PROGENICS PHARMACEUTICALS INC

Form 10-K March 13, 2014

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, 2013

..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. 000-23143

PROGENICS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

13-3379479 Delaware

incorporation or organization) (I.R.S. Employer Identification Number)

777 Old Saw Mill River Road

Tarrytown, NY 10591

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (914) 789-2800

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 \$0.0013 per share 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 Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 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 Website, 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."

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

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

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant on June 30, 2013, based upon the closing price of the Common Stock on The NASDAQ Stock Market LLC on that date of \$4.46 per share, was \$171,517,805 ⁽¹⁾.

Calculated by excluding all shares that may be deemed to be beneficially owned by executive officers, directors (1) and five percent stockholders of the Registrant, without conceding that any such person is an "affiliate" of the Registrant for purposes of the Federal securities laws.

As of March 7, 2014, a total of 69,575,404 shares of Common Stock, par value \$.0013 per share, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the Registrant's definitive proxy statement to be filed in connection with solicitation of proxies for its 2014 Annual Meeting of Shareholders are hereby incorporated by reference into Part III of this Form 10-K where such portions are referenced.

TABLE OF CONTENTS

PART I						
Item 1.	<u>Business</u>	2				
Item 1A.	Risk Factors	12				
Item 1B.	<u>Unresolved Staff Comments</u>	25				
Item 2.	<u>Properties</u>					
Item 3.	<u>Legal Proceedings</u>					
Item 4.	Not Applicable					
PART II						
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity	25				
	<u>Securities</u>	23				
Item 6.	Selected Financial Data	27				
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	28				
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	39				
Item 8.	Financial Statements and Supplementary Data	39				
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	39				
Item 9A.	Controls and Procedures	39				
Item 9B.	Other Information	41				
PART III						
Item 10.	Directors, Executive Officers and Corporate Governance	42				
Item 11.	Executive Compensation	42				
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	42				
Item 13.	Certain Relationships and Related Transactions, and Director Independence	42				
Item 14.	Principal Accounting Fees and Services	42				
PART IV	I					
Item 15.	Exhibits, Financial Statement Schedules	43				
INDEX 7	ΓΟ CONSOLIDATED FINANCIAL STATEMENTS	F-1				
SIGNAT	<u>'URES</u>	S -1				
EXHIBI	<u>r index</u>	E-				
i						

Table of Contents PART I

This document and other public statements we make may contain statements that do not relate strictly to historical fact, any of which may be forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. When we use the words "anticipates," "plans," "expects" and similar expressions, we are identifying forward-looking statements. Forward-looking statements involve known and unknown risks and uncertainties which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. While it is impossible to identify or predict all such matters, these differences may result from, among other things, the inherent uncertainty of the timing and success of, and expense associated with, research, development, regulatory approval and commercialization of our products and product candidates, including the risks that clinical trials will not commence or proceed as planned; products appearing promising in early trials will not demonstrate efficacy or safety in larger-scale trials; clinical trial data on our products and product candidates will be unfavorable; our products will not receive marketing approval from regulators or, if approved, do not gain sufficient market acceptance to justify development and commercialization costs; competing products currently on the market or in development might reduce the commercial potential of our products; we, our collaborators or others might identify side effects after the product is on the market; or efficacy or safety concerns regarding marketed products, whether or not originating from subsequent testing or other activities by us, governmental regulators, other entities or organizations or otherwise, and whether or not scientifically justified, may lead to product recalls, withdrawals of marketing approval, reformulation of the product, additional pre-clinical testing or clinical trials, changes in labeling of the product, the need for additional marketing applications, declining sales or other adverse events.

We are also subject to risks and uncertainties associated with the actions of our corporate, academic and other collaborators and government regulatory agencies, including risks from market forces and trends; potential product liability; intellectual property, litigation and other dispute resolution, environmental and other risks; the risk that we may not be able to enter into favorable collaboration or other relationships or that existing or future relationships may not proceed as planned; the risk that current and pending patent protection for our products may be invalid, unenforceable or challenged, or fail to provide adequate market exclusivity, or that our rights to in-licensed intellectual property may be terminated for our failure to satisfy performance milestones; the risk of difficulties in, and regulatory compliance relating to, manufacturing products; and the uncertainty of our future profitability.

Risks and uncertainties also include general economic conditions, including interest and currency exchange-rate fluctuations and the availability of capital; changes in generally accepted accounting principles; the impact of legislation and regulatory compliance; the highly regulated nature of our business, including government cost-containment initiatives and restrictions on third-party payments for our products; trade buying patterns; the competitive climate of our industry; and other factors set forth in this document and other reports filed with the U.S. Securities and Exchange Commission (SEC). In particular, we cannot assure you that Relistor® will be commercially successful or be approved in the future in other formulations, indications or jurisdictions, or that any of our other programs will result in a commercial product.

We do not have a policy of updating or revising forward-looking statements and we assume no obligation to update any statements as a result of new information or future events or developments. It should not be assumed that our silence over time means that actual events are bearing out as expressed or implied in forward-looking statements.

Available Information

We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the Securities Exchange Act of 1934. The SEC maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers, including Progenics, that file electronically with the SEC. You may obtain documents that we file with the SEC at http://www.sec.gov, and read and copy them at the SEC's Public Reference

Room at 100 F Street NE, Washington, DC 20549. You may obtain information on operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. We also make available our annual, quarterly and current reports and proxy materials on http://www.progenics.com.

Additional information concerning Progenics and its business may be available in press releases or other public announcements and quarterly and current reports and documents filed with the SEC. Information on or accessed through our website is not included in the Company's SEC filings.

In this document, Relistor, a registered trademark, refers to methylnaltrexone – the active ingredient of Relistor -- as it has been and is being developed and commercialized by or in collaboration with Progenics. Subcutaneous Relistor has received regulatory marketing approval for specific indications, and references to Relistor do not imply that any other form or possible use of the drug has received approval. Relistor's approved U.S. label and full U.S. prescribing information is available at www.Relistor.com. Other approved labels for Relistor apply in ex-U.S. markets. Azedra and Onalta are trademarks of our Molecular Insight Pharmaceuticals, Inc. subsidiary.

Table of Contents

Item 1. Business

Progenics Pharmaceuticals develops innovative medicines for oncology. Our clinical development efforts center on late-stage oncology assets. An important focus for Progenics is targeted therapeutics and imaging agents. A number of our candidates target prostate specific membrane antigen (PSMA).

OUR
PRODUCT
CANDIDATES

RELISTOR®

Status In development for

chemotherapy-experienced patients completed; a PSMA Treatment of prostate cancer second cohort in chemotherapy-naïve

Phase 2 testing 1140aging agent for prostate cancer

completed

registrational trial Azedta Tent of pheochromocytoma and paraganglioma under Special

Protocol Assessment

(SPA)

Relication eState body appreciation duced constipation (OIC) in advanced-illness patients receiving

ipiditative care when laxative therapy has not been sufficient

Relistor-Subcutaneous Treatment of OIC in patients with non-cancer pain injection

Phase 3 testing Redestrone Otradf OIC completed

6

Phase 2 testing in

patients ongoing

Marketed in the U.S.,

elsewhere; licensed

Complete Response Letter received in

Pharmaceuticals

2012 on pending sNDA; awaiting meeting date of **Advisory Committee** convened by FDA

E.U., Canada, Australia and

to Salix

Phase 2b

Oncology

Our principal clinical-stage product candidates in oncology are

PSMA ADC, a fully human monoclonal antibody-drug conjugate designed to deliver a chemotherapeutic agent to cancer cells by targeting the three-dimensional structure of the PSMA protein. In a phase 2 open-label, multicenter clinical trial to assess anti-tumor activity, tolerability and safety, we have completed enrollment in an original cohort of chemotherapy refractory patients with metastatic castration-resistant prostate cancer (mCRPC) and are conducting a second cohort of chemotherapy-naïve patients.

1404 (trofolastat), a radio-labeled small molecule which binds PSMA and acts as an imaging agent to diagnose and detect prostate cancer, including metastases in other soft tissue and bone. We have recently completed a global multicentered phase 2 study assessing the diagnostic accuracy of 1404 imaging in men with high-risk prostate cancer scheduled for radical prostectomy.

Azedra, a phase 2 radiotherapeutic product candidate in development as a treatment for pheochromocytoma -- rare tumors found primarily in the adrenal glands – and related paraganglioma tumors occurring in other tissues. Azedra ·has Orphan Drug designation and Fast Track status in the U.S. for pheochromocytoma and paraganglioma, with clinical study conducted under a 2009 Special Protocol Assessment (SPA) with the FDA. There is currently no FDA-approved therapeutic for the treatment of pheochromocytoma.

See Clinical Trial Activities, below, for additional information concerning these studies and those for Relistor.

We have decided to move forward MIP-1095, a PSMA-targeted small molecule radiopharmaceutical originally developed by our Molecular Insight subsidiary, into clinical development, and expects to file an Investigational New Drug (IND) application in the U.S. later this year. Memorial Sloan-Kettering Cancer Center has agreed to serve as a study site for a phase 1 trial of this compound.

Table of Contents

While MIP-1095 was being developed by Molecular Insight, it provided the compound to an academic institution in Germany for compassionate use in men with late stage metastatic prostate cancer who had exhausted other available therapies. This use was not in conjunction with any clinical trial. Information from this compassionate use was recently published in the European Journal of Nuclear Medicine and Molecular Imaging. A link to this article is found on Progenics' website.

We continue to consider opportunities for strategic collaborations, out-licenses and other arrangements with biopharmaceutical companies involving proprietary research, development and clinical programs, and may in the future also in-license or acquire additional oncology compounds and/or programs.

