termination costs for the year ended December 31, 2012 due to changes in leasing assumptions. We recorded $22,000 as a decrease in lease exit and termination costs for the year ended December 31, 2011.

Write-off of in-process research and development

In 2011, we recorded a non-cash impairment charge of $1.1 million for the write-off of intellectual property and interests in future milestones and royalties for MEDI-528, an IL-9 antibody program by AstraZeneca's subsidiary, MedImmune. The asset was impaired upon receipt of notice from MedImmune that it was exercising its right to terminate the collaboration and license agreement. Additionally, in 2011, we recorded a non-cash impairment charge of $1.2 million for the write-off of interests in future milestones for TRPV1, a collaborative research and licensing program between us and Merck, related to the physiology, pharmacology, chemistry and potential therapeutic applications and potential clinical utilities related to Vanilloid Receptors, subtype 1. The asset was impaired upon receipt of notice from Merck in October 2011 that it was exercising its right to terminate the collaboration and license agreement. In 2010, Roche notified us that they were exercising their right to terminate the collaboration and license agreement with our subsidiary, Metabasis. As a result, we reviewed the carrying amount of the intangible asset related to this agreement. Based on our analysis of available information, we determined that the asset would not generate any future cash flow. Therefore, we wrote-off the $2.8 million of acquired in-process research and development associated with the agreement during the year ended December 31, 2010.

Accretion of Deferred Gain on Sale Leaseback

In 2006, we entered into an agreement for the sale of our real property located in San Diego, California for a purchase price of $47.6 million. This property, with a net book value of $14.5 million, included one building totaling approximately 82,500 square feet, the land on which the building is situated, and two adjacent vacant lots. As part of the sale transaction, we agreed to lease back the building for a period of 15 years. We recognized an immediate pre-tax gain on the sale transaction of $3.1 million in 2006 and deferred a gain of $29.5 million on the sale of the building. The deferred gain was being recognized as an offset to operating expense on a straight-line basis over the 15 year term of the lease at a rate of approximately $2.0 million per year. In 2009, we entered into a lease termination agreement for this building. As a result, we recognized an additional $20.4 million of accretion of deferred gain during the quarter ended September 30, 2009, and recognized the remaining balance of the deferred gain of $3.1 million through the term of our new building lease, which expired in December 2011. The amount of the deferred gain recognized for the years ended December 31, 2011 and 2010 was $1.7 million, respectively. The deferred gain was

fully amortized as of December 31, 2011, thus no gain was recognized for the year ended December 31, 2012.

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Interest income (expense), net

Interest expense was $3.3 million for the year ended December 31, 2012 compared to $2.5 million in 2011 and interest income of $0.4 million in 2010. The increase in interest expense of $0.8 million for the year ended December 31, 2012 compared with 2011 was due to the increase in the outstanding balance of notes payable at December 31, 2012 compared to December 31, 2011. Additionally, the $20 million loan obtained to acquire CyDex in January 2011 was outstanding for a partial period for the year ended December 31, 2011. The interest income in 2010 of $0.4 million is the result of interest earned on investments which were liquidated in January 2011 and used to acquire CyDex.

Change in Contingent Liabilities

We recorded an increase in contingent liabilities of $1.7 million for the year ended December 31, 2012 compared to $1.0 million for 2011, and a decrease of $9.1 million for 2010. The change relates to our liability for amounts potentially due to holders of CVRs and other former license holders associated with our CyDex, Metabasis, and Neurogen acquisitions. The Metabasis CVR liability is marked-to-market at each reporting period based upon the quoted market prices of the underlying CVR. The fair value of the CyDex and Neurogen contingent liabilities were determined based upon the income approach for the years ended December 31, 2012 and 2011. The carrying amount of the liability may fluctuate significantly based upon quoted market prices and actual amounts paid under the agreements may be materially different than the carrying amount of the liability.

Other, net

We recorded other income of $0.5 million for the year ended December 31, 2012, compared to $0.6 million for 2011 and $4.4 million for 2010. Other income for 2012 is primarily due to decreases in liabilities assumed in acquisitions. Other income for 2011 primarily relates to income related to the gain on the sale of property and equipment and decreases in liabilities assumed in acquisitions. Other income for 2010 primarily relates to grants totaling $2.0 million in response to applications submitted for qualified investments in a qualifying therapeutic discovery project under section 48D of the Internal Revenue Code, $1.5 million in realized gains on investments, $0.5 million reduction in warrant liability and $0.4 million of gain on the sale of property and equipment.

Income Taxes

We recorded an income tax benefit from continuing operations of $1.2 million for the year ended December 31, 2012 compared to a income tax benefit of $13.3 million in 2011. The income tax benefit in 2011 was principally the result of net deferred tax liabilities recorded in connection with our acquisition of Cydex. The net deferred tax liabilities assumed in the Cydex acquisition became a future source of income to support the realization of deferred tax assets and resulted in the release of a portion of our valuation allowance against deferred tax assets. The income tax benefit in 2012 is principally due to a requirement under ASC740-20-45-7 that a Company to consider all sources of income in order to determine the tax benefit resulting from a loss from continuing operations. As a result of the requirement under ASC740-20-45-7, the pretax income which we generated from discontinued operations was a source of income which resulted in the partial realization of the current year loss from continuing operations. Thus, we recorded an approximate $1.5 million tax benefit to continuing operations and an offsetting $1.5 million charge to discontinued operations. In addition, the Company realized a tax benefit as a result of California voters approving legislation in November 2012 which required a single sales factor income apportionment methodology beginning in 2013 and resulted in a decrease in our future California deferred income tax obligations.

During 2010, we recorded an income tax benefit of $2.6 million related to the reversal of estimated interest for a proposed substantial underpayment of tax in fiscal 2007. During 2009, the IRS issued to us a Notice of Proposed

Adjustment, or NOPA, seeking an increase to our taxable income for the 2007 fiscal year of $71.5 million and a $4.1 million penalty for substantial underpayment of tax in fiscal 2007. We recorded a liability for uncertain tax positions of $25.1 million related to the income tax effect of the NOPA and $3.0 million related to estimated interest due on the proposed underpayment of tax. We also recorded deferred income tax assets of $25.1 million associated with the ability to carry back losses from 2008 and 2009 to offset the NOPA. In addition, we recorded an income tax receivable of $4.5 million associated with changes in income tax law in relation to prior AMT taxes paid on carry back periods. In November 2010, the IRS granted us an extension of time to make a closing-of-the-books election with respect to an ownership change, within the meaning of section 382 of the Internal Revenue Code, for the 2007 tax year. We filed an amended 2007 federal tax return in the fourth quarter of 2010. In addition, in January 2011, we were notified by the IRS that they had completed their examination resulting in no changes to the taxes for our 2007 tax year.

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Discontinued Operations, net

Oncology Product Line

In 2006, we sold our Oncology product line to Eisai, including, among other things, all related inventory, equipment, records and intellectual property, and assumed certain liabilities. For the year ended December 31, 2010, we recognized a pretax gain of $0.2 million, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date.

Avinza Product Line

In 2007, we sold our Avinza product line to King, including, among other things, all Avinza inventory, records and related intellectual property, and the transfer of certain liabilities. For the years ended December 31, 2012, 2011, and 2010, we recognized pre-tax gains of $3.7 million, $0, and $2.2 million, respectively, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date.

Income tax expense on discontinued operations

In 2012, we recorded income tax expense on discontinued operations of $1.5 million. See discussion on income taxes above. There was no income tax expense on discontinued operations for the years ended December 31, 2011 and 2010.

Liquidity and Capital Resources

We have financed our operations through offerings of our equity securities, borrowings from long-term debt, issuance of convertible notes, product sales and the subsequent sales of our commercial assets, royalties, collaborative research and development and other revenues, capital and operating lease transactions.

We have incurred significant losses since inception. At December 31, 2012, our accumulated deficit was $682.8 million and we had negative working capital of $11.6 million. We believe that cash flows from operations will improve due to consistent Captisol sales, an increase in royalty revenues driven primarily from continued increases in Promacta sales, recent product approvals and regulatory developments, as well as anticipated new license and milestone revenues. In the event revenues and operating cash flows do not meet expectations, management plans to reduce discretionary expenses. However, it is possible that we may be required to seek additional financing. There can be no assurance that additional financing will be available on terms acceptable to management, or at all. We believe our available cash, cash equivalents, and short-term investments as well as our current and future royalty, license and milestone revenues will be sufficient to satisfy our anticipated operating and capital requirements, through at least the next twelve months. Our future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in our research and development programs; the potential success of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the amount of royalties on sales of the commercial products of our partners; the efforts of our collaborative partners; obligations under our operating lease agreements; and the capital requirements of any companies we acquire, including Pharmacopeia, Inc. (“Pharmacopeia”), Neurogen Corporation (“Neurogen”), Metabasis Therapeutics, Inc. (“Metabasis”) and CyDex Pharmaceuticals, Inc. (“CyDex”). Our ability to achieve our operational targets is dependent upon our ability to further implement our business plan and generate sufficient operating cash flow.

In January 2010, we completed our acquisition of Metabasis. In addition to cash consideration, we issued four tradable Contingent Value Rights (“CVRs”), one CVR from each of four respective series of CVRs, for each Metabasis share.

The CVRs will entitle the holder to cash payments as frequently as every six months as cash is received by us from the sale or partnering of any of the Metabasis drug development programs, among other triggering events. We have also committed to spend at least $7 million within 30 months and $8 million within 42 months, in new research and development funding on the Metabasis programs. Through December 31, 2012, we estimate that we have spent approximately $7.7 million of the committed amount.

In January 2011, we entered into a $20 million secured term loan credit facility (“secured debt”) with Oxford Financial Group (“Oxford”). The loan was amended in January 2012 to increase the secured credit facility to $27.5 million. The original $20 million borrowed under the facility bears interest at a fixed rate of 8.6%. The additional $7.5 million bears interest at a fixed rate of 8.9%. Under the terms of the secured debt, we will make interest only payments through February 2013. Subsequent to the interest only payments, the note will amortize with principal and interest payments through the

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remaining term of the loan. Additionally, we must also make an additional final payment equal to 6% of the total amount borrowed which is due at maturity and is being accreted over the life of the loan. The maturity date of the term loan is August 1, 2014.

We also have a cash-collateralized revolving credit facility under which we may elect to borrow up to $10 million. Amounts borrowed under the revolving credit facility bear interest at a floating rate equal to 200 basis points above the prime rate. All outstanding amounts under the credit facility may become due and payable if we fail to maintain a cash balance equal to the amount outstanding under the credit facility. The maturity date of the revolving credit facility is March 28, 2013.

In October 2011, we filed a Registration Statement on Form S-3 with the Securities and Exchange Commission (“SEC”) for the issuance and sale of up to $30 million of equity or other securities, proceeds from which will be used for general corporate purposes. The Form S-3 provides additional financial flexibility for us to sell shares or other securities as needed at any time. As of December 31, 2012, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately $5.5 million.

In connection with the acquisition of CyDex Pharmaceuticals, Inc. on January 24, 2011, we issued a series of Contingent Value Rights (“CVR”) and assumed certain contractual obligations. We paid the CVR holders $4.3 million in January 2012 and may be required to pay up to an additional $8.0 million upon achievement of certain clinical and regulatory milestones to the CyDex CVR holders and former license holders. In 2011, $0.9 million was paid to the CyDex Shareholders upon completion of a licensing agreement with The Medicines Company for the Captisol enabled Intravenous formulation of Clopidogrel. An additional $2 million was paid to the CyDex Shareholders upon acceptance by the FDA of the New Drug Application submitted by Onyx and an additional $3.5 million was paid upon approval by the FDA of Kyprolis for the potential treatment of patients with relapsed and refractory multiple myeloma. In addition, we will pay CyDex shareholders, for each respective year from 2011 through 2016, 20% of all CyDex-related revenue, but only to the extent that and beginning only when CyDex-related revenue for such year exceeds $15.0 million; plus an additional 10% of all CyDex-related revenue recognized during such year, but only to the extent that and beginning only when aggregate CyDex-related revenue for such year exceeds $35.0 million. We paid $0.3 million to the CyDex shareholders in March 2012 for 20% of all 2011 CyDex-related revenue in excess of $15 million. For the year ended December 31, 2012, CyDex related revenue did not exceed $15 million. Pursuant to the CVR Agreement, the shareholders' representative on behalf of the former CyDex shareholders filed a notice of objection with us regarding the calculation of payments due to the CyDex former shareholders for the first and second quarters of 2011. In addition, the shareholders' representative claimed that we exceeded the $35 million financial indebtedness limitation contained in the CVR Agreement. In August 2012, we executed a settlement agreement with the shareholders' representative releasing us from all claims.

We are also required by the CyDex CVR Agreement to dedicate at least five experienced full-time employee equivalents per year to the acquired business and to invest at least $1.5 million per year, inclusive of such employee expenses, in the acquired business, through 2015. As of December 31, 2012, we have exceeded our commitment for the year ending December 31, 2012.

Based on management’s plans, including projected increases in Captisol sales and royalty revenues, as well as anticipated new license revenue and expense reductions, if necessary, we believe our currently available cash, cash equivalents, and short-term investments as well as our current and future royalty, license and milestone revenues will be sufficient to satisfy our anticipated operating and capital requirements, through at least the next twelve months. Our future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in our research and development programs; the magnitude of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and

market developments; the amount of royalties on sales of our partners' commercial products; the efforts of our collaborative partners; obligations under our operating lease agreements; and the capital requirements of any companies we may acquire, including Neurogen, Metabasis and CyDex. We believe that the actions presently being taken to generate sufficient operating cash flow provide the opportunity for us to continue as a going concern. While we believe in the viability of our strategy to generate sufficient operating cash flow and in our ability to raise additional funds, there can be no assurances to that effect. Our ability to achieve our operational targets is dependent upon our ability to further implement our business plan and generate sufficient operating cash flow.

Operating Activities

Operating activities provided cash of $1.1 million in 2012 and used cash of $1.2 million in 2011 and $27.1 million in 2010.

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The cash provided in 2012 reflects a net loss of $0.5 million, adjusted by $2.1 million of gain from discontinued operations and $6.5 million of non-cash items to reconcile the net income to net cash used in operations. These reconciling items primarily reflect a non-cash change in estimated value of contingent liabilities of $1.7 million, depreciation and amortization of $2.7 million, stock-based compensation of $4.1 million and other changes of $0.5 million, partially offset by an increase in net deferred tax assets and liabilities of $1.2 million, and receipt of a non-cash milestone of $1.2 million. The cash provided by operations in 2012 is further impacted by changes in operating assets and liabilities due primarily to a decrease in accounts receivable of $1.5 million, decrease in inventory of $1.0 million, decrease in other current assets of $0.5 million, decrease in other long term assets of $0.3 million, and increase in other liabilities of $0.5 million. Partially offsetting, accounts payable and accrued liabilities decreased $4.8 million and deferred revenue decreased $1.9 million. Net cash used in operating activities of discontinued operations was $0.9 million in 2012.

The use of cash in 2011 reflects net income of $9.7 million, adjusted by $5.0 million of non-cash items to reconcile the net income to net cash used in operations. These reconciling items primarily reflect deferred income taxes of $13.4 million, accretion of deferred gain on sale leaseback transaction of $1.7 million and gain on asset write-offs of $0.5 million, partially offset by a non-cash change in estimated value of contingent liabilities of $1.9 million, write off of acquired in-process research and development of $2.3 million, depreciation and amortization of $2.8 million, and stock-based compensation of $3.4 million. The use of cash in 2011 is further impacted by changes in operating assets and liabilities due primarily to an increase in accounts receivable of $3.9 million and a decrease in accounts payable and accrued liabilities of $11.6 million, partially offset by an increase in other current assets of $5.5 million, an increase in inventory of $1.1 million, a decrease in deferred revenue of $2.2 million, and a decrease in other liabilities of $0.9 million. None of the cash used in operating activities for 2011 related to discontinued operations.

The use of cash in 2010 reflects a net loss of $10.4 million, adjusted by $2.4 million of gain from discontinued operations and $10.2 million of non-cash items to reconcile the net loss to net cash used in operations. These reconciling items primarily reflect noncash lease costs of $9.0 million, a write-off of acquired in-process research and development of $2.8 million, the recognition of $2.3 million of stock-based compensation expense, depreciation of assets of $2.2 million and the write-off of assets of $5.3 million, partially offset by the change in estimated fair value of contingent value rights of $9.1 million, accretion of deferred gain on the sale leaseback of the building of $1.7 million and gain on investments of $0.6 million. The use of cash in 2010 is further impacted by changes in operating assets and liabilities due primarily to decreases in accounts payable and accrued liabilities of $13.4 million, a decrease in deferred revenue of $5.9 million, an increase in other current assets of $3.9 million, a decrease in other liabilities of $0.7 million and an increase in accounts receivable, net of $0.4 million. Net cash provided by operating activities of discontinued operations was $0.2 million in 2010.

Investing Activities

Investing activities used cash of $1.3 million in 2012, $25.2 million in 2011, and $14.5 million in 2010.

Cash used by investing activities in 2012 primarily reflects payments to CyDex CVR holders of $8.0 million and purchases of property, building and equipment of $0.6 million, partially offset by proceeds from the sale of short-term investments of $10.0 million. None of the cash provided by investing activities for 2012 related to discontinued operations.

Cash used by investing activities in 2011 primarily reflects cash used for the acquisition of CyDex of $32.0 million, payments made to CyDex CVR holders of $2.9 million, and purchases of short term investments of $10.0 million, partially offset by proceeds from the sale of short-term investments of $19.3 million and proceeds from the sale of property and equipment of $0.5 million. None of the cash provided by investing activities for 2011 related to discontinued operations.

Cash provided by investing activities in 2010 primarily reflects the net sales of short-term investments of $18.5 million and $0.6 million of proceeds from sale of property and equipment, partially offset by $4.1 million of cash paid for acquisitions. None of the cash provided by investing activities for 2010 related to discontinued operations.

Financing Activities

Financing activities provided cash of $3.9 million in 2012 and $30.1 million in 2011, and used cash of $0.2 million in 2010. None of the cash used in financing activities for 2010 related to discontinued operations.

Cash provided by financing activities in 2012 primarily reflects proceeds from issuance of debt of $7.5 million and proceeds from issuance of shares of $6.4 million, partially offset by repayment of debt of $10 million. None of the cash used in financing activities for 2012 related to discontinued operations.

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Cash provided by financing activities in 2011 primarily reflects $30.0 million of proceeds from the issuance of debt, partially offset by share repurchases of $0.1 million. None of the cash used in financing activities for 2011 related to discontinued operations.

Cash used in financing activities in 2010 primarily reflects payments under equipment financing obligations of $0.1 million and repurchases of common stock of $0.1 million. None of the cash used in financing activities for 2010 related to discontinued operations.

Other

In July 2007, we purchased $5.0 million of commercial paper issued by Golden Key Ltd. The investment was highly-rated and within our investment policy at the time of purchase, but during the third quarter of 2007, large credit rating agencies downgraded the quality of this security. In addition, as a result of not meeting certain liquidity covenants, the assets of Golden Key Ltd. were assigned to a trustee who established a committee of the largest senior credit holders to determine the next steps, at which point the investment was written down. Subsequently, Golden Key Ltd. defaulted on its obligation to settle the security on the stated maturity date of October 10, 2007. During 2010, the assets of Golden Key Ltd. were sold through an auction process and, as a result, the Company received a final cash distribution of approximately $2.9 million, of which $1.4 million was recognized as a gain.

In connection with the acquisition of Pharmacopeia in December 2008, Pharmacopeia security holders received a CVR that entitled them to an aggregate cash payment of $15.0 million under certain circumstances. The CVR expired on December 31, 2011.

In connection with the acquisition of Neurogen in December 2009, Neurogen security holders received CVRs under four CVR agreements. The CVRs entitle Neurogen shareholders to cash payments upon the sale or licensing of certain assets and upon the achievement of a specified clinical milestone. The fair value of the Neurogen CVR's at December 31, 2011 was $0.7 million and related to programs for H3 and VR1. In 2012, we received a notice from a collaboration partner that it was terminating its agreement related to VR1 for convenience and the Company recorded a decrease in the fair value of the liability for the related contingent value right of $0.2 million. Additionally, per the CVR agreement, no payment event date related to the H3 asset can occur after December 23, 2012 and we recorded a decrease in the fair value of the liability for the related contingent value right of $0.5 million. There are no remaining CVR obligations under the agreement with the former Neurogen shareholders.