Relistor

Relistor, the first approved treatment for opioid-induced constipation (OIC) that addresses its underlying mechanism, decreases the constipating side effects induced by opioid pain medications such as morphine and codeine without diminishing their ability to relieve pain. Relistor subcutaneous injection is approved for sale in the U.S., E.U., Canada, Australia and elsewhere in pre-filled syringes, which are designed to ease preparation and administration for patients and caregivers. Under our License Agreement, Salix is responsible for developing and commercializing Relistor, including completing clinical development necessary to support regulatory marketing approvals for potential new indications (such as OIC in patients with chronic, non-cancer pain) and formulations of the drug (such as an oral formulation of methylnaltrexone, the active ingredient in Relistor). The U.S. Food and Drug Administration in July 2012 issued a Complete Response Letter for the supplemental New Drug Application for Relistor injection for subcutaneous use for the treatment of OIC in adult patients with chronic, non-cancer pain, in which the FDA requested additional clinical data. After an End-of-Review meeting in October of that year, the FDA's Division of Gastroenterology and Inborn Errors Products expressed a concern that there may be a risk associated with the chronic use of mu-opioid receptor antagonists in patients who are taking opioids for chronic pain, and, in order to understand this potential risk, the Division communicated that a very large, well-controlled, chronic administration trial will have to be conducted to assess the safety of any mu-opioid receptor antagonist prior to market approval for the treatment of patients with OIC who are taking opioids for chronic, non-cancer pain. Salix subsequently held discussions with the Division and expressed the view that the post-marketing, clinical and preclinical data currently available for Relistor adequately demonstrate an appropriate and expected safety profile sufficient to permit the approval of the current Relistor sNDA. In response to Salix's formal appeal of the FDA's complete response letter, the FDA informed Salix and Progenics in June 2013 that it will seek input from an Advisory Committee, which it originally scheduled for March 2014. The FDA has recently postponed this meeting and said it will convene in the near future. The FDA has also stated that it will take action under the appeal within 30 days after receiving input from the Committee.

We believe that some of the areas being considered for discussion during the meeting would include the potential for drugs in Relistor's class to cause withdrawal symptoms; the strength of a potential cardiovascular signal seen with another drug in this class of drugs and the available safety data with Relistor in regards to a potential cardiovascular (CV) signal; and the need and timing (pre-approval vs. post-approval) of major adverse cardiac events (MACE) studies with drugs of this class. The FDA has communicated that it is convening the Advisory Committee for the following reasons: (i) the potential cardiovascular safety signal observed in the 12-month safety trial of another peripheral mu-opioid antagonist for the treatment of opioid-induced constipation in patients with chronic non-cancer pain raises concern for this class of drug products; (ii) the RELISTOR supplemental application contains only uncontrolled long-term safety data, and while there is no cardiovascular signal apparent in this data, the lack of a control population does not allow a definitive evaluation to be made to rule out a potential cardiovascular safety signal; and (iii) the FDA needs to provide consistent advice regarding the need for MACE studies to applicants developing drug products in this class for this indication, and for this reason, a broader discussion of the potential for cardiovascular events across the drug class is necessary.

See Risk Factors.

Relistor net sales and related royalties earned during the years 2011-2013 are set forth below. Our recognition of royalty revenue for financial reporting purposes is explained in Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) and our financial statements included elsewhere in this document. Royalties are based on net sales reported by commercialization collaborators.

Table of Contents

	First	Second	Third	Fourth	Full
	Quarter	Quarter	Quarter (in thousands)	Quarter	Year
2013:			tilousalius)		
Net Sales	\$7,700	\$7,900	\$ 4,800	\$19,000	\$39,400
Royalties Earned	1,155	1,174	719	2,847	5,895
2012:					
Net Sales	\$12,300	\$10,800	\$ 4,900	\$5,200	\$33,200
Royalties Earned	1,834	1,619	728	782	4,963
2011:					
Net Sales	\$3,300	\$5,200	\$ 9,700	\$8,800	\$27,000
Royalties Earned	-	527	1,240	1,279	3,046

Clinical Trial Activities

Progenics' practice has been to announce commencement and results of all of its significant clinical trials in press releases, medical and scientific meetings and other venues. Following is a summary of current clinical trial activities involving our principal product candidates and Relistor.

PSMA ADC. In our open-label, multicenter U.S. phase 2 trial of PSMA ADC to assess anti-tumor activity and tolerability an initial cohort of chemotherapy experienced participants with metastatic castration-resistant prostate cancer (mCRPC) have received initial doses of drug starting at either 2.5 mg/kg or 2.3 mg/kg; in some cases subsequent doses were adjusted based on tolerability. The study endpoints evaluate the anti-tumor effect of the compound as measured by changes in prostate specific antigen (PSA) levels, number of circulating tumor cells (CTC), pain scores, and tumor size as measured under RECIST criteria. Safety is also being assessed. Progenics has completed enrollment of 83 patients in this cohort and is treating an additional trial cohort of up to 35 chemotherapy naive patients who have progressed on hormonal therapies.

Adverse events (AEs) associated with PSMA ADC observed in this phase 2 study through mid-2013 have been consistent with those observed in the phase 1 study noted below; the most common grade 3 or higher AEs in this study have been neutropenia (grade 4: 6.7% at 2.3 mg/kg and 11.4% at 2.5 mg/kg) and peripheral neuropathy (grade 3 or higher: 6.7% at 2.3 mg/kg and 5.7% at 2.5 mg/kg). Eight patients experienced serious adverse events (SAEs) which included febrile neutropenia, neutropenia, sinus tachycardia, gastrointestinal disorders, fatigue, infections and dehydration. Two deaths occurred after treatment with PSMA ADC. The first, a patient hospitalized ten days following his first dose of study drug (2.5 mg/kg) with febrile neutropenia and E. coli positive blood cultures, progressed despite treatment to septic shock and died; both the investigator and Progenics considered this patient's septic shock as probably related to PSMA ADC. The second patient developed a rash and fever and was hospitalized for neutropenic fever, where further assessment revealed Strep Viridans bacteria (suspected to be from a tunnel catheter) in blood. Approximately two weeks after receiving study drug (also 2.5 mg/kg), this patient was intubated due to hypoxia and respiratory failure, and died three days after being removed from a ventilator. The investigator considered sepsis as unlikely, bacteremia as probably, febrile neutropenia as definitely related to PSMA ADC; Progenics assessed sepsis as probably, bacteremia as unlikely, and febrile neutropenia as definitely related to PSMA ADC. A third patient died before receiving study drug.

The phase 2 trial was undertaken after review and analysis of results from a phase 1 dose-ranging study of the compound in 52 mCRPC patients whose cancer had progressed despite prior treatment with taxane-based chemotherapy regimens.

The initial 12-week clinical trial period of the phase 1 study evaluated up to four intravenous doses of PSMA ADC administered at three-week intervals. Following completion of the four doses, patients were offered, at their physicians' discretion, the option to continue treatment with PSMA ADC for up to an additional 39 weeks. The anti-tumor effect of the compound as measured by changes in PSA levels and number of CTCs was observed in the study across doses ranging from 1.8 mg/kg to 2.8 mg/kg, and durable responses were seen in some of these heavily pre-treated patients. PSMA ADC was generally well tolerated in patients at doses up to and including 2.5 mg/kg. Dose limiting toxicities, primarily neutropenia, were seen at 2.8 mg/kg. The most commonly reported AEs were anorexia and fatigue. Five patients experienced SAEs, two of which resulted in death. One patient dosed at 1.8 mg/kg died from multi-organ failure due to acute pancreatitis: while no data suggested this event was drug-related, a possible relationship could not be definitively ruled out. A second patient died 11 days after receiving study drug at 2.8 mg/kg: septic shock was cited as the cause of death. The investigator considered septic shock as probably related and febrile neutropenia as definitely related to PSMA ADC.

Table of Contents

Through mid-2013, 14% of the 95 patients treated with PSMA ADC in these trials have reported SAEs, including acute pancreatitis, sepsis/septic shock (each as noted above), tachycardia, abnormal ECG, atrial fibrillation, chest pain, confusion, deep vein thrombosis, pulmonary embolism, hematuria, increased International Normalized Ratio (INR), leukopenia, metabolic acidosis, myocardial infarction, pneumonia and renal failure. In conducting these studies, Progenics has taken into account SAEs reported to date as treatment-related or possibly treatment-related; based on data currently available to it, the Company is continuing development of PSMA ADC and has not determined what effects, if any, treatment-related SAEs reported to date or that may be reported in the future may have on the development of PSMA ADC going forward. See Risk Factors.

1404. Molecular Insight conducted four phase 1 studies with 1404 to establish proof-of-concept and dosimetry, and to assess a simplified kit preparation as compared to multi-step preparation. It commenced a phase 2 safety and efficacy study in 2012 to assess the diagnostic accuracy of the compound imaging in men with high-risk prostate cancer scheduled for radical prostatectomy (RP) and extended pelvic lymph node dissection (EPLND) compared to histopathology. The primary objective of this phase 2 international multi-center, multi-reader, open-label trial is to assess clinical safety as well as the compound's ability to detect prostate cancer within the prostate gland. Patient enrollment has been completed with 105 participants dosed at 20 centers in the U.S. and Europe. An additional phase 1 study in 14 patients to assess safety and diagnostic accuracy of 1404 whole body and pelvic SPECT/CT imaging and pelvic MRI in normal healthy men without current evidence of prostate cancer has completed dosing. There have to date been no treatment related AEs reported in these studies, other than one mild injection site reaction.

Azedra. In 2006, Molecular Insight commenced a phase 1 study with Azedra in 11 patients with pheochromocytoma / paraganglioma and metastatic carcinoid tumors to assess the safety, radiation dosimetry, and distribution metabolism of a single imaging dose of this compound. Following completion of this study, two dose-finding studies were conducted to determine a maximum tolerated therapeutic dose, and to assess safety, dosimetry and preliminary efficacy of Azedra in 21 patients with pheochromocytoma / paraganglioma and 15 with high-risk neuroblastoma, respectively.