In connection with the acquisition of Metabasis in January 2010, Metabasis security holders received CVRs under four CVR agreements. The CVRs entitle the holders to cash payments upon the sale or licensing of certain assets and upon the achievement of specified milestones. The fair value of the liability at December 31, 2012 and 2011 was $0 and $1.1 million, respectively.

In connection with the acquisition of CyDex in January 2011, we issued a series of CVR's and assumed certain contingent liabilities for payments due to former license holders. We paid the CVR holders $4.3 million in January 2012 and may be required to pay up to an additional $8.0 million upon achievement of certain regulatory milestones to the CVR holders and former license holders. In 2011, $0.9 million was paid to the CyDex shareholders upon completion of a licensing agreement with The Medicines Company for the Captisol enabled Intravenous formulation of Clopidogrel. In 2012, an additional $2 million was paid to the CyDex Shareholders upon acceptance by the FDA of Onyx’s NDA and $3.5 million was paid upon approval by the FDA. In addition, we will pay CyDex shareholders, for each respective year from 2011 through 2016, 20% of all CyDex-related revenue, but only to the extent that and beginning only when CyDex-related revenue for such year exceed $15.0 million; plus an additional 10% of all CyDex-related revenue recognized during such year, but only to the extent that and beginning only when aggregate CyDex-related revenue for such year exceeds $35.0 million, of which $0.3 million was paid for 2011. For the year ended December 31, 2012, revenue did not exceed $15 million. The fair value of the liability at December 31, 2012 and 2011 was $10.9 million and $15.5 million, respectively.

Leases and Off-Balance Sheet Arrangements

We lease our office and research facilities under operating lease arrangements with varying terms through November 2019. The agreements provide for increases in annual rents based on changes in the Consumer Price Index or fixed percentage increases ranging from 3.0% to 3.5%. Commencing in January 2008, we also sublease a portion of our

facilities through July 2015. The sublease agreement provides for a 3% increase in annual rents. We had no off-balance sheet arrangements at December 31, 2012 and 2011.

Contractual Obligations

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As of December 31, 2012, future minimum payments due under our contractual obligations are as follows (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	2-3 years	4-5 years	More than 5 years
Operating lease obligations (1)	$20,089	$ 5,372	$10,304	$3,273	$1,140

(1) We lease office and research facilities that we have fully vacated under operating lease arrangements expiring in July 2015 and August 2016. We sublet portions of these facilities through the end of our lease. As of December 31, 2012, we expect to receive aggregate future minimum lease payments totaling $3.2 million (nondiscounted) over the duration of the sublease agreement as follows and not included in the table above: less than one year, $1 million; two to three years, $2.0 million; four to five years, $0.2 million; and more than five years, $0.

We outsource the production of Captisol to Hovione, LLC. Under the terms of the supply agreement with Hovione, we have ongoing minimum annual purchase commitments and are required to purchase a total of $15 million of Captisol over the term of the supply agreement which expires in December 2019. Through December 31, 2012, we have exceeded that commitment. Either party may terminate the Agreement for the uncured material breach or bankruptcy of the other party or an extended force majeure event. We may also terminate the supply agreement for extended supply interruption, regulatory action related to Captisol or other specified events.

Under the terms of our merger with Metabasis, we are committed to spend at least $7 million within 30 months following the close of the transaction and $8.0 million within 42 months in new research and development funding on the Metabasis programs. Through December 31, 2012, we estimate that we have spent approximately $7.7 million of the committed amount. We are also required under our CyDex CVR Agreement to invest at least $1.5 million per year, inclusive of employee expenses, in the acquired business, through 2015. Through December 31, 2012, we have exceeded our committed amount.

Critical Accounting Policies

Certain of our policies require the application of management judgment in making estimates and assumptions that affect the amounts reported in the consolidated financial statements and disclosures made in the accompanying notes. Those estimates and assumptions are based on historical experience and various other factors deemed to be applicable and reasonable under the circumstances. The use of judgment in determining such estimates and assumptions is by nature, subject to a degree of uncertainty. Accordingly, actual results could differ materially from the estimates made. Our critical accounting policies are as follows:

Revenue Recognition

Material sales revenue is recognized upon transfer of title, which normally passes upon shipment to the customer. Royalties on sales of products commercialized by our partners are recognized in the quarter reported by the respective partner.

Revenue from research funding under our collaboration agreements is earned and recognized on a percentage of completion basis as research hours are incurred in accordance with the provisions of each agreement.

Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by us under our collaboration agreements are recognized as revenue upon the earlier of when payments are received or collection is assured, but are deferred if we have continuing performance obligations. Amounts received under multiple-element arrangements requiring ongoing services or performance by us are recognized over the period of such services or performance. The Company occasionally has sub-license obligations related to arrangements for which it receives license fees, milestones and royalties. We evaluate the determination of gross versus net reporting based on each individual agreement.

We analyze our revenue arrangements and other agreements to determine whether there are multiple elements that should be separated and accounted for individually or as a single unit of accounting. For multiple element contracts, arrangement consideration is allocated at the inception of the arrangement to all deliverables on the basis of relative selling price, using a hierarchy to determine selling price. We first consider vendor-specific objective evidence

(VSOE), then third-party evidence (TPE) and if neither VSOE nor TPE exist, we use our best estimate of selling price. Many of our revenue arrangements involve the bundling of a license with the option to purchase manufactured product. Licenses are granted to pharmaceutical companies for the use of Captisol in the development of pharmaceutical compounds. The licenses may be granted for the use of the Captisol product for all phases of clinical trials and through commercial

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availability of the host drug or may be limited to certain phases of the clinical trial process. We believe that our licenses have stand-alone value at the outset of an arrangement because the customer obtains the right to use Captisol in its formulations without any additional input by us, and in a hypothetical stand-alone transaction, the customer would be able to procure inventory from another manufacturer in the absence of contractual provisions for exclusive supply by us.

Revenue from milestones is recognized when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive, its achievability was not reasonably assured at the inception of the agreement, and we have no further performance obligations relating to that event, and (ii) collectability is reasonably assured. If these criteria are not met, the milestone payment is recognized over the remaining period of our performance obligations under the arrangement or when received.

Inventory

Inventory is stated at the lower of cost or market. We determine cost using the first-in, first-out method. We analyze our inventory levels periodically and writes down inventory to its net realizable value if it has become obsolete, has a cost basis in excess of its expected net realizable value or is in excess of expected requirements.

Co-Promote Termination Accounting

As part of the termination and return of co-promotion rights agreement that we entered into with Organon in January 2006, we agreed to make quarterly payments to Organon, effective for the fourth quarter of 2006, equal to 6.5% of Avinza net sales through December 31, 2012 and thereafter 6% through patent expiration, currently anticipated to be November 2017. The estimated fair value of the amounts to be paid to Organon after the termination, based on the future estimated net sales of the product, was recognized as a liability and expensed as a cost of the termination as of the effective date of the agreement.

In connection with the Avinza® sale transaction, King assumed our obligation to make payments to Organon based on net sales of Avinza (the fair value of which approximated $12.5 million as of December 31, 2012). As Organon has not consented to the legal assignment of the co-promote termination obligation from us to King, we remain liable to Organon in the event of King's default of this obligation. Therefore, we recorded an asset on February 26, 2007 to recognize King's assumption of the obligation, while continuing to carry the co-promote termination liability in our consolidated financial statements to recognize our legal obligation as primary obligor to Organon. This asset represents a non-interest bearing receivable for future payments to be made by King and is recorded at its fair value. As of December 31, 2012 and thereafter, the receivable and liability will remain equal and adjusted each quarter for changes in the fair value of the obligation. On a quarterly basis, management reviews the carrying value and assesses the co-promote termination receivable for impairment (e.g. in the event King defaults on the assumed obligation to pay Organon). Annually management also reviews the carrying value of the co-promote termination liability. Due to assumptions and judgments inherent in determining the estimates of future net Avinza sales through November 2017, the actual amount of net Avinza sales used to determine the amount of the asset and liability for a particular period may be materially different from current estimates. Any resulting changes to the co-promote termination liability will have a corresponding impact on the co-promote termination payments receivable. As of December 31, 2012 and 2011, the fair value of the co-promote termination liability (and the corresponding receivable) was determined using a discount rate of 15%.

Impairment of Long-Lived Assets

We review long-lived assets for impairment annually or whenever events or circumstances indicate that the carrying amount of the assets may not be recoverable. We measure the recoverability of assets to be held and used by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value of our long-lived assets is determined using the expected cash flows discounted at a rate commensurate with the risk involved. As of December 31, 2012, we believe that the future discounted cash flows to be received from our long-lived assets will exceed the assets' carrying value.

Income Taxes

Income taxes are accounted for under the liability method. This approach requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of differences between the tax basis of assets or liabilities and their carrying amounts in the consolidated financial statements. A valuation allowance is provided for deferred tax assets if it is more likely than not that these items will either expire before we are able to realize their benefit or if future deductibility is uncertain. As of December 31, 2012, we have provided a full valuation allowance against our deferred tax assets as recoverability was uncertain. Developing the provision for income taxes requires significant judgment and expertise in federal and state income tax laws, regulations and strategies, including the determination of deferred tax assets and liabilities and, if necessary, any

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valuation allowances that may be required for deferred tax assets. Our judgments and tax strategies are subject to audit by various taxing authorities. While we believe we have provided adequately for our income tax liabilities in our consolidated financial statements, adverse determinations by these taxing authorities could have a material adverse effect on our consolidated financial condition and results of operations. Our ending deferred tax liability represents liabilities for which we cannot estimate the reversal period and therefore cannot be used as support for our deferred tax assets.

Share-Based Compensation

Share-based compensation cost for awards to employees and non-employee directors is recognized on a straight-line basis over the vesting period until the last tranche vests. Compensation cost for consultant awards is recognized over each separate tranche's vesting period. We recognized compensation expense of $4.1 million, $3.4 million, and $2.3 million for 2012, 2011, and 2010, respectively, associated with option awards, restricted stock and our employee stock purchase plan.