Molecular Insight subsequently commenced a phase 2 study of Azedra under the 2009 SPA regarding the design of this intended registrational phase 2 trial to evaluate the efficacy and safety of the administration of two therapeutic doses of the compound in patients with pheochromocytoma / paraganglioma. The primary objective of this U.S. study is to determine the clinical benefit of Azedra based on the proportion of study participants with a reduction of antihypertensive medication by at least 50% for at least six months. This phase 2 trial has enrolled 41 of the 58 patients required to be treated under the SPA, and the long-term follow up phase of the study is ongoing. To date 49% of patients receiving study drug reported SAEs, the most common of which were hematologic (12%); other SAEs included constipation, dyspnea and myelodysplastic syndrome (each at 4.5%).

This trial was suspended in late 2010 due to lack of funding. Progenics is now resuming this trial, and plans for patient recruitment to continue after making drug supply manufacturing arrangements for the trial.

Relistor. Salix and Progenics completed in 2011 a phase 3 U.S. trial to evaluate the efficacy and safety of oral methylnaltrexone for the treatment of opioid-induced constipation in patients with chronic, non-cancer pain. This 804-patient trial assessed a once-daily oral methylnaltrexone dose of 150, 300 or 450 mg compared to placebo for 12 weeks: patients received one daily dose during the first four weeks and dosing on an as needed basis for the remaining eight weeks. Both the 300 and 450 mg treatment arms demonstrated statistically significant results for the primary endpoint of average proportion of rescue-free bowel movements (RFBMs) per patient within four hours of administration over four weeks of dosing, when compared to the placebo treatment arm. Efficacy was also seen in both the 300 and 450 mg treatment groups for other endpoints, including change in weekly RFBMs from baseline over the first four weeks and one assessing response (responder/non-responder) to study drug during weeks one to four, where "responder" was defined as having three or more RFBMs per week, with an increase of at least one RFBM per

week over baseline, for at least three out of the first four weeks. Overall, efficacy of oral methylnaltrexone in this study was comparable to that reported in clinical studies of subcutaneous methylnaltrexone in patients with chronic, non-cancer pain, and the overall observed safety profile seen in patients treated with oral methylnaltrexone was comparable to placebo.

The phase 3 trial was undertaken after review and analysis of results from clinical trials initiated by Progenics' former collaboration partner, Wyeth Pharmaceuticals, and Progenics utilizing formulations of oral methylnaltrexone in patients with chronic, non-cancer pain receiving opioid treatment.

In one of these trials, of the oral formulation utilized in the phase 3 trial described above, 48% of the 25 patients receiving methylnaltrexone tablets laxated within four hours of treatment. In this study, there were no drug related SAEs reported, and the most frequent AEs were nausea and headache (10.8% each); others were vomiting (4.6%), abdominal pain and muscle spasms (3.1% each). Based on the data from this study and other information regarding oral methylnaltrexone, Progenics concluded that the methylnaltrexone tablet was active and generally well tolerated and that its safety, pharmacokinetics and activity profiles were comparable to that of subcutaneous methylnaltrexone, and decided to commence the phase 3 trial described above.

For purposes of the foregoing summary, in general phase 1 trials are initial evaluations of safety in humans which study methods of action and metabolization; phase 2 trials evaluate safety, dosing and activity or efficacy, and continue safety evaluation; and phase 3 trials involve larger scale evaluations of safety, efficacy and dosage.

Table of Contents

License and Other Agreements

Following is a summary of significant agreements relating to our pipeline.

Oncology

Our PSMA Development Company LLC subsidiary has a collaboration agreement with Seattle Genetics, Inc. under which SGI has granted us an exclusive worldwide license to its proprietary ADC technology. We have the right to use this technology, which is based in part on technology licensed by SGI from third parties, to link chemotherapeutic agents to our monoclonal antibodies that target prostate specific membrane antigen utilizing technology licensed to us, through Cytogen Corporation, from Sloan-Kettering Institute for Cancer Research. We are responsible for research, product development, manufacturing and commercialization of all products, and are obligated to make maintenance and milestone payments and to pay royalties to SGI and its licensors, as applicable, on a percentage of net sales. The SGI agreement terminates at the latest of (i) the tenth anniversary of the first commercial sale of each licensed product in each country or (ii) the latest date of expiration of patents underlying the licensed products. We may terminate the agreement upon advance written notice; SGI may terminate if we fail to cure a breach of an SGI in-license after written notice; and either party may terminate after written notice upon an uncured breach or in the event of the other party's bankruptcy.

PSMA LLC also has a worldwide exclusive licensing agreement with Abgenix (now Amgen Fremont, Inc.) to use its XenoMouse® technology for generating fully human antibodies to PSMA. We are obligated to make development and commercialization milestone payments with respect to products incorporating an antibody generated utilizing that technology, along with royalties based upon net sales of such products. Abgenix may terminate this agreement for cause, after an opportunity to cure, upon 30 days prior written notice; we have the right to terminate upon 30 days prior written notice. The agreement continues until the later of the expiration of specified patents or seven years from the first commercial sale of eligible products.

We acquired Molecular Insight in January 2013 by purchasing all of its outstanding capital stock for 4,566,210 shares of Progenics common stock (with 500,000 held in an escrow expiring in April 2014) in a private transaction. Under the agreement, we also agreed to pay to the former stockholders potential milestones, in cash or Progenics stock at our option, of up to \$23 million contingent upon achieving specified commercialization events and up to \$70 million contingent upon achieving specified sales targets relating to the acquired company's products. The agreement contains customary representations and warranties, covenants, and indemnification and other provisions.

In addition to utilizing its own proprietary technology, Molecular Insight has a number of agreements with owners of intellectual property which we use or believe may be useful in research and development of product candidates, including:

A 2012 co-exclusive license agreement with the University of Zurich and the Paul Scherrer Institute for worldwide sublicensable rights to certain intellectual property related to production methodologies relevant to 1404. Under this agreement, we maintain related patent rights and are obligated to pay low single-digit royalties on products using the licensed technology, license maintenance fees creditable against royalties, an annual fee for an option to expand the license's field of use, and clinical and regulatory milestone payments aggregating approximately \$1.2 million. The agreement may be terminated by the licensors upon certain material defaults by, and automatically terminates upon certain bankruptcy events relating to Molecular Insight, and may be terminated by us on prior written notice.

·A 2000 exclusive license agreement with The University of Western Ontario for worldwide sublicensable rights to certain intellectual property related to production methodologies relevant to Azedra. Under this agreement, we

maintain related patent rights and are obligated to pay low single-digit royalties on products using the licensed technology, minimum annual royalties creditable against royalties and clinical and regulatory milestone payments aggregating approximately \$0.2 million. The agreement, which either party may terminate upon certain bankruptcy events or material defaults, continues through the last to expire of the related patent rights.

A 2006 agreement with Novartis Pharma AG for exclusive rights to certain technology relating to OnaltaTM, a compound which has been outlicensed to third parties which are obligated to make milestone payments and royalties consistent with Molecular's obligations under this agreement, including royalties and milestone payments, partially creditable against future royalties, totaling \$4.6 million upon the attainment of certain regulatory approvals. Either party may terminate this agreement immediately upon the occurrence of bankruptcy proceedings relating to or in the event of an uncured material breach by the other party, and Novartis may terminate in the event Molecular Insight is acquired by a direct competitor of Novartis.

6

<u>Table of Contents</u> Relistor

Under our License Agreement, Salix Pharmaceuticals is responsible for further developing and commercializing subcutaneous Relistor worldwide other than Japan, including completing clinical development necessary to support regulatory marketing approvals for potential new indications and formulations, and marketing and selling the product. Salix is marketing Relistor directly through its specialty sales force in the U.S., and outside the U.S., directly through distribution and marketing partners and sublicensing regional companies. Salix is paying us royalties ranging from 15 to 19 percent on its net sales of Relistor as well as 60% of any upfront, milestone, reimbursement or other revenue (net of costs of goods sold and territory-specific research and development expense reimbursement) it receives from sublicensees in respect of any country outside the U.S. We are also eligible to receive (i) a development milestone of up to \$40 million upon U.S. marketing approval for subcutaneous Relistor in chronic, non-cancer pain patients (the proposed indication addressed in the Complete Response Letter referred to above), (ii) a development milestone of up to \$50 million upon U.S. marketing approval of an oral formulation of Relistor, and (iii) up to \$200 million of commercialization milestone payments upon achievement of specified U.S. sales targets. In the event that either marketing approval is subject to a Black Box Warning or Risk Evaluation and Mitigation Strategy (REMS), payment of a substantial portion of specified milestone amounts would be deferred, and subject, to achievement of the first commercialization milestone payable upon annual U.S. sales first exceeding \$100 million. See Risk Factors.

We have licensed to Ono Pharmaceutical the rights to subcutaneous Relistor in Japan. We are entitled to receive up to \$20 million upon achievement of development milestones as well as royalties and commercialization milestones. Ono has the option to acquire the rights to develop and commercialize other formulations of Relistor in Japan, on terms to be negotiated separately. The license permits termination by either party upon the occurrence of certain events. Progenics in October 2013 commenced an arbitration with Ono, following a communication from Ono that it has determined to discontinue development because of "commercial concerns" that Ono contends would permit it to cease development and terminate the License. Ono's discontinuation of development and/or protracted dispute resolution proceedings could result in reduced or delayed, or in the elimination of, milestone and/or royalty revenue from subcutaneous Relistor development in Japan. Under our License Agreement with Salix, in the event the Ono license terminates or rights thereunder otherwise revert to Progenics, the Salix Agreement automatically without payment by Salix extends to the license grants, territory and other rights provided in the Ono license, as a result of which Salix and not Progenics would receive such rights.

Among the rights we have licensed to Salix are our exclusive rights to develop and commercialize methylnaltrexone, the active ingredient of Relistor, which we in-licensed from the University of Chicago. Our agreement with Chicago provides for an exclusive license to intellectual property in exchange for development and potential commercialization obligations, low single-digit royalties on commercial sales of resulting products and single-digit percentages of milestone and sublicensing revenues, and shared patent policing responsibilities. The Chicago agreement, as amended in connection with our Relistor collaborations, including substantially all of Progenics' payment obligations thereunder, expires by its terms upon the expiration of the last to expire of the patents licensed thereunder, the last-to-expire of which expires in 2017.

Patents and Proprietary Technology

Protection of our intellectual property rights is important to our business. We seek U.S. patent protection for many of our inventions, and generally file patent applications in Canada, Japan, European countries that are party to the European Patent Convention and other countries on a selective basis in order to protect inventions we consider to be important to the development of business in those areas. Generally, patents issued in the U.S. are effective for either (i) 20 years from the earliest asserted filing date, if the application was filed on or after June 8, 1995, or (ii) the longer of 17 years from the date of issue or 20 years from the earliest asserted filing date, if the application was filed prior to that date.

In certain instances, the U.S. patent term can be extended up to a maximum of five years to recapture a portion of the term during which FDA regulatory review was being conducted. The duration of foreign patents varies in accordance with the provisions of applicable local law, although most countries provide for patent terms of 20 years from the earliest asserted filing date and allow patent extensions similar to those permitted in the U.S.

Patents may not enable us to preclude competitors from commercializing drugs in direct competition with our products, and consequently may not provide us with any meaningful competitive advantage. See Risk Factors. We also rely on trade secrets, proprietary know-how and continuing technological innovation to develop and maintain a competitive position in our product areas. We require our employees, consultants and corporate partners who have access to our proprietary information to sign confidentiality agreements.

7

Table of Contents

Information with respect to our current patent portfolio is set forth below.

Clinical and Research	Num Pate	nber of nts	Expiration	Number of Patent Applications	
Candidates; Relistor	U.S.	International	Dates (1)	U.S.	International
Development program	s 21	76	2015-2031	15	49
Relistor	19	112	2015-2031	23	218
Other	1	1	2029	4	19

(1) Patent term extensions and pending patent applications may extend periods of patent protection.

With respect to PSMA ADC, currently issued composition-of-matter patents comprising co-owned and in-licensed properties have expiration ranges of 2022 to 2023 in the U.S. and 2022 to 2026 ex-U.S. Corresponding patent applications as well as patent applications directed to methods of use (except for the U.S. patent expiring in 2023) are pending worldwide, which if issued would have expiration ranges from 2022 to 2029. We view all of these patents as significant.

Owned and in-licensed properties relating to 1404 have expiration ranges of 2020 to 2029; we view as most significant the composition-of-matter patent on the compound, as well as technetium-99 labeled forms, which expires in 2029. Owned properties relating to MIP-1095 have expiration ranges of 2027 to 2031; we view as most significant the composition-of-matter patent on this compound, as well as radiolabeled forms, which expires in 2027. Additional U.S. patents are directed to various inventions relating to these product candidates, and corresponding patent applications are pending worldwide.

With regard to our Relistor-related intellectual property, the composition-of-matter patent for the active ingredient of Relistor, methylnaltrexone, was invented in the 1970's and has expired. The University of Chicago, as well as Progenics and its collaborators, have extended the methylnaltrexone patent estate with additional patents and pending patent applications covering various inventions relating to the product. Salix has listed in the FDA Orange Book four U.S. patents relating to subcutaneous Relistor, which have expiration dates ranging from 2017 to 2030, and one patent (expiring in 2024) with Health Canada. A patent issued in September 2013 provides protection for the oral methylnaltrexone product until 2031.

We are aware of intellectual property rights held by third parties that relate to products or technologies we are developing. For example, we are aware of others investigating and developing technologies and drug candidates directed toward PSMA or related compounds as well as methylnaltrexone and other peripheral opioid antagonists, and of patents and applications held or filed by others in those areas. The validity of issued patents, patentability of claimed inventions in pending applications and applicability of any of them to our programs are uncertain and subject to change, and patent rights asserted against us could adversely affect our ability to commercialize or collaborate with others on specific products.

Research, development and commercialization of a biopharmaceutical product often require choosing between alternative development and optimization routes at various stages in the development process. Preferred routes depend upon current -- and may be affected by subsequent -- discoveries and test results and cannot be identified with certainty at the outset. There are numerous third-party patents in fields in which we work, and we may need to obtain license under patents of others in order to pursue a preferred development route of one or more of our product candidates. The need to obtain a license would decrease the ultimate value and profitability of an affected product. If

we cannot negotiate such a license, we might have to pursue a less desirable development route or terminate the entire program altogether.

Government Regulation

Progenics and its product candidates are subject to comprehensive regulation by the U.S. FDA and comparable authorities in other countries. Pharmaceutical regulation currently is a topic of substantial interest in lawmaking and regulatory bodies in the U.S. and internationally, and numerous proposals exist for changes in FDA and non-U.S. regulation of pre-clinical and clinical testing, approval, safety, effectiveness, manufacturing, storage, recordkeeping, labeling, marketing, export, advertising, promotion and other aspects of biologics, small molecule drugs and medical devices, many of which, if adopted, could significantly alter our business and the current regulatory structure described below. See Risk Factors.

FDA Regulation. FDA approval, which involves review of scientific, clinical and commercial data, manufacturing processes and facilities, is required before a product candidate may be marketed in the U.S. This process is costly, time consuming and subject to unanticipated delays, and a drug candidate may fail to progress at any point.

Table of Contents

None of our product candidates other than Relistor has received marketing approval from the FDA or any other regulatory authority. The process required by the FDA before product candidates may be approved for marketing in the U.S. generally involves:

- ·pre-clinical laboratory and animal tests;
- submission to and favorable review by the FDA of an investigational new drug application before clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its intended indication (animal and other nonclinical studies also are typically conducted during each phase of human clinical trials);
- ·submission to the FDA of a marketing application; and
- FDA review of the marketing application in order to determine, among other things, whether the product is safe and effective for its intended uses.

Pre-clinical tests include laboratory evaluation of product chemistry and animal studies to gain preliminary information about a compound's pharmacology and toxicology and to identify safety problems that would preclude testing in humans. Since product candidates must generally be manufactured according to current Good Manufacturing Practices (cGMP), pre-clinical safety tests must be conducted by laboratories that comply with FDA good laboratory practices regulations. Pre-clinical testing is preceded by initial research related to specific molecular targets, synthesis of new chemical entities, assay development and screening for identification and optimization of lead compound(s).

Results of pre-clinical tests are submitted to the FDA as part of an Investigational New Drug application (IND) which must become effective before clinical trials may commence. The IND submission must include, among other things, a description of the sponsor's investigational plan; protocols for each planned study; chemistry, manufacturing and control information; pharmacology and toxicology information and a summary of previous human experience with the investigational drug. Unless the FDA objects to, makes comments or raises questions concerning an IND, it becomes effective 30 days following submission, and initial clinical studies may begin. Companies often obtain affirmative FDA approval, however, before beginning such studies.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or to individuals under the supervision of a qualified principal investigator. Clinical trials must be conducted in accordance with the FDA's Good Clinical Practice requirements under protocols submitted to the FDA that detail, among other things, the objectives of the study, parameters used to monitor safety and effectiveness criteria to be evaluated. Each clinical study must be conducted under the auspices of an Institutional Review Board, which considers, among other things, ethical factors, safety of human subjects, possible liability of the institution and informed consent disclosure which must be made to participants in the trial.

Clinical trials are typically conducted in three sequential phases, which may overlap. During phase 1, when the drug is initially administered to human subjects, the product is tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. Phase 2 involves studies in a limited population to evaluate preliminarily the efficacy of the product for specific, targeted indications, determine dosage tolerance and optimal dosage and identify possible adverse effects and safety risks.

When a product candidate is found in phase 2 evaluation to have an effect and an acceptable safety profile, phase 3 trials are undertaken in order to further evaluate clinical efficacy and test for safety within an expanded population. Safety studies are conducted in accordance with the FDA's International Conference on Harmonization (ICH) Guidelines. Phase 2 results do not guarantee a similar outcome in phase 3 trials. The FDA may suspend clinical trials at any point in this process if it concludes that clinical subjects are being exposed to an unacceptable health risk.

A New Drug Application, or NDA, is an application to the FDA to market a new drug. A Biologic License Application, or BLA, is an application to market a biological product. The new drug or biological product may not be marketed in the U.S. until the FDA has approved the NDA or issued a biologic license. The NDA must contain, among other things, information on chemistry, manufacturing and controls; non-clinical pharmacology and toxicology; human pharmacokinetics and bioavailability; and clinical data. The BLA must contain, among other things, data derived from nonclinical laboratory and clinical studies which demonstrate that the product meets prescribed standards of safety, purity and potency, and a full description of manufacturing methods. Supplemental NDAs (sNDAs) are submitted to obtain regulatory approval for additional indications for a previously approved drug, and are reviewed by the FDA in a similar manner.

The results of the pre-clinical studies and clinical studies, the chemistry and manufacturing data, and the proposed labeling, among other things, are submitted to the FDA in the form of an NDA or BLA. The FDA may refuse to accept the application for filing if certain administrative and content criteria are not satisfied, and even after accepting the application for review, the FDA may require additional testing or information before approval of the application, in either case based upon changes in applicable law or FDA policy during the period of product development and FDA regulatory review. The applicant's analysis of the results of clinical studies is subject to review and interpretation by the FDA, which may differ from the applicant's analysis, and in any event, the FDA must deny an NDA or BLA if applicable regulatory requirements are not ultimately satisfied. If regulatory approval of a product is granted, such approval may be made subject to various conditions, including post-marketing testing and surveillance to monitor the safety of the product, or may entail limitations on the indicated uses for which it may be marketed. Product approvals may also be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing.

Table of Contents

Underlying this process are FDA regulations relating to drug approval which are complex and multi-faceted. Two such policies which may apply to some of our current or future product candidates are "Fast Track" approval for new drugs or biologics intended for the treatment of serious or life-threatening conditions which demonstrate the potential to address unmet medical needs, and Orphan Drug designation, available under U.S., E.U. and other laws, for drug candidates intended to treat rare diseases or conditions, and which if approved are granted a period of market exclusivity, subject to various conditions. Orphan Drug designation does not shorten or otherwise convey any advantage in the regulatory approval process.