The fair-value for options that were awarded to employees and directors was estimated at the date of grant using the Black-Scholes option valuation model with the following weighted average assumptions:

	Year Ended December 31,		
	2012	2011	2010
Risk-free interest rate	1.1 %	2.5 %	2.7 %
Dividend yield	—	—	—
Expected volatility	69 %	69 %	72 %
Expected term	6 years	6 years	6 years

The expected term of the employee and non-employee director options is the estimated weighted-average period until exercise or cancellation of vested options (forfeited unvested options are not considered) based on historical experience. The expected term for consultant awards is the remaining period to contractual expiration.

Volatility is a measure of the expected amount of variability in the stock price over the expected life of an option expressed as a standard deviation. In selecting this assumption, we used the historical volatility of our stock price over a period equal to the expected term. Changes in the assumptions used to estimate the fair value of stock-based compensation would impact the amount of compensation expenses recognized during the period.

New Accounting Pronouncements

In May 2011, the FASB issued ASU 2011-04, Fair Value Measurement (Topic 820) – Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." This ASU represents the converged guidance of the FASB and the IASB (the Boards) on fair value measurement. The collective efforts of the Boards and their staffs, reflected in ASU No. 2011-04, have resulted in common requirements for measuring fair value and for disclosing information about fair value measurements, including a consistent meaning of the term "fair value." ASU No. 2011-04 amends ASC 820, Fair Value Measurements and Disclosures to provide guidance on how fair value measurement should be applied where existing U.S. GAAP already requires or permits fair value measurements. This ASU does not extend the use of fair value, but rather provides guidance on application. In addition, ASU No. 2011-04 requires expanded disclosures regarding fair value measurements. Our adoption of this standard had no impact on our consolidated financial position, results of operations or cash flows.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220) – Presentation of Comprehensive Income. This ASU amends Topic 220, Comprehensive Income, to allow an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. ASU No. 2011-05 eliminates the option to present the components of other comprehensive income as part of the statement of changes in shareholders' investment. The amendments to the Codification in the ASU do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. Our adoption of this standard had no impact

on our consolidated financial position, results of operations or cash flows.

In September 2011, the FASB issued ASU 2011-08, Intangibles – Goodwill and other: testing for goodwill impairment, which, among other things, amends Accounting Standards Topic 350 Intangibles – Goodwill and Other, to allow entities to use a qualitative approach to test goodwill for impairment. ASU 2011-08 permits an entity to first perform a qualitative assessment

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to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, it is necessary to perform the currently prescribed two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. Our adoption of this standard had no impact on our consolidated financial position, results of operations or cash flows.

In December 2011, the FASB issued ASU 2011-12, Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in ASU 2011-12. The amendments in ASU 2011-12 defer the changes in ASU 2011-05 that relate to the presentation of reclassification adjustments out of accumulated other comprehensive income. The amendments in this ASU are effective for us for fiscal years, and interim periods within those years, beginning after December 15, 2011. We adopted this standard for the year ended December 31, 2012. The adoption of ASU 2011-12 did not have a material impact on our financial position or results of operations.

In July 2012, the FASB issued ASU 2012-02, Intangibles – Goodwill and Other: Testing Indefinite-Lived Intangible Assets for Impairment in ASU 2012-02. ASU 2012-02 allows a company the option to first assess qualitative factors to determine whether it is necessary to perform a quantitative impairment test. Under that option, a company would no longer be required to calculate the fair value of an indefinite-lived intangible asset unless the company determines, based on that qualitative assessment, that it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount. The amendments in this ASU are effective for annual and interim indefinite-lived intangible asset impairment tests performed for periods beginning after September 15, 2012. We adopted this standard for the year ended December 31, 2012. The adoption of ASU 2012-02 did not have a material impact on our financial position or results of operations.

In February 2013, the FASB issued ASU No. 2013-02, Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For
amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. The amendments in this ASU are effective for us for fiscal years, and interim periods within those years, beginning after January 1, 2013.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2012, our investment portfolio included investments in available for sale equity securities of $1.4 million. These securities are subject to market risk and may decline in value based on market conditions. Additionally, we are subject to a one year trading restriction on these investments.

We purchase Captisol from Hovione, located in Lisbon, Portugal. Payments to Hovione are denominated and paid in US dollars, however the unit price of CAPTISOL contains an adjustment factor which is based on the sharing of foreign currency risk between the two parties. The effect of an immediate 10% change in foreign exchange rates would have an immaterial impact on our financial condition, results of operations or cash flows.

We are exposed to market risk involving rising interest rates. To the extent interest rates rise, our interest costs could increase. An increase in interest costs of 10% would have no material impact on our financial condition, results of operations or cash flows.

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Item 8. Consolidated Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Ligand Pharmaceuticals Incorporated

We have audited the accompanying consolidated balance sheets of Ligand Pharmaceuticals Incorporated (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, changes in shareholders' equity, comprehensive income (loss), and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ligand Pharmaceuticals Incorporated as of December 31, 2012 and 2011, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 14, 2013 expressed an adverse opinion.

/s/ GRANT THORNTON LLP
San Diego, California
March 14, 2013

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LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	December 31, 2012	2011
ASSETS		
Current assets:		
Cash and cash equivalents	$12,381	$7,041
Short-term investments	—	10,000
Accounts receivable, net	4,589	6,110
Inventory	1,697	1,301
Deferred income taxes	—	237
Other current assets	829	1,344
Current portion of co-promote termination payments receivable	4,327	6,197
Total current assets	23,823	32,230
Restricted cash and investments	2,767	1,341
Property and equipment, net	788	455
Deferred income taxes	8	—
Intangible assets, net	55,912	58,326
Goodwill	12,238	12,238
Long-term portion of co-promote termination payments receivable	8,207	15,255
Other assets	517	738
Total assets	$104,260	$120,583
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$5,854	$11,065
Accrued liabilities	4,961	5,054
Current portion of contingent liabilities	356	6,879
Current portion of deferred income taxes	1,581	—
Bank line of credit	—	10,000
Current portion of note payable	14,835	—
Current portion of co-promote termination liability	4,327	6,197
Current portion of lease exit obligations	3,039	3,208
Current portion of deferred revenue	486	1,240
Total current liabilities	35,439	43,643
Long-term portion of note payable	13,443	20,286
Long-term portion of co-promote termination liability	8,207	15,255
Long-term portion of deferred revenue, net	2,369	3,466
Long-term portion of lease exit obligations	5,963	8,367
Long-term portion of deferred income taxes	725	2,230
Long-term portion of contingent liabilities	10,543	10,419
Other long-term liabilities	1,086	388
Total liabilities	77,775	104,054
Commitments and contingencies-see note		
Common stock subject to conditional redemption; 0 and 112,371 shares issued and outstanding at December 31, 2012 and 2011, respectively	—	8,344
Stockholders' equity:		
	21	21

Common stock, $0.001 par value; 33,333,333 shares authorized; 21,278,606 and 20,682,506 shares issued and outstanding at December 31, 2012 and 2011, respectively		
Additional paid-in capital	751,503	732,676
Accumulated deficit	(682,759)	(682,232)
Treasury stock, at cost; 1,118,222 shares at December 31, 2012 and 2011	(42,280)	(42,280)
Total stockholders' equity	26,485	8,185
Total liabilities and stockholders' equity	$104,260	$120,583

See accompanying notes to these consolidated financial statements.

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LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share data)

	Year Ended December 31,		
	2012	2011	2010
Revenues:			
Royalties	$14,073	$9,213	$7,279
Material Sales	9,432	12,123	—
Collaborative research and development and other revenues	7,883	8,701	16,259
Total revenues	31,388	30,037	23,538
Operating costs and expenses:			
Cost of material sales	3,601	4,909	—
Research and development	10,790	10,291	22,067
General and administrative	16,108	14,977	12,829
Lease exit and termination costs	315	(22)	16,894
Write-off of acquired in-process research and development	—	2,282	2,754
Total operating costs and expenses	30,814	32,437	54,544
Accretion of deferred gain on sale leaseback	—	1,702	1,702
Gain (loss) from operations	574	(698)	(29,304)
Other income (expense):			
Interest (expense) income, net	(3,305)	(2,477)	382
(Increase) decrease in contingent liabilities	(1,650)	(1,013)	9,142
Other, net	516	630	4,377
Total other (expense) income, net	(4,439)	(2,860)	13,901
Loss from continuing operations before income tax benefit	(3,865)	(3,558)	(15,403)
Income tax benefit from continuing operations	1,191	13,270	2,617
(Loss) income from continuing operations	(2,674)	9,712	(12,786)
Discontinued operations:			
Gain on sale of Avinza Product Line, net	3,656	—	2,212
Gain on sale of Oncology Product Line, net	—	3	201
Income tax expense on discontinued operations	(1,509)	—	—
Income from discontinued operations	2,147	3	2,413
Net (loss) income	$(527)	$9,715	$(10,373)
Basic and diluted per share amounts:			
(Loss) income from continuing operations	$(0.13)	$0.49	$(0.65)
Income from discontinued operations	0.11	—	0.12
Net (loss) income	$(0.03)	$0.49	$(0.53)
Weighted average number of common shares-basic	19,853,095	19,655,632	19,613,201
Weighted average number of common shares-diluted	19,853,095	19,713,320	19,613,201

See accompanying notes to these consolidated financial statements.

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LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share data)

	Common Stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Treasury stock		Total stockholders' equity (deficit)
	Shares	Amount				Shares	Amount	
Balance at December 31, 2009	20,544,833	$21	$726,919	$513	$(681,574)	(1,101,317)	$(42,134)	$3,745
Issuance of common stock under employee stock compensation plans	76,084	—	27	—	—	—	—	27
Unrealized net loss on available-for-sale securities	—	—	—	(482)	—	—	—	(482)
Repurchase of common stock	—	—	—	—	—	(10,682)	(91)	(91)
Stock-based compensation	—	—	2,325	—	—	—	—	2,325
Net loss	—	—	—	—	(10,373)	—	—	(10,373)
Balance at December 31, 2010	20,620,917	21	729,271	31	(691,947)	(1,111,999)	(42,225)	(4,849)
Issuance of common stock under employee stock compensation plans, net	61,589	—	54	—	—	—	—	54
Unrealized net loss on available-for-sale securities	—	—	—	(31)	—	—	—	(31)
Repurchase of common stock	—	—	—	—	—	(6,223)	(55)	(55)
Stock-based compensation	—	—	3,351	—	—	—	—	3,351
Net income	—	—	—	—	9,715	—	—	9,715
Balance at December 31, 2011	20,682,506	21	732,676	—	(682,232)	(1,118,222)	(42,280)	8,185
Issuance of common stock under employee stock compensation plans, net	180,979	—	1,103	—	—	—	—	1,103
Issuance of common stock, net	302,750	—	5,313	—	—	—	—	5,313
Stock-based compensation	—	—	4,067	—	—	—	—	4,067
Shares released from restriction	112,371	—	8,344	—	—	—	—	8,344
Net loss	—	—	—	—	(527)	—	—	(527)

Balance at December 31, 2012	21,278,606	$21	$751,503	—	$(682,759)	(1,118,222)	$(42,280)	$26,485

See accompanying notes to these consolidated financial statements.

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LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Year Ended December 31,		
	2012	2011	2010
Net (loss) income	$(527)	$9,715	$(10,373)
Unrealized net loss on available-for-sale securities, net of tax of $0	—	(31)	(482)
Comprehensive (loss) income	$(527)	$9,684	$(10,855)

See accompanying notes to these consolidated financial statements.

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LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2012	2011	2010
Operating activities			
Net (loss) income	$(527)	$9,715	$(10,373)
Less: gain from discontinued operations	2,147	3	2,413
(Loss) income from continuing operations	(2,674)	9,712	(12,786)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Write-off of acquired in-process research and development	—	2,282	2,754
Non-cash change in estimated fair value of contingent liabilities	1,650	1,888	(9,142)
Accretion of deferred gain on sale leaseback	—	(1,702)	(1,702)
Depreciation and amortization	2,727	2,790	2,212
Non-cash lease costs	—	(51)	9,042
Non-cash milestone revenue	(1,212)	—	—
Gain (loss) on asset write-offs	(17)	(456)	5,303
Realized loss (gain) on investment	—	6	(607)
Stock-based compensation	4,067	3,351	2,325
Deferred income taxes	(1,204)	(13,402)	—
Other	492	285	32
Changes in operating assets and liabilities, net of acquisition:			
Accounts receivable, net	1,521	(3,915)	(375)
Inventory	1,030	1,114	—
Other current assets	515	4,864	(3,931)
Other long term assets	334	605	(332)
Accounts payable and accrued liabilities	(4,801)	(11,568)	(13,447)
Other liabilities	484	865	(715)
Deferred revenue	(1,851)	2,160	(5,938)
Net cash provided by (used in) operating activities of continuing operations	1,061	(1,172)	(27,307)
Net cash (used in) provided by operating activities of discontinued operations	(900)	—	240
Net cash provided by (used in) operating activities	161	(1,172)	(27,067)
Investing activities			
Acquisition of Metabasis, net of cash acquired	—	—	(2,834)
Acquisition of CyDex, net of cash acquired	—	(32,024)	—
Payments to CVR holders	(8,049)	(2,875)	—
Acquisition of intellectual property	—	—	(1,247)
Purchases of property, equipment and building	(595)	(78)	(70)
Proceeds from sale of property, and equipment and building	20	530	589
Purchases of short-term investments	—	(10,000)	(35,584)
Proceeds from sale of short-term investments	10,000	19,346	54,040
Other, net	(113)	(31)	(354)
Net cash provided by (used in) investing activities	1,263	(25,132)	14,540
Financing activities			
Principal payments on equipment financing obligations	—	—	(91)

Proceeds from issuance of debt	7,500	30,000	—
Repayment of debt	(10,000)	—	—
Proceeds from issuance of common stock, net	5,313	54	23
Net proceeds from stock option exercises	979	—	—
Net proceeds from employee stock purchase program	124	—	—
Share repurchases	—	(55)	(91)
Net cash provided by (used in) financing activities	3,916	29,999	(159)

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Net increase (decrease) in cash and cash equivalents	5,340	3,695	(12,686)
Cash and cash equivalents at beginning of year	7,041	3,346	16,032
Cash and cash equivalents at end of year	$12,381	$7,041	$3,346
Supplemental disclosure of cash flow information			
Cash paid during the year:			
Interest paid	$2,452	$2,463	$58
Taxes paid	—	39	28
Proceeds received from sale of building and disbursed to Neurogen shareholders	—	—	3,170
Supplemental schedule of non-cash investing and financing activities			
Common stock released from restriction	8,344	—	—

See accompanying notes to these consolidated financial statements.

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LIGAND PHARMACEUTICALS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company" or "Ligand") is a biopharmaceutical company with a business model that is based upon the concept of developing or acquiring royalty revenue generating assets and coupling them to a lean corporate cost structure. By diversifying the portfolio of assets across numerous technology types, therapeutic areas, drug targets, and industry partners, the Company offers investors an opportunity to invest in the increasingly complicated and unpredictable pharmaceutical industry. In comparison to its peers, the Company believes it has assembled one of the largest and most diversified asset portfolios in the industry with the potential to generate revenue in the future. These therapies address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, muscle wasting, Alzheimer's disease, dyslipidemia, diabetes, anemia, asthma, FSGS and osteoporosis. Ligand has established multiple alliances with the world's leading pharmaceutical companies including GlaxoSmithKline, Onyx Pharmaceuticals, Merck, Pfizer, Baxter International, Bristol-Myers Squibb, Celgene, Lundbeck Inc. and The Medicines Company. The Company's principle market is the United States. The Company sold its Oncology Product Line ("Oncology") and Avinza® Product Line ("Avinza") on October 25, 2006 and February 26, 2007, respectively. The operating results for Oncology and Avinza have been presented in the accompanying consolidated financial statements as "Discontinued Operations".

The Company has incurred significant losses since its inception. At December 31, 2012, the Company's accumulated deficit was $682.8 million and the Company had negative working capital of $11.6 million. Management believes that cash flows from operations will improve due to consistent Captisol® sales, an increase in royalty revenues driven primarily from continued increases in Promacta® and Kyprolis® sales, as well as anticipated new license and milestone revenues. In the event revenues and operating cash flows are not meeting expectations, management plans to reduce discretionary expenses. However, it is possible that the Company may be required to seek additional financing. There can be no assurance that additional financing will be available on terms acceptable to management, or at all. Management believes its currently available cash, cash equivalents, and short-term investments as well as its current and future royalty, license and milestone revenues will be sufficient to satisfy its anticipated operating and capital requirements, through at least the next twelve months. The Company's future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in its research and development programs; the potential success of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the amount of royalties on sales of the commercial products of its partners; the efforts of its collaborative partners; obligations under its operating lease agreements; and the capital requirements of any companies the Company acquires, including Pharmacopeia, Inc. ("Pharmacopeia"), Neurogen Corporation ("Neurogen"), Metabasis Therapeutics, Inc. ("Metabasis") and CyDex Pharmaceuticals, Inc. ("CyDex"). The ability of the Company to achieve its operational targets is dependent upon the Company's ability to further implement its business plan and generate sufficient operating cash flow.

Principles of Consolidation

The accompanying consolidated financial statements include Ligand and its wholly owned subsidiaries, Ligand JVR, Allergan Ligand Retinoid Therapeutics, Seragen, Pharmacopeia, LLC, Neurogen Corporation, CyDex Pharmaceuticals, Inc., Metabasis Therapeutics, and Nexus. All significant intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, including disclosure of contingent assets and contingent liabilities, at the date of the consolidated financial statements and the reported amounts of revenues and expenses, definite and indefinite lived intangible assets, goodwill, co-promote termination payments receivable and co-promote termination liabilities, uncertain tax positions, deferred revenue and income tax net operating losses during the reporting period. The Company's critical accounting policies are those that

are both most important to the Company's consolidated financial condition and results of operations and require the most difficult, subjective or complex judgments on the part of management in their application, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Because of the uncertainty of factors surrounding the estimates or judgments used in the preparation of the consolidated financial statements, actual results may materially vary from these estimates.

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Income (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing net income or loss by the weighted average number of common shares and vested restricted stock units outstanding. Diluted earnings (loss) per share is computed by dividing net income or loss by the weighted average number of common shares and vested restricted stock units outstanding and the weighted average number of dilutive common stock equivalents, including stock options and non-vested restricted stock units. Common stock equivalents are only included in the diluted earnings per share calculation when their effect is dilutive. Potential common shares, the shares that would be issued upon the exercise of outstanding stock options and warrants and the vesting of restricted shares that are excluded from the computation of diluted net income (loss) per share, were 1.9 million, 1.6 million and 1.0 million for the years ended December 31, 2012, 2011, and 2010 respectively.

The following table sets forth the computation of basic and diluted net income (loss) per share for the periods indicated (in thousands, except per share amounts):

	Year Ended December 31,		
	2012	2011	2010
Net (loss) income from continuing operations	$(2,674)	$9,712	$(12,786)
Discontinued operations	2,147	3	2,413
Net (loss) income	$(527)	$9,715	$(10,373)
Shares used to compute basic (loss) income per share	19,853,095	19,655,632	19,613,201
Dilutive potential common shares:			
Restricted stock	—	57,688	—
Shares used to compute diluted (loss) income per share	19,853,095	19,713,320	19,613,201
Basic and diluted per share amounts:			
(Loss) income from continuing operations	$(0.13)	$0.49	$(0.65)
Discontinued operations	0.11	—	0.12
Net (loss) income	$(0.03)	$0.49	$(0.53)

Cash, Cash Equivalents and Short-term Investments

Cash and cash equivalents consist of cash and highly liquid securities with original maturities of three months or less. Non-restricted equity and debt security investments with a maturity of more than three months are considered short-term investments and have been classified by management as available-for-sale. Such investments are carried at fair value, with unrealized gains and losses included as a separate component of stockholders' equity. The Company determines the cost of investments based on the specific identification method.