Both before and after approval is obtained, a product, its manufacturer and the sponsor of the marketing application for the product are subject to comprehensive regulatory oversight. Violations of existing or newly-adopted regulatory requirements at any stage, including the pre-clinical and clinical testing process, the approval process, or thereafter, may result in various adverse consequences, including FDA delay in approving or refusal to approve a product, withdrawal of an approved product from the market or the imposition of criminal penalties against the manufacturer or sponsor. Later discovery of previously unknown problems may result in restrictions on the product, manufacturer or sponsor, including withdrawal of the product from the market.

Regulation Outside the U.S. Whether or not FDA approval has been obtained, approval of a pharmaceutical product by comparable government regulatory authorities abroad must be obtained prior to marketing the product there. The approval procedure varies from country to country, and the time required may be longer or shorter than that required for FDA approval. The requirements for regulatory approval by governmental agencies in other countries prior to commercialization of products there can be rigorous, costly and uncertain, and approvals may not be granted on a timely basis or at all.

In E.U. countries, Canada, Australia and Japan, regulatory requirements and approval processes are similar in principle to those in the U.S. Regulatory approval in Japan requires that clinical trials of new drugs be conducted in Japanese patients. Depending on the type of drug for which approval is sought, there are currently two potential tracks for marketing approval in the E.U. countries: mutual recognition and the centralized procedure. These review mechanisms may ultimately lead to approval in all E.U. countries, but each method grants all participating countries some decision-making authority in product approval. The centralized procedure, which is mandatory for biotechnology derived products, results in a recommendation in all member states, while the E.U. mutual recognition process involves country-by-country approval.

In other countries, regulatory requirements may require additional pre-clinical or clinical testing regardless of whether FDA or European approval has been obtained. This is the case in Japan, where trials are required to involve patient populations which we and our other collaborators have not examined in detail. If a product is manufactured in the U.S., it is also subject to FDA and other U.S. export provisions. In most countries outside the U.S., coverage, pricing and reimbursement approvals are also required, which may affect the profitability of the affected product.

Other Regulation. In addition to regulations enforced by the FDA, we are also subject to regulation under the U.S. Occupational Safety and Health Act, Environmental Protection Act, Toxic Substances Control Act, Resource Conservation and Recovery Act and various other current and potential future U.S. federal, state or local regulations. In addition, Molecular Insight's research is dependent on maintenance of licenses from various authorities permitting the acquisition, use and storage of quantities of radioactive isotopes that are critical for its manufacture and testing of research products. Biopharmaceutical research and development generally involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Even strict compliance with safety procedures for storing, handling, using and disposing of such materials prescribed by applicable regulations cannot completely eliminate the risk of accidental contaminations or injury from these materials, which may result in liability for resulting legal and regulatory violations as well as damages.

Manufacturing

Under our License Agreement, Salix is responsible for the manufacture and supply, at its expense, of all active pharmaceutical ingredient (API) and finished and packaged products for its Relistor commercialization efforts, including contracting with contract manufacturing organizations (CMOs) for supply of Relistor API and subcutaneous and oral finished drug product. We expect to engage third-party CMOs to manufacture additional clinical trial supplies of our PSMA monoclonal antibody and to continue using CMOs for other portions of the PSMA ADC manufacturing process. We have engaged and are finalizing definitive manufacturing arrangements with third-party CMOs for clinical trial supplies of Azedra and 1404, and may in the future undertake such efforts with respect to other assets and programs. If we are unable to arrange for satisfactory CMO services, we would need to undertake such responsibilities on our own. See Risk Factors.

10

<u>Table of Contents</u>
Sales and Marketing

We from time to time seek strategic collaborations and other funding support for product candidates in our pipeline. We expect that we would market other products for which we obtain regulatory approval through co-marketing, co-promotion, licensing and distribution arrangements with third-party collaborators, and might also consider contracting with professional detailing and sales organizations to perform promotional and/or medical-scientific support functions for them. See Risk Factors.

Competition

Competition in the biopharmaceutical industry is intense and characterized by ongoing research and development and technological change. We face competition from many for-profit companies and major universities and research institutions in the U.S. and abroad. We face competition from companies marketing existing products or developing new products for diseases targeted by our technologies. Many of our competitors have substantially greater resources, experience in conducting pre-clinical studies and clinical trials and obtaining regulatory approvals for their products, operating experience, research and development and marketing capabilities and production capabilities than we do. Our products and product candidates under development may not compete successfully with existing products or products under development by other companies, universities and other institutions. Drug manufacturers that are first in the market with a therapeutic for a specific indication generally obtain and maintain a significant competitive advantage over later entrants and therefore, the speed with which industry participants move to develop products, complete clinical trials, approve processes and commercialize products is an important competitive factor.

Relistor is the first FDA-approved product for any indication involving OIC. We are, however, aware of approved and marketed products, as well as candidates in pre-clinical or clinical development, that target the side effects of opioid pain therapy. Cubist Pharmaceuticals, which acquired Adolor Corporation in 2011, markets ENTEREG® (alvimopan) for the treatment of postoperative ileus, and is in phase 3 testing of a compound for OIC in chronic-pain patients. Sucampo Pharmaceuticals, Inc., in collaboration with Takeda Pharmaceutical Company Limited, markets AMITIZA® (lubiprostone), a selective chloride channel activator, for chronic idiopathic (non-opioid related) constipation, and in April 2013 received FDA approval of this drug for opioid-induced constipation. The FDA has also recently accepted for review, with a PDUFA date of September 14, 2014, an NDA for Naloxegol, an oral peripheral mu-opioid receptor antagonist for patients with OIC being developed by a Nektar Therapeutics-AstraZeneca PLC collaboration, which also has a related combination product in early stage development. Shionogi & Co. is developing Naldemedine, another mu-opioid receptor antagonist, for patients with OIC. Theravance, Inc. has completed phase 2 clinical testing of an oral peripheral mu-opioid antagonist. In Europe, Mundipharma International Limited markets TARGIN® (oxycodone/naloxone), a combination of an opioid and a systemic opioid antagonist. Other prescription as well as over-the-counter (OTC) constipation products are also prescribed first line for OIC.

As to our oncology pipeline, radiation and surgery are two traditional forms of treatment for prostate cancer. If the disease spreads, hormone (androgen) suppression therapy is often used to slow the cancer's progression, but this form of treatment can eventually become ineffective. We are aware of several competitors who are developing or have received approval for alternative treatments for castration-resistant prostate cancer, some of which are directed against PSMA, including Johnson & Johnson subsidiary Janssen Biotech, Inc.'s Zytiga® (abiraterone acetate), approved in 2011 for use in combination with prednisone as a second-line (after treatment with docetaxel) advanced prostate cancer treatment, and later for use with prednisone for metastatic castration-resistant disease before the use of chemotherapy; Medivation, Inc.'s Xtandi® (enzalutamide), approved in August 2012 for patients with metastatic castration-resistant prostate cancer previously treated with docetaxel; and Algeta ASA's Alpharadin® (radium-223 dichloride) (marketed as Xofigo®), submitted in late 2012 for marketing authorization for therapy of bone metastases in prostate cancer patients. A competitive product to 1404 is Jazz Pharmaceuticals' ProstaScint®, which is approved for detection of metastatic prostate cancer or relapsed or high-risk prostate cancer patients.

A significant amount of research in the biopharmaceutical field is carried out at academic and government institutions. An element of our research and development strategy has been to in-license technology and product candidates from academic and government institutions. These institutions are sensitive to the commercial value of their findings and pursue patent protection and negotiate licensing arrangements to collect royalties for use of technology they develop. They may also market competitive commercial products on their own or in collaboration with competitors and compete with us in recruiting highly qualified scientific personnel, which may result in increased costs or decreased availability of technology or product candidates from these institutions to other industry participants.

Competition with respect to our technologies and products is based on, among other things, product efficacy, safety, reliability, method of administration, availability, price and clinical benefit relative to cost; timing and scope of regulatory approval; sales, marketing and manufacturing capabilities; collaborator capabilities; insurance and other reimbursement coverage; and patent protection. Competitive position in our industry also depends on a participant's ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources for the typically substantial period between technological conception and commercial sales.

11

Table of Contents

Product Liability

The testing, manufacturing and marketing of our product candidates and products involves an inherent risk of product liability attributable to unwanted and potentially serious health effects. To the extent we elect to test, manufacture or market product candidates and products independently, we bear the risk of product liability directly. We maintain product liability insurance coverage in the amount of \$10.0 million per occurrence, subject to a deductible and a \$10.0 million aggregate limitation. Where local statutory requirements exceed the limits of our existing insurance or local policies of insurance are required, we maintain additional clinical trial liability insurance to meet these requirements. This insurance is subject to deductibles and coverage limitations. The availability and cost of maintaining insurance may change over time.

Human Resources

At December 31, 2013, we had 69 full-time employees, 12 of whom hold Ph.D. degrees and two of whom hold M.D. degrees. At that date, 49 employees were engaged in research and development, medical, regulatory affairs and manufacturing related activities and 20 were engaged in finance, legal, administration and business development. We consider our relations with our employees to be good. None of our employees is covered by a collective bargaining agreement.

Item 1A. Risk Factors

The future of our business and operations depends on the success of our Relistor collaborations and our oncology research and development programs.

Our business and operations entail a variety of serious risks and uncertainties and are inherently risky. The research and development programs on which we focus involve novel approaches to human therapeutics. Our principal product candidates are in clinical development, and in some respects involve technologies with which we have limited prior experience. We are subject to the risks of failure inherent in the development of product candidates based on new technologies. There is little precedent for the successful commercialization of products based on our technologies, and there are a number of technological challenges that we must overcome to complete most of our development efforts. We may not be able successfully to develop further any of our product candidates. We and our Relistor and other collaborators must successfully complete clinical trials and obtain regulatory approvals for potential commercial products. Once approved, if at all, commercial product sales are subject to general and industry-specific local and international economic, regulatory, technological and policy developments and trends. The oncology space in which we operate presents numerous significant risks and uncertainties that may be expected to increase to the extent it becomes more competitive or less favored in the commercial healthcare marketplace.