Restricted Cash and Investments

Restricted cash and investments consist of certificates of deposit held with a financial institution as collateral under a facility lease and third-party service provider arrangements and available-for-sale equity investments received by the Company as a result of milestone payments from a licensee. The fair value of the Company's long-term equity investments are determined using quoted market prices in active markets and are discounted based on trading restrictions.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash equivalents and investments.

The Company invests its excess cash principally in United States government debt securities, investment grade corporate debt securities and certificates of deposit. The Company has established guidelines relative to diversification and maturities that maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. During 2012 the Company did not experience any significant losses on its cash equivalents, short-term investments or restricted investments. As of December 31, 2012, cash deposits held at financial institutions in excess of FDIC insured amounts of $250,000 were approximately $11.9 million.

Accounts receivable from two customers were 87% of total accounts receivable at December 31, 2012. Accounts receivable from one customer was 67% of total accounts receivable at December 31, 2011.

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The Company obtains Captisol® from a sole-source supplier. If this supplier were not able to supply the requested amounts of Captisol, the Company would be unable to continue to derive revenues from the sale of Captisol until it obtained an alternative source, which might take a considerable length of time.

Inventory

Inventory is stated at the lower of cost or market. The Company determines cost using the first-in, first-out method. The Company analyzes its inventory levels periodically and writes down inventory to its net realizable value if it has become obsolete, has a cost basis in excess of its expected net realizable value or is in excess of expected requirements. There was no reserve for obsolete inventory recorded as of December 31, 2012 and 2011.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts based on the best estimate of the amount of probable losses in the Company's existing accounts receivable. Accounts receivable that are outstanding longer than their contractual payment terms, ranging from 30 to 90 days, are considered past due. When determining the allowance for doubtful accounts, several factors are taken into consideration, including historical write-off experience and review of specific customer accounts for collectability. Account balances are charged off against the allowance after collection efforts have been exhausted and the potential for recovery is considered remote. There was no allowance for doubtful accounts recorded as of December 31, 2012 and 2011.

Property and Equipment

Property and equipment is stated at cost and consists of the following (in thousands):

	December 31,	
	2012	2011
Lab and office equipment	$4,374	$4,110
Leasehold improvements	145	62
Computer equipment and software	1,150	1,054
	5,669	5,226
Less accumulated depreciation and amortization	(4,881)	(4,771)
	$788	$455

Depreciation of equipment is computed using the straight-line method over the estimated useful lives of the assets which range from three to ten years. Leasehold improvements are amortized using the straight-line method over their estimated useful lives or their related lease term, whichever is shorter. Depreciation expense of $0.3 million, $0.5 million and $2.1 million was recognized in 2012, 2011, and 2010, respectively,

In September 2010, the Company ceased use of its facility located in New Jersey. As a result, during the quarter ended September 30, 2010, the Company recorded lease exit costs of $9.7 million for costs related to the difference between the remaining lease obligations of the abandoned operating leases, which run through August 2016, and management's estimate of potential future sublease income, discounted to present value. Actual future sublease income may differ materially from the Company's estimate, which would result in us recording additional expense or reductions in expense. In addition, the Company wrote-off approximately $5.4 million of property and equipment related to the facility closure and recorded approximately $1.8 million of severance related costs.

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Goodwill and Other Identifiable Intangible Assets

Goodwill and other identifiable intangible assets consist of the following (in thousands):

	December 31, 2012	December 31, 2011
Indefinite lived intangible assets		
Acquired in-process research and development	$13,036	$13,036
Goodwill	12,238	12,238
Definite lived intangible assets		
Complete technology	15,227	15,227
Trade name	2,642	2,642
Customer relationships	29,600	29,600
	47,469	47,469
Accumulated amortization	(4,593)	(2,179)
Total goodwill and other identifiable intangible assets, net	$68,150	$70,564

The Company accounts for goodwill in accordance with Accounting Standards Codification ("ASC 350") which, among other things, establishes standards for goodwill acquired in a business combination, eliminates the amortization of goodwill and requires the carrying value of goodwill and certain non-amortizing intangibles to be evaluated for impairment on an annual basis. The Company considers its market capitalization and the carrying value of its assets and liabilities, including goodwill, when performing its goodwill impairment test. If the carrying value of the assets and liabilities, including goodwill, were to exceed the Company's estimation of the fair value, the Company would record an impairment charge in an amount equal to the excess of the carrying value of goodwill over the implied fair value of the goodwill. The Company performs an evaluation of goodwill as of December 31 of each year, absent any indicators of earlier impairment, to ensure that impairment charges, if applicable, are reflected in our financial results before December 31 of each year. When it is determined that impairment has occurred, a charge to operations is recorded. Goodwill and other intangible asset balances are included in the identifiable assets of the business segment to which they have been assigned. Any goodwill impairment, as well as the amortization of other purchased intangible assets, is charged against the respective business segments' operating income. As of December 31 2012 and 2011, there have been no impairment of goodwill for continuing operations.

Amortization of definite lived intangible assets is computed using the straight-line method over the estimated useful life of the asset of 20 years. Amortization expense of $2.4 million, $2.3 million and $0.1 million was recognized in 2012, 2011, and 2010, respectively. Estimated amortization expense for the years ending December 31, 2013 through 2017 is $2.4 million per year.

In January 2011, the Company completed its acquisition of CyDex. As a result of the transaction, the Company recorded $47.5 million of intangible assets with definite lives. The weighted-average amortization period for the identified intangible assets with definite lives is 20 years. In addition, the Company recorded $3.2 million of acquired In-Process Research and Development (IPR&D) and $11.5 million of goodwill.

In May 2010, the Company purchased from the Genaera Liquidating Trust, certain intellectual property and interests in future milestones and royalties for MEDI-528, an IL-9 antibody program under development by AstraZeneca's subsidiary, MedImmune. MEDI-528 is currently in a 320-patient Phase II study for moderate-to-severe asthma. The Company paid $2.8 million to the Genaera Liquidating Trust in connection with the purchase. As part of the transaction, the Company also entered into a separate agreement with a shareholder of Ligand, whereby the shareholder and Ligand agreed to share the purchase price and any proceeds from the deal equally. Accordingly, the Company was reimbursed for $1.4 million of the purchase price. The Company recorded the net purchase price of $1.4 million as IPR&D. As discussed below, the asset was subsequently impaired upon receipt of notice from MedImmune that it was exercising its right to terminate the collaboration and license agreement.

In January 2010, the Company completed its acquisition of Metabasis. As a result, the Company recorded $12.0 million of the purchase price of Metabasis as IPR&D.

Acquired in-process research and development

Intangible assets related to IPR&D are considered to be indefinite-lived until the completion or abandonment of the associated research and development efforts. During the period the assets are considered to be indefinite-lived, they will not be amortized but will be tested for impairment on an annual basis and between annual tests if the Company becomes aware of any

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events occurring or changes in circumstances that would indicate a reduction in the fair value of the IPR&D projects below their respective carrying amounts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives at that point in time.

Impairment of Long-Lived Assets

Management reviews long-lived assets for impairment annually or whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value for the Company’s long-lived assets is determined using the expected cash flows discounted at a rate commensurate with the risk involved.

During 2011, the impairment analysis performed by management resulted in the write-off of certain acquired in process research and development assets. The Company recorded a non-cash impairment charge of $1.1 million for the write-off of the net book value of the IPR&D and interests in future milestones and royalties for MEDI-528, an IL-9 antibody program by AstraZeneca’s subsidiary, MedImmune. The asset was impaired upon receipt of notice from MedImmune in September that it was exercising its right to terminate the collaboration and license agreement. Additionally, in 2011, the Company recorded a non-cash impairment charge of $1.2 million for the write-off of IPR&D and interests in future milestones for TRPV1, a collaborative research and licensing program between the Company and Merck, related to the physiology, pharmacology, chemistry and potential therapeutic applications and potential clinical utilities related to Vanilloid Receptors, subtype 1. The asset was impaired upon receipt of notice from Merck that it was exercising its right to terminate the collaboration and license agreement. Subsequent to the termination of the agreement, the Company will receive an exclusive, perpetual, irrevocable, royalty-free (but subject to any third party royalty obligations), fully-paid world-wide license, with the right to sub-license, under specified patents and technology for the research, development, or commercialization of specified compounds and products in a limited field of use.

In November 2010, Roche notified the Company that it was exercising its right to terminate the collaboration and license agreement with the Company’s subsidiary, Metabasis Therapeutics, Inc. As a result, the Company’s management reviewed the carrying amount of the intangible asset related to this agreement. Based on an analysis of available information, management determined that the asset would not generate future cash flows. Therefore, the Company wrote-off the $2.8 million of acquired in-process research and development associated with the agreement during the year ended December 31, 2010.

As of December 31, 2012, management does not believe there have been any other events or circumstances indicating that the carrying amount of its remaining long-lived assets may not be recoverable.

Contingent Liabilities

In connection with the Company’s acquisition of CyDex in January 2011, the Company recorded a $17.6 million contingent liability, inclusive of the $4.3 million payment made in January 2012, for amounts potentially due to holders of the CyDex contingent value rights ("CVR's) and former license holders. The initial fair value of the liability was determined using the income approach incorporating the estimated future cash flows from potential milestones and revenue sharing. These cash flows were then discounted to present value using a discount rate of 21.6%. The liability will be periodically assessed based on events and circumstances related to the underlying milestones, and the change in fair value will be recorded in the Company’s consolidated statements of operations. The carrying amount of the liability may fluctuate significantly and actual amounts paid under the CVR agreements may be materially different than the carrying amount of the liability. The fair value of the liability at December 31, 2012 and 2011 was $10.9 million and $15.5 million, respectively. The Company recorded a fair value adjustment to increase the liability for CyDex related contingent liabilities of $3.4 million for the year ended December 31, 2012. Additionally, contingent liabilities decreased $8.0 million for cash payments to CVR holders for the year ended December 31, 2012. The Company recorded fair value adjustments to decrease the liability for contingent liabilities of $2.1 million for the

year ended December 31, 2011.

In connection with the Company's acquisition of Metabasis in January 2010, the Company issued Metabasis stockholders four tradable CVRs, one CVR from each of four respective series of CVR, for each Metabasis share. The CVR will entitle Metabasis stockholders to cash payments as frequently as every six months as cash is received by the Company from proceeds from Metabasis' partnership with Roche (which has been terminated) or the sale or partnering of any of the Metabasis drug development programs, among other triggering events. The acquisition-date fair value of the CVRs of $9.1 million was determined using quoted market prices of Metabasis common stock in active markets. The fair values of the CVRs are

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remeasured at each reporting date through the term of the related agreement. Changes in the fair values are reported in the statement of operations as income (decreases) or expense (increases). The carrying amount of the liability may fluctuate significantly based upon quoted market prices and actual amounts paid under the agreements may be materially different than the carrying amount of the liability. The fair value of the liability was $0 million and $1.1 million as of December 31, 2012 and 2011, respectively. The Company recorded a decrease in the liability for CVRs of $1.1 million during the year ended December 31, 2012, an increase of $1.1 million during the year ended December 31, 2011, and a decrease of $9.1 million during the year ended December 31, 2010.

In connection with the Company's acquisition of Neurogen in December 2009, the Company issued to Neurogen stockholders four CVRs; real estate, Aplindore, VR1 and H3, that entitle them to cash and/or shares of third-party stock under certain circumstances. The Company recorded the acquisition-date fair value of the CVRs as part of the purchase price. The acquisition-date fair value of the real estate CVR of $3.2 million was estimated using the net proceeds from a pending sale transaction and recorded as a payable to stockholders at December 31, 2009. In February 2010, the Company completed the sale of the real estate and subsequently distributed the proceeds to the holders of the real estate CVR. As a result and after final settlement of all related expenses, the real estate CVR was terminated in August 2010. In 2012, the Company received a notice from a collaboration partner that it was terminating its agreement related to VR1 for convenience and subsequently the Company recorded a decrease in the fair value of the liability for the related CVR of $0.2 million. Additionally, per the CVR agreement, no payment event date for the H3 program can occur after December 23, 2012 and the Company recorded a decrease in the fair value of the liability for the related CVR of $0.5 million. There are no remaining CVR obligations under the agreement with the former Neurogen shareholders.

Fair Value of Financial Instruments

Fair value is defined as the exit price that would be received to sell an asset or paid to transfer a liability. Fair value is a market-based measurement that should be determined using assumptions that market participants would use in pricing an asset or liability. The Company establishes a three-level hierarchy to prioritize the inputs used in measuring fair value. The levels are described in the below with Level 1 having the highest priority and Level 3 having the lowest:

Level 1 - Observable inputs such as quoted prices in active markets

Level 2 - Inputs other than the quoted prices in active markets that are observable either directly or indirectly

Level 3 - Unobservable inputs in which there is little or no market data, which require us to develop our own assumptions

The Company's long-term investments include investments in equity securities which are subject to trading restrictions. The fair value of the investments is determined using quoted market prices in active markets and discounted for the restrictive effect. The Metabasis CVR liability is marked-to-market at each reporting period based upon the quoted market prices of the underlying CVR. The fair value of the CyDex contingent liabilities are determined at each reporting period based upon an income valuation model.

Treasury Stock

The Company may on occasion repurchase our common stock on the open market or in a private transaction. When such stock is repurchased it is not constructively or formally retired and may be reissued if certain regulatory requirements are met. The purchase price of the common stock repurchased is charged to treasury stock.

Revenue Recognition

Royalties on sales of products commercialized by the Company's partners are recognized in the quarter reported by the respective partner.

Revenue from material sales is recognized upon transfer of title, which normally passes upon shipment to the customer. The Company's credit and exchange policy includes provisions for the return of product between 30 to 90 days, depending on the specific terms of the individual agreement, when that product (1) does not meet specifications, (2) is damaged in shipment (in limited circumstances where title does not transfer until delivery), or (3) is exchanged for an alternative grade of Captisol.

Revenue from research funding under the Company's collaboration agreements is earned and recognized on a percentage-of-completion basis as research hours are incurred in accordance with the provisions of each agreement. Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by us under our collaboration agreements are recognized as revenue upon the earlier of when payments are received or collection is assured, but are deferred if the Company has continuing performance obligations. Amounts received

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under multiple-element arrangements requiring ongoing services or performance by the Company are recognized over the period of such services or performance. The Company occasionally has sub-license obligations related to arrangements for which it receives license fees, milestones and royalties. The Company evaluates the determination of gross versus net reporting based on each individual agreement.

The Company analyzes its revenue arrangements and other agreements to determine whether there are multiple elements that should be separated and accounted for individually or as a single unit of accounting. For multiple element contracts, arrangement consideration is allocated at the inception of the arrangement to all deliverables on the basis of relative selling price, using a hierarchy to determine selling price. Management first considers vendor-specific objective evidence (VSOE), then third-party evidence (TPE) and if neither VSOE nor TPE exist, the Company uses its best estimate of selling price.

Many of the Company's revenue arrangements involve the bundling of a license with the option to purchase manufactured product. Licenses are granted to pharmaceutical companies for the use of Captisol in the development of pharmaceutical compounds. The licenses may be granted for the use of the Captisol product for all phases of clinical trials and through commercial availability of the host drug or may be limited to certain phases of the clinical trial process. The Company believes that its licenses have stand-alone value at the outset of an arrangement because the customer obtains the right to use Captisol in its formulations without any additional input by the Company, and in a hypothetical stand-alone transaction, the customer would be able to procure inventory from another manufacturer in the absence of contractual provisions for exclusive supply by the Company.

Revenue from milestones is recognized when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive, its achievability was not reasonably assured at the inception of the agreement, and the Company has no further performance obligations relating to that event, and (ii) collectability is reasonably assured. If these criteria are not met, the milestone payment is recognized over the remaining period of the Company’s performance obligations under the arrangement.

Preclinical Study and Clinical Trial Accruals

Substantial portions of the Company’s preclinical studies and all of the Company’s clinical trials have been performed by third-party laboratories, contract research organizations, or other vendors (collectively CROs). Some CROs bill monthly for services performed, while others bill based upon milestone achievement. The Company accrues for each of the significant agreements it has with CROs on a monthly basis. For preclinical studies, accruals are estimated based upon the percentage of work completed and the contract milestones achieved. For clinical studies, accruals are estimated based upon a percentage of work completed, the number of patients enrolled and the duration of the study. The Company monitors patient enrollment, the progress of clinical studies and related activities to the extent possible through internal reviews of data reported to it by the CROs, correspondence with the CROs and clinical site visits. The Company’s estimates are dependent upon the timelines and accuracy of the data provided by its CROs regarding the status of each program and total program spending. The Company periodically evaluates its estimates to determine if adjustments are necessary or appropriate based on information it receives concerning changing circumstances, and conditions or events that may affect such estimates. No material adjustments to preclinical study and clinical trial accrued expenses have been recognized to date.

Sale of Royalty Rights

The Company previously sold to third parties the rights to future royalties of certain of its products. As part of the underlying royalty agreements, the partners have the right to offset a portion of any future royalty payments owed to the Company to the extent of previous milestone payments. Accordingly, the Company deferred a portion of the revenue associated with each tranche of royalty right sold, equal to the pro-rata share of the potential royalty offset. Such amounts associated with the offset rights against future royalty payments will reduce this balance upon receipt of future royalties from the respective partners. As of December 31, 2012 and 2011, the Company had deferred $0.8 million and $1.3 million of revenue, respectively, which is included in long-term portion of deferred revenue.

Product Returns

In connection with the sale of the Avinza and Oncology product lines, the Company retained the obligation for returns of product that were shipped to wholesalers prior to the close of the transactions. The accruals for product returns, which were recorded as part of the accounting for the sales transactions, are based on historical experience. Any

subsequent changes to the Company's estimate of product returns are accounted for as a component of discontinued operations.

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Costs and Expenses

Collaborative research and development expense consists of labor, material, equipment and allocated facilities cost of the Company's scientific staff who are working pursuant to the Company's collaborative agreements. From time to time, collaborative research and development expense includes costs related to research efforts in excess of those required under certain collaborative agreements. Management has the discretion to set the scope of such excess efforts and may increase or decrease the level of such efforts depending on the Company's strategic priorities.

Proprietary research and development expense consists of intellectual property in-licensing costs, labor, materials, contracted services, and allocated facility costs that are incurred in connection with internally funded drug discovery and development programs.

Research and development costs are expensed as incurred. Research and development expenses from continuing operations were $10.8 million, $10.3 million and $22.1 million in 2012, 2011, and 2010, respectively, of which 100%, 99% and 61%, respectively, were sponsored by Ligand, and the remainder of which was funded pursuant to collaborative research and development arrangements.

Income Taxes

The Company recognizes liabilities or assets for the deferred tax consequences of temporary differences between the tax basis of assets or liabilities and their reported amounts in the financial statements. These temporary differences will result in taxable or deductible amounts in future years when the reported amounts of the assets or liabilities are recovered or settled. A valuation allowance is established when management determines that it is more likely than not that all or a portion of a deferred tax asset will not be realized. Management evaluates the realizability of its net deferred tax assets on a quarterly basis and valuation allowances are provided, as necessary. During this evaluation, management reviews its forecasts of income in conjunction with other positive and negative evidence surrounding the realizability of its deferred tax assets to determine if a valuation allowance is required. Adjustments to the valuation allowance will increase or decrease the Company's income tax provision or benefit. Management also applies the relevant guidance to determine the amount of income tax expense or benefit to be allocated among continuing operations, discontinued operations, and items charged or credited directly to stockholders' equity (deficit).

A tax position must meet a minimum probability threshold before a financial statement benefit is recognized. The minimum threshold is a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense.

Accounting for Stock-Based Compensation

Stock-based compensation expense for awards to employees and non-employee directors is recognized on a straight-line basis over the vesting period until the last tranche vests. The Company grants options and awards to employees, non-employee consultants, and non-employee directors. Only new shares of common stock are issued upon the exercise of stock options. Non-employee directors are accounted for as employees. Options and restricted stock granted to certain directors vest in equal monthly installments over one year from the date of grant. Options granted to employees vest 1/8 on the six month anniversary of the date of grant, and 1/48 each month thereafter for forty-two months. All option awards generally expire ten years from the date of grant.