The long-term success of our acquisition of Molecular Insight will be subject to all of the risks and uncertainties described in these risk factors. In addition, the estimated fair values of Molecular Insight assets and liabilities reflected in our financial statements do not, given their uniqueness and attendant uncertainties, reflect actual transactions or quoted prices and may not correlate to any future values or results. Such information should not be interpreted or relied upon as indicative of any future value or results. Our failure to manage successfully any of our product candidates, technologies or programs could have an adverse impact on our business, and on the price of our stock.

We are dependent on Salix, Ono and other business partners to develop and commercialize Relistor, exposing us to significant risks.

We rely on Salix to complete development and obtain regulatory approvals for additional formulations of and indications for Relistor and, in the Japanese market, we rely on Ono to conduct clinical trials and obtain regulatory

approvals. We are and will be dependent upon Salix, Ono and any other business partners with which we may collaborate in the future to perform and fund development, including clinical testing of Relistor, make related regulatory filings and manufacture and market products, including for new indications and in new formulations, in their respective territories. Revenue from the sale of Relistor depends entirely upon the efforts of Salix and its sublicensees, which have significant discretion in determining the efforts and resources they apply to sales of Relistor. One will have similar discretion with respect to sales in Japan. Neither may be effective in obtaining approvals for new indications or formulations, marketing existing or future products or arranging for necessary sublicense or distribution relationships. Our business relationships with Salix, Ono and other partners may not be scientifically, clinically or commercially successful. For example, Salix has a variety of marketed products. Salix is not, however, a large diversified pharmaceutical company and does not have resources commensurate with such companies. Salix has its own corporate objectives, which may not be consistent with our best interests, and may change its strategic focus or pursue alternative technologies in a manner that results in reduced or delayed revenue to us. Changes of this nature might also occur if Salix were acquired or if its management changed. We may have future disagreements with Salix or Ono, both of which have significantly greater financial and managerial resources which either could draw upon in the event of a dispute. Such disagreements could lead to lengthy and expensive litigation or other dispute-resolution proceedings as well as extensive financial and operational consequences to us and have a material adverse effect on our business, results of operations and financial condition. In addition, independent actions may be taken by Salix and/or Ono concerning product development, marketing strategies, manufacturing and supply issues, and rights relating to intellectual property, including, as discussed below, Relistor's path forward in light of the July 2012 Complete Response Letter from the FDA. 12

Table of Contents

As noted elsewhere in this document, Progenics in October 2013 commenced an arbitration with Ono under the provisions of the parties' License Agreement for development and commercialization of subcutaneous Relistor in Japan, following a communication from Ono that it has determined to discontinue development because of "commercial concerns" that Ono contends would permit it to cease development and terminate the Agreement. Ono's discontinuation of development and/or protracted dispute resolution proceedings could result in reduced or delayed, or in the elimination of, milestone and/or royalty revenue from subcutaneous Relistor development in Japan. Under our License Agreement with Salix, in the event our Agreement with Ono terminates or rights thereunder otherwise revert to Progenics, the Salix Agreement automatically without payment by Salix extends to the license grants, territory and other rights provided in the Ono Agreement, as a result of which Salix and not Progenics would receive such rights.

As a result of the FDA's Complete Response Letter on Relistor for chronic pain, the Relistor program may be discontinued or otherwise at risk.

As previously announced, and noted elsewhere in this document, the FDA in July 2012 issued a Complete Response Letter in response to Salix's supplemental New Drug Application for Relistor for the treatment of OIC in adult patients with chronic, non-cancer pain. This development may result in Salix and/or Ono taking independent actions concerning product development, marketing strategies or other matters for Relistor, including termination of their efforts to develop and commercialize the drug. At an End-of-Review meeting in October 2012, the FDA's Division of Gastroenterology and Inborn Errors Products has expressed a concern that there may be a risk associated with the chronic use of mu-opioid receptor antagonists in patients who are taking opioids for chronic pain, and, in order to understand this potential risk, the Division communicated that a very large, well-controlled, chronic administration trial will have to be conducted to assess the safety of any mu-opioid receptor antagonist prior to market approval for the treatment of patients with OIC who are taking opioids for chronic, non-cancer pain. In addition, the FDA informed Salix and Progenics in June 2013 that it will seek input from an Advisory Committee, which is now expected to convene in the near future, and at that time expressed our belief that some of the areas being considered for discussion during the meeting would include the potential for drugs in Relistor's class to cause withdrawal symptoms; the strength of a potential cardiovascular signal seen with another drug in this class of drugs and the available safety data with Relistor in regards to a potential cardiovascular signal; and the need and timing (pre-approval vs. post-approval) of major adverse cardiac events (MACE) studies with drugs of this class.

Salix has disclosed in regulatory filings that it might terminate its development program for Relistor subcutaneous injection for treatment of OIC in chronic non-cancer pain patients, and that additional information and additional guidance from the FDA could result in the termination of its oral OIC Relistor development program. As noted in our risk factor on regulatory approvals below, if clinical trials indicate, or regulatory bodies are concerned about, actual or possible serious problems with the safety or efficacy of a product candidate, such as the concerns expressed in the FDA's CRL and as described above, we or our collaborators may stop or significantly slow development or commercialization of affected products. As a result of such concerns, the development programs for subcutaneous and/or oral Relistor for chronic, non-cancer pain patients may be significantly delayed or terminated altogether. In such an event, we could be faced with either further developing and commercializing the drug on our own or with one or more substitute collaborators, either of which paths would subject us to the development, commercialization, collaboration and/or financing risks discussed in these risk factors. Any such significant action adverse to development and commercialization of Relistor could have a material adverse impact on our business, and on the price of our stock.

We are subject to extensive regulation, which can be costly and time consuming, may not lead to marketing approval for our product candidates, and can subject us to unanticipated limitations, restrictions, delays and fines.

Our business, products and product candidates are subject to comprehensive regulation by the FDA and comparable authorities in other countries. These agencies and other entities regulate the pre-clinical and clinical testing, safety,

effectiveness, approval, manufacture, labeling, marketing, export, storage, recordkeeping, advertising, promotion and other aspects of our products and product candidates. We cannot guarantee that approvals of product candidates, processes or facilities will be granted on a timely basis, or at all. If we experience delays or failures in obtaining approvals, commercialization of our product candidates will be slowed or stopped.

For example, as described in Business – Clinical Trial Activities, in clinical studies of one of our principal product candidates, PSMA ADC, investigators have reported serious adverse events (SAEs), including three deaths, in a small proportion of patients treated with the drug. Based on data currently available to us, the Company is continuing development of PSMA ADC and has not determined what effects, if any, treatment-related SAEs reported to date or that may be reported in the future may have on the development of PSMA ADC going forward. If, however, we, together with or independently of investigators participating in our clinical trials, or regulators evaluating PSMA ADC were to determine that this candidate cannot safely be administered to patients with sufficient therapeutic effect, we may determine to attempt to reformulate or otherwise change the candidate and/or its administration to alleviate such concerns, which could result in costs and delays that could impair the value of the candidate. If such costs and delays were sufficiently large, we could determine to abandon the PSMA ADC program. Concerns about the safety and/or efficacy of PSMA ADC could also make it more difficult or impossible for us to enter into licensing, collaboration or other arrangements with third parties for further development and commercialization of PSMA ADC. Any of these possibilities could have material adverse effects on Progenics' business, its financial condition, and/or the price of our stock.

Table of Contents

Even if we obtain regulatory approval for a product candidate, the approval may include significant limitations on indicated uses for which the product could be marketed or other significant marketing restrictions, such as a Risk Evaluation and Mitigation Strategy (REMS). For example, Relistor is only approved for OIC in patients with advanced illness and not for chronic, non-cancer pain, and our product candidates, if approved at all, may be subject to those or other such limitations and restrictions.

If we or our collaborators violate regulatory requirements at any stage, whether before or after marketing approval is obtained, we or they may be subject to forced removal of a product from the market, product seizure, civil and criminal penalties and other adverse consequences. Under our license agreement with Salix, we are dependent on Salix for compliance with these regulatory requirements as they apply to Relistor. Salix has disclosed that in February 2013 it received a subpoena from the U.S. Attorney's Office for the Southern District of New York requesting documents regarding its sales and promotional practices for Relistor and certain of its other products, that it is in the process of responding to the subpoena and intends to cooperate fully with the subpoena and related government investigation, which has and will continue to increase its legal expenses, and might require management time and attention, and that at the time of its disclosure it cannot predict or determine the timing or outcome of the inquiry or its impact on Salix's financial condition or results of operations.

Our products may face regulatory, legal or commercial challenges even after approval.

Even if a product receives regulatory approval:

It might not obtain labeling claims necessary to make the product commercially viable (in general, labeling claims define the medical conditions for which a drug product may be marketed, and are therefore very important to the commercial success of a product), or may be required to carry Boxed or other warnings that adversely affect its commercial success.

Approval may be limited to uses of the product for treatment or prevention of diseases or conditions that are relatively less financially advantageous to us than approval of greater or different scope or subject to an FDA-imposed REMS that imposes limits on the distribution or use of the product.

Side effects (including different or aggravated effects such as SAEs encountered in our PSMA ADC program) identified after the product is on the market might hurt sales or result in mandatory safety labeling changes, additional pre-clinical testing or clinical trials, imposition of a REMS, product recalls or withdrawals from the market.

Efficacy or safety concerns (including those arising from SAEs heretofore or hereafter encountered in our PSMA ADC program) regarding a marketed product, or manufacturing or other problems, may lead to a recall, withdrawal of marketing approval, reformulation of the product, additional pre-clinical testing or clinical trials, changes in labeling, imposition of a REMS, the need for additional marketing applications, declining sales or other adverse events. These potential consequences may occur whether or not the concerns originate from subsequent testing or other activities by us, governmental regulators, other entities or organizations or otherwise, and whether or not they are scientifically justified. If products lose previously received marketing and other approvals, our business, results of operations and financial condition would be materially adversely affected.

We or our collaborators will be subject to ongoing FDA obligations and continuous regulatory review, and might be required to undertake post-marketing trials to verify the product's efficacy or safety or other regulatory obligations.

Competing products in development may adversely affect acceptance of our products.

We are aware of a number of products and product candidates described in this Annual Report under Business – Competition which compete or may potentially compete with Relistor. Any of these approved products or product candidates, or others which may be developed in the future may achieve a significant competitive advantage relative to Relistor, and, in any event, the existing or future marketing and sales capabilities of these competitors may impair Salix's and/or Ono's ability to compete effectively in the market.

Table of Contents

We are also aware of competitors, including those described under Business – Competition, which are developing alternative treatments for disease targets to which our research and development programs are directed, any of which – or others which may be developed in the future – may achieve a significant competitive advantage relative to any product we may develop.

Developing product candidates will require us to obtain additional financing. Our access to capital funding is uncertain.

We expect to continue to incur significant development expenditures for our product candidates. We do not have committed external sources of funding for most of these projects. Our expenditures will be funded from cash on hand, or we may seek additional external funding for them, most likely through collaborative, license or royalty financing agreements with one or more pharmaceutical or other companies and equity securities issuances in public offerings, private placements or through our January 2014 Sales Agreement with Cantor Fitzgerald & Co., pursuant to which we may sell from time to time up to \$50 million of our stock. We may also seek capital through debt financings or government grants or contracts. To the extent we raise additional capital by issuing equity securities in the future, existing stockholders could experience substantial dilution in addition to the dilution experienced as a result of our recent equity offerings and the Molecular Insight acquisition, and new investors could have rights superior to existing stockholders, if securities other than common stock were to be issued. Any debt financing that we are able to obtain may involve operating covenants that restrict our business and significant repayment obligations. To the extent that we raise additional funds through any new collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

We cannot predict when we will need additional funds, how much we will need, the form any financing may take or whether additional funds will be available at all, especially in light of current conditions in global credit and financial markets. Our need for future funding will depend on numerous factors, such as the availability of new product development projects; the achievement of events identified in our collaboration agreements that trigger payments to us from our collaboration partners, most of which are out of our control and rely entirely on the efforts of our partners; the progress and success of clinical trials and pre-clinical activities (including studies and manufacture of materials) of our product candidates conducted by our collaborators or us; the progress of research programs carried out by us; any changes in the breadth of our research and development programs; the progress of the research and development efforts of our collaborators; our ability to acquire or license other technologies or compounds that we seek to pursue; competing technological and market developments; the costs and timing of obtaining, enforcing and defending our patent and intellectual property rights; the costs and timing of regulatory approvals and filings by us and our collaborators; our ability to manage our growth; and any unforeseen litigation. These factors may be more important with respect to product candidates and programs that involve technologies with which we have limited prior experience, such as those originally developed by Molecular Insight. Insufficient funds may require us to delay, scale back or eliminate some or all of our research and development programs, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern. We may not be able at the necessary time to obtain additional funding on acceptable terms, or at all. Our inability to raise additional capital on terms reasonably acceptable to us would seriously jeopardize our business.

If we are unable to negotiate collaboration agreements, our cash burn rate could increase and our rate of product development could decrease.

Our ability to generate revenue in the near term depends on the timing of achievement, if any, of certain payment triggering events under our existing collaboration agreements and our ability to enter into additional collaboration agreements with third parties. We may not be successful in negotiating additional collaboration arrangements with pharmaceutical and biotechnology companies to develop and commercialize product candidates and technologies. If

we do not enter into new collaboration arrangements, we would have to devote more of our resources to clinical product development and product launch activities and to seeking additional sources of capital to fund those activities. If we were not successful in seeking such capital, our cash burn rate would increase or we would need to take steps to reduce our rate of product development. Our ability to enter into new collaborations may be dependent on many factors, such as the results of clinical trials, competitive factors and the fit of our programs with the risk tolerance of a potential collaborator, including in relation to regulatory issues, the patent portfolio, the clinical pipeline, the stage of the available data, overall corporate goals and financial position. If we are not able to generate revenue under our collaborations when and in accordance with our expectations or the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our common stock.

Table of Contents

Drug development is a long and inherently uncertain process with a high risk of failure at every stage of development.

Drug development is a highly uncertain scientific and medical endeavor, and failure can unexpectedly occur at any stage of clinical development. Typically, there is a high rate of attrition for product candidates in preclinical and clinical trials due to scientific feasibility, safety, efficacy, changing standards of medical care and other variables. The risk of failure increases for our product candidates that are based on new technologies, as well as technologies with which we have limited prior experience, such as those originally developed by Molecular Insight. Pre-clinical studies and clinical trials are long, expensive and highly uncertain processes that can take many years. It will take us, or our collaborators, several years to complete clinical trials and the time required for completing testing and obtaining approvals is uncertain. The start or end of a clinical trial is often delayed or halted due to changing regulatory requirements, manufacturing challenges, required clinical trial administrative actions, slower than anticipated patient enrollment, changing standards of care, availability or prevalence of use of a comparator drug or required prior therapy, clinical outcomes, or our and our partners' financial constraints. The FDA and other U.S. and foreign regulatory agencies have substantial discretion, at any phase of development, to terminate clinical trials, require additional clinical development or other testing, delay or withhold registration and marketing approval and mandate product withdrawals, including recalls. Results attained in early human clinical trials may not be indicative of results in later clinical trials. In addition, many of our investigational or experimental drugs are at an early stage of development, and successful commercialization of early stage product candidates requires significant research, development, testing and approvals by regulators, and additional investment. Our products in the research or pre-clinical development stage may not yield results that would permit or justify clinical testing. Our failure to demonstrate adequately the safety and efficacy of a product under development would delay or prevent marketing approval, which could adversely affect our operating results and credibility. The failure of one or more of our product candidates could have a material adverse effect on our business, financial condition and results of operations.

If we or our collaborators do not obtain regulatory approval for our product candidates on a timely basis, or at all, or if the terms of any approval impose significant restrictions or limitations on use, our business, results of operations and financial condition will be adversely affected. Setbacks in clinical development programs could have a material adverse effect on our business.

Regulatory approvals are necessary to market product candidates and require demonstration of a product's safety and efficacy through extensive pre-clinical and clinical trials. We or our collaborators may not obtain regulatory approval for product candidates on a timely basis, or at all, and the terms of any approval (which in some countries includes pricing approval) may impose significant restrictions, limitations on use or other commercially unattractive conditions. We, our collaborators or regulators may also amend, suspend or terminate clinical trials if we or they believe that the participating subjects are being exposed to unacceptable health risks, and after reviewing trial results, we or our collaborators may abandon projects which we previously believed to be promising for commercial or other reasons unrelated to patient risks. During this process, we may find, for example, that results of pre-clinical studies are inconclusive or not indicative of results in human clinical trials, clinical investigators or contract research organizations do not comply with protocols or applicable regulatory requirements, or that product candidates do not have the desired efficacy or have undesirable side effects or other characteristics that preclude marketing approval or limit their potential commercial use if approved. In such circumstances, the entire development program for that product candidate could be adversely affected, resulting in delays in trials or regulatory filings for further marketing approval and a possible need to reconfigure our clinical trial programs to conduct additional trials or abandon the program involved. Conducting additional clinical trials or making significant revisions to a clinical development plan would lead to delays in regulatory filings. If clinical trials indicate, or regulatory bodies are concerned about, actual or possible serious problems with the safety or efficacy of a product candidate, such as the concerns expressed in the FDA's July 2012 Complete Response Letter or during consideration of the oral Relistor development program, we or our collaborators may stop or significantly slow development or commercialization of affected products. As a result of such concerns, the development programs for subcutaneous and/or oral Relistor for chronic, non-cancer pain patients

may be significantly delayed or terminated altogether.

Even if we agree to a path forward with Salix and the FDA, if the results of any future Relistor trials are not satisfactory or we or our collaborators encounter problems enrolling subjects, clinical trial supply issues, setbacks in developing drug formulations, including raw material-supply, manufacturing, stability or other difficulties, or issues complying with protocols or applicable regulatory requirements, the entire development program for Relistor could be adversely affected in a material manner. Such scenarios could also befall our other clinical-stage product candidates. If any of our collaborators breach or terminate its agreement with us or otherwise fail to conduct successfully and in a timely manner the collaborative activities for which they are responsible, the preclinical or clinical development or commercialization of the affected product candidate or research program could be delayed or terminated. We generally do not control the amount and timing of resources that our collaborators devote to our programs or product candidates. We also do not know whether current or future collaboration partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases or conditions targeted by our collaborative arrangements. Setbacks of these types could have a material adverse effect on our business, results of operations and financial condition.

Table of Contents

We or our collaborators must design and conduct successful clinical trials for our product candidates to obtain regulatory approval. We rely on third parties for conduct of clinical trials, which reduces our control over them and may expose us to conflicts of interest. Clinical trial results may be unfavorable or inconclusive, and often take longer than expected.

We have limited experience in conducting clinical trials, and we rely on or obtain the assistance of others to design, conduct, supervise or monitor some or all aspects of some of our clinical trials, including our ongoing phase 2 trials of PSMA ADC and 1404. We have less control over the timing and other aspects of clinical trials for which we rely on third parties, such as CROs, clinical data management organizations, medical institutions or clinical investigators, than if we conducted them entirely on our own. These third parties may also have relationships with other entities, some of which may be our competitors. In all events, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. The FDA requires us to comply with good clinical practices for conducting and recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements.

To obtain regulatory approval of drug candidates, we must demonstrate through preclinical studies and clinical trials that they are safe and effective. Adverse or inconclusive clinical trial results concerning any of our drug candidates, or trials which regulators find deficient in scope, design or one or more other material respects, could require additional trials, resulting in increased costs, significant delays in submissions of approval applications, approvals in narrower indications than originally sought, or denials of approval, none of which we can predict. As a result, any projections that we publicly announce of commencement and duration of clinical trials are not certain. We have experienced clinical trial delays in the past as a result of slower than anticipated enrollment and such delays may recur. Delays can be caused by, among other things, deaths or other adverse medical events; regulatory or patent issues; interim or final results of ongoing clinical trials; failure to enroll clinical sites as expected; competition for enrollment from other clinical trials; scheduling conflicts with participating clinicians and institutions; disagreements, disputes or other matters arising from collaborations; our inability to obtain necessary funding; or manufacturing problems.