The fair-value for options that were awarded to employees and directors was estimated at the date of grant using the Black-Scholes option valuation model with the following weighted average assumptions:

	Year Ended December 31,		
	2012	2011	2010
Risk-free interest rate	1.1 %	2.5 %	2.7 %
Dividend yield	—	—	—
Expected volatility	69 %	69 %	72 %
Expected term	6 years	6 years	6 years

The expected term of the employee and non-employee director options is the estimated weighted-average period until exercise or cancellation of vested options (forfeited unvested options are not considered) based on historical experience. The expected term for consultant awards is the remaining period to contractual expiration.

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Volatility is a measure of the expected amount of variability in the stock price over the expected life of an option expressed as a standard deviation. In selecting this assumption, the Company used the historical volatility of the Company's stock price over a period equal to the expected term.

The following table summarizes share-based compensation expense recorded as components of research and development expenses and general and administrative expenses for the periods indicated (in thousands):

	2012	2011	2010
Share-based compensation expense as a component of:			
Research and development expenses	$1,448	$1,072	$1,253
General and administrative expenses	2,619	2,279	1,072
	$4,067	$3,351	$2,325

Segment reporting

Under Accounting Standards Codification No. 280, "Segment Reporting", or ASC 280, operating segments are defined as components of an enterprise about which separate financial information is available that is regularly evaluated by the entity's chief operating decision maker, in deciding how to allocate resources and in assessing performance. The Company has evaluated this Codification and has identified two reportable segments: the development and commercialization of drugs using Captisol technology by CyDex Pharmaceuticals, Inc. and the biopharmaceutical company with a business model that is based upon the concept of developing or acquiring royalty revenue generating assets and coupling them to a lean corporate cost structure of Ligand Pharmaceuticals, Inc.

Comprehensive Income (Loss)

Comprehensive income (loss) represents net income (loss) adjusted for the change during the periods presented in unrealized gains and losses on available-for-sale securities less reclassification adjustments for realized gains or losses included in net income (loss). The unrealized gains or losses are reported on the Consolidated Statements of Comprehensive Income.

New Accounting Pronouncements

In May 2011, the FASB issued ASU 2011-04, Fair Value Measurement (Topic 820) – Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." This ASU represents the converged guidance of the FASB and the IASB (the Boards) on fair value measurement. The collective efforts of the Boards and their staffs, reflected in ASU No. 2011-04, have resulted in common requirements for measuring fair value and for disclosing information about fair value measurements, including a consistent meaning of the term "fair value." ASU No. 2011-04 amends ASC 820, Fair Value Measurements and Disclosures to provide guidance on how fair value measurement should be applied where existing U.S. GAAP already requires or permits fair value measurements. This ASU does not extend the use of fair value, but rather provides guidance on application. In addition, ASU No. 2011-04 requires expanded disclosures regarding fair value measurements. The adoption of this standard had no impact on the Company's consolidated financial position, results of operations or cash flows.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220) – Presentation of Comprehensive Income. This ASU amends Topic 220, Comprehensive Income, to allow an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. ASU No. 2011-05 eliminates the option to present the components of other comprehensive income as part of the statement of changes in shareholders' investment. The amendments to the Codification in the ASU do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. The provisions of ASU No. 2011-05 should be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The adoption of this standard had no impact on the Company's consolidated financial position, results of operations or cash flows.

In September 2011, the FASB issued ASU 2011-08, Intangibles – Goodwill and other: testing for goodwill impairment, which, among other things, amends Accounting Standards Topic 350 Intangibles – Goodwill and Other, to allow entities to use a qualitative approach to test goodwill for impairment. ASU 2011-08 permits an entity to first perform a qualitative assessment

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to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, it is necessary to perform the currently prescribed two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. The adoption of this standard had no impact on the Company's consolidated financial position, results of operations or cash flows.

In December 2011, the FASB issued ASU 2011-12, Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in ASU 2011-12. The amendments in ASU 2011-12 defer the changes in ASU 2011-05 that relate to the presentation of reclassification adjustments out of accumulated other comprehensive income. The amendments in this ASU are effective for us for fiscal years, and interim periods within those years, beginning after December 15, 2011. We adopted this standard for the year ended December 31, 2012. The adoption of ASU 2011-12 did not have a material impact on the Company's financial position or results of operations.

In July 2012, the FASB issued ASU 2012-02, Intangibles – Goodwill and Other: Testing Indefinite-Lived Intangible Assets for Impairment in ASU 2012-02. ASU 2012-02 allows a company the option to first assess qualitative factors to determine whether it is necessary to perform a quantitative impairment test. Under that option, a company would no longer be required to calculate the fair value of an indefinite-lived intangible asset unless the company determines, based on that qualitative assessment, that it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount. The amendments in this ASU are effective for annual and interim indefinite-lived intangible asset impairment tests performed for periods beginning after September 15, 2012. We adopted this standard for the year ended December 31, 2012. The adoption of ASU 2012-02 did not have a material impact on the Company's financial position or results of operations.

In February 2013, the FASB issued ASU No. 2013-02, Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For

amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. The amendments in this ASU are effective for us for fiscal years, and interim periods within those years, beginning after January 1, 2013.

2. Business Combinations

In January 2011, the Company acquired CyDex Pharmaceuticals, Inc. (“CyDex”), a specialty pharmaceutical company developing products and licensing its Captisol technology. Captisol is currently incorporated in five FDA-approved medications and marketed by three of CyDex’s licensees: Pfizer, Bristol-Myers Squibb and Baxter (formerly Prism Pharmaceuticals). In addition, CyDex is supporting drug development efforts with more than 40 companies worldwide.

Under the terms of the agreement, the Company paid $31.6 million to the CyDex shareholders and issued a series of Contingent Value Rights (CVR's). Additionally, the Company assumed certain contractual obligations for potential milestone payments to license holders. In addition, the Company will pay CyDex shareholders, for each respective year from 2011 through 2016, 20% of all CyDex-related revenue, but only to the extent that and beginning only when CyDex-related revenue for such year exceeds $15 million; plus an additional 10% of all CyDex-related revenue recognized during such year, but only to the extent that and beginning only when aggregate CyDex-related revenue for such year exceeds $35 million. The initial fair value of the liability was determined using an income approach, incorporating the estimated future cash flows from potential milestones and revenue sharing. These cash flows were then discounted to present value using a discount rate of 21.5%. For the year ended December 31, 2012, the fair value of the acquisition related contingent liabilities was determined using the income approach. The liability is evaluated each reporting period based on events and circumstances related to the underlying milestones, and the change in fair value is recorded in the Company's consolidated statements of operations. The carrying amount of the liability may fluctuate significantly and actual amounts paid may be materially different than the carrying amount of the liability.

The Company is required by the CyDex CVR Agreement to dedicate at least five experienced full-time employee equivalents per year to the acquired business and to invest at least $1.5 million per year, inclusive of such employee expenses, in the acquired business, through 2015.

The components of the purchase price allocation for CyDex are as follows (in thousands):

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Purchase Consideration (in thousands):		
Cash paid to CyDex shareholders	$31,572	
Estimated fair value of contingent consideration	17,585	
Total purchase consideration	$49,157	
Allocation of Purchase Price (in thousands):		
Cash		$85
Accounts receivable		1,202
Inventory		2,414
In-process research and development		3,200
Intangible assets with definite lives		47,469
Goodwill		11,538
Other assets		1,311
Liabilities assumed		(18,062)
		$49,157

The acquired identified intangible assets with definite lives from the acquisition with CyDex are as follows:

Acquired Intangible Assets (in thousands)	
Complete technology	$15,227
Trademark and trade name	2,642
Customer relationships	29,600
	$47,469

The weighted-average amortization period for the identified intangible assets with definite lives is 20 years.

The Company has allocated $3.2 million of the purchase price of CyDex to IPR&D. This amount represents the estimated fair value of CyDex's two main proprietary products that have not yet reached technological feasibility and do not have future alternative use as of the date of the merger. The valuation was based on a probability-weighted present value of the expected upfront and milestone payments. The probability of success takes into account the stages of completion and the risks surrounding successful development and commercialization of the underlying product candidates. These cash flows were then discounted to present value using a discount rate of 21.5%. Management does not believe that any events have occurred that would impair the IPR&D at December 31, 2012.

The valuation of the Captisol technology was based on a derivative of the discounted cash flow method that estimated the present value of a hypothetical royalty stream derived via the licensing of similar technology. These projected cash flows were then discounted to present value using a discount rate of 20.5%. The valuation of the trademark and trade name was based on the Relief from Royalty method using royalty rates paid in third-party licensing agreements involving similar trade names. These projected cash flows were then discounted to present value using a discount rate of 20.5%. The valuation of the customer relationships was based on a discounted cash flow analysis incorporating the estimated future cash flows from these relationships during their assumed life of 20 years. These cash flows were then discounted to present value using a discount rate of 21.5%.

Had the merger with CyDex been completed as of the beginning of 2010, the Company's pro forma results for the years ended December 31, 2011 and 2010 would have been as follows (unaudited):

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(in thousands, except per share data)	2011	2010
Revenue	$30,226	$23,727
Operating loss	(1,591)	(32,403)
Net income (loss)	8,687	(15,480)
Basic and diluted earnings per share:		
Income (loss) from continuing operations	$0.44	$(0.91)
Discontinued operations	$—	$0.12
Net income (loss)	$0.44	$(0.79)
Basic and diluted weighted average shares	19,656	19,613

The primary adjustments relate to interest expense on long-term debt, the loss of interest income due to the timing of transaction related payments and amortization of intangible assets. The above pro forma information was determined based on historical results adjusted for the purchase price allocation and estimated related changes in income associated with the acquisition of CyDex.

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3. Financial Instruments

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including available-for-sale fixed income, equity securities, and contingent liabilities. The following table provides a summary of the assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2012 (in thousands):

	Fair Value Measurements at Reporting Date Using		
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Current portion of co-promote termination payments receivable	$4,327	$—	$—	$4,327
Equity investments	1,426	—	1,426	—
Long-term portion of co-promote termination payments receivable	8,207	—	—	8,207
Total Assets	$13,960	$—	$1,426	$12,534
Liabilities:				
Current portion of contingent liabilities - CyDex	$356	$—	$—	$356
Current portion of co-promote termination liability	4,327	—		