Under our license agreement, Salix generally has responsibility for conducting Relistor clinical trials, including all trials outside of the U.S. other than Japan, where Ono has that responsibility. In addition, certain clinical trials for our product candidates may be conducted by government-sponsored agencies, and consequently will be dependent on governmental participation and funding. These arrangements expose us to the same considerations we face when contracting with third parties for our own trials.

Our product candidates may not obtain regulatory approvals needed for marketing.

None of our product candidates, other than Relistor for the treatment of OIC in patients with advanced illnesses, has been approved by applicable regulatory authorities for marketing. The process of obtaining FDA and foreign regulatory approvals often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. We have had only limited experience in filing and pursuing applications and other submissions necessary to gain marketing approvals. Products under development may never obtain marketing approval from the FDA or other regulatory authorities necessary for commercialization.

Even if our product candidates obtain marketing approval, our ability to generate revenue will be diminished if our products are not accepted in the marketplace or our collaboration partners fail to obtain acceptable prices or an adequate level of reimbursement for products from third-party payors or government agencies.

The commercial success of our products will depend upon their acceptance by the medical community and third-party payors as clinically useful, cost effective and safe. Market acceptance of approved products, such as Relistor for patients with advanced illnesses, is affected by the timing of regulatory approvals, product launches and reimbursement programs for existing and expanded uses or generic, over-the-counter or other competitors; price increases for the product and relative prices of competing products; product development efforts for new indications; availability of sufficient commercial quantities of the product; success in arranging for necessary sublicense or distribution relationships; and general and industry-specific local and international economic pressures such as those experienced worldwide over the last five years. If health care providers believe that patients can be managed adequately with alternative, currently available therapies, they may not prescribe our products, especially if the alternative therapies are viewed as more effective, as having a better safety or tolerability profile, as being more convenient to the patient or health care providers or as being less expensive. Third-party insurance coverage may not be available to patients for any products we develop, alone or with collaborators. For pharmaceuticals administered in an institutional setting, the ability of the institution to be adequately reimbursed from government and health administration authorities, private health insurers and other third-party payors could also play a significant role in demand for our products. Significant uncertainty exists as to the reimbursement status of newly-approved pharmaceuticals. Government and other third-party payors increasingly are attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new drugs and by refusing, in some cases, to provide coverage for uses of approved products for indications for which the FDA has not granted labeling approval. In some foreign markets, pricing and profitability of prescription pharmaceuticals are subject to government control. In the U.S., we expect that there will continue to be a number of federal and state proposals to implement similar government control and that the emphasis on managed care in the U.S. will continue to put pressure on the pricing of pharmaceutical products. Cost control initiatives could decrease the price that our collaborators receive for any products in the future and adversely affect the ability of our collaborators to commercialize our products and our realization of royalties from commercialization. If any of our products do not achieve market acceptance, we will likely lose our entire investment in that product. 17

Table of Contents

Marketplace acceptance depends in part on competition in our industry, which is intense, and competing products in development may adversely affect acceptance of our products.

The extent to which any of our products achieves market acceptance will depend on competitive factors. Competition in the biopharmaceutical industry is intense and characterized by ongoing research and development and technological change. We face competition from many for-profit companies and major universities and research institutions in the U.S. and abroad. We face competition from companies marketing existing products or developing new products for diseases and conditions targeted by our technologies. We are aware of a number of products and product candidates, including those described in this Annual Report under Business – Competition, which compete or may potentially compete with Relistor, PSMA ADC or our other product candidates. For instance, there are product candidates in pre-clinical or clinical development that target the side effects of opioid pain therapy, and a marketed product for the treatment of post-operative ileus could compete with Relistor. We are aware of several competitors, including those described under Business – Competition, which have received approval for or are developing alternative treatments or diagnostics for castration-resistant prostate cancer, some of which are directed against PSMA. Any of these competing approved products or product candidates, or others which may be developed in the future, may achieve a significant competitive advantage relative to Relistor, PSMA ADC, 1404, Azedra, MIP-1095 or other product candidates.

Competition with respect to our technologies and products is based on, among other things, product efficacy, safety, reliability, method of administration, availability, price and clinical benefit relative to cost; timing and scope of regulatory approval; sales, marketing and manufacturing capabilities; collaborator capabilities; insurance and other reimbursement coverage; and patent protection. Competitive disadvantages in any of these factors could materially harm our business and financial condition. Many of our competitors have substantially greater research and development capabilities and experience and greater manufacturing, marketing, financial and managerial resources than we do. These competitors may develop products that are superior to those we are developing and render our products or technologies non-competitive or obsolete. Our products and product candidates under development may not compete successfully with existing products or product candidates under development by other companies, universities and other institutions. Drug manufacturers that are first in the market with a therapeutic for a specific indication generally obtain and maintain a significant competitive advantage over later entrants and therefore, the speed with which industry participants move to develop products, complete clinical trials, approve processes and commercialize products is an important competitive factor. If our product candidates receive marketing approval but cannot compete effectively in the marketplace, our operating results and financial position would suffer.

If we or our collaborators are unable to obtain sufficient quantities of the raw and bulk materials needed to make our product candidates or Relistor, development of our product candidates or commercialization of our approved product could be slowed or stopped.

Salix or Ono may not be able to fulfill manufacturing obligations for Relistor, a key raw material for which grows in Tasmania, either on their own or through third-party suppliers. A delay or disruption of supplies of Relistor would have a material adverse effect on the Relistor franchise, and therefore on our business as a whole. Our existing arrangements with suppliers for our other product candidates may not result in the supply of sufficient quantities of our product candidates needed to accomplish our clinical development programs, and we may not have the right and in any event do not currently have the capability to manufacture these products if our suppliers are unable or unwilling to do so. We currently arrange for supplies of critical raw materials used in production of our product candidates from single sources. We do not have long-term contracts with any of these suppliers. Any delay or disruption in the availability of raw materials would slow or stop product development and commercialization of the relevant product.

Manufacturing resources could limit or adversely affect our ability to commercialize products.

We or our collaborators engage third parties to manufacture our approved product and product candidates. We or our collaborators may not be able to obtain adequate supplies from third-party manufacturers in a timely fashion for development or commercialization purposes, and commercial quantities of products may not be available from contract manufacturers at acceptable costs. Under our license agreement with Salix, Salix is responsible for obtaining supplies of Relistor, including contracting with contract manufacturing organizations for supply of Relistor active pharmaceutical ingredient and subcutaneous and oral finished drug product. These arrangements may not be on terms that are advantageous and, as a result of our royalty and other interests in Relistor's commercial success, will subject us to risks that the counterparties may not perform optimally in terms of quality or reliability. In engaging third parties for these activities, we do not control many aspects of the manufacturing process, including compliance with current Good Manufacturing Practices (cGMP) and other regulatory requirements. In order to commercialize our product candidates successfully, we or our collaborators need to be able to manufacture or arrange for the manufacture of products in commercial quantities, in compliance with regulatory requirements, at acceptable costs and in a timely manner. Manufacture of our product candidates can be complex, difficult to accomplish even in small quantities, difficult to scale-up for large-scale production and subject to delays, inefficiencies and low yields of quality products. The cost of manufacturing some of our product candidates may make them prohibitively expensive. If adequate supplies of any of our product candidates or related materials are not available on a timely basis or at all, our clinical trials could be seriously delayed, since these materials are time consuming to manufacture and cannot be readily obtained from third-party sources. If we were to decide to establish a commercial-scale manufacturing facility in the future, we would require substantial additional funds and be required to hire and train significant numbers of employees and comply with applicable regulations. 18

Table of Contents

Failure of any manufacturer of Relistor or our product candidates to comply with applicable regulatory requirements could subject us to penalties and have a material adverse effect on supplies of our product or products candidates.

Third-party manufacturers are required to comply with cGMP or similar regulatory requirements outside of the U.S. If manufacturers of our product or product candidates cannot successfully manufacture material that conforms to the strict regulatory requirements of the FDA and any applicable foreign regulatory authority, they may not be able to obtain any required approval for their manufacturing facilities. If these facilities are not approved for commercial manufacture, we may need to find alternative manufacturing facilities, which could result in delays of several years in obtaining approval for a product candidate. We do not control the manufacturing process and are completely dependent on our third-party manufacturing partners or contractors for compliance with the applicable regulatory requirements for the manufacture of Relistor and our product candidates. Manufacturers are subject to ongoing periodic unannounced inspections by the FDA and corresponding state and foreign agencies for compliance with cGMP and similar regulatory requirements. Failure of any manufacturer of Relistor or any of our product candidates to comply with applicable cGMP or other regulatory requirements could result in sanctions being imposed on our collaborators or us, including fines, injunctions, civil penalties, delays, suspensions or withdrawals of approvals, operating restrictions, interruptions in supply and criminal prosecutions, any of which could significantly and adversely affect supplies of Relistor or such product candidate and have a material adverse impact on our business, financial condition and results of operations.

We are dependent on patents and other intellectual property rights.

The validity, enforceability and commercial value of our patents and other intellectual property rights are highly uncertain.

We own or have direct or sub-licenses to a number of issued patents. We must obtain, maintain and enforce patent and other rights to protect our intellectual property. The patent position of biotechnology and pharmaceutical firms is highly uncertain and involves many complex legal and technical issues. There are many laws, regulations and judicial decisions that dictate and otherwise influence the manner in which patent applications are filed and prosecuted and in which patents are granted and enforced, all of which are subject to change from time to time. There is no clear policy involving the breadth of claims allowed, or the degree of protection afforded, under patents in this area. In addition, we are aware of others who have patent applications or patents containing claims similar to or overlapping those in our patents and patent applications. Accordingly, patent applications owned by or licensed to us may not result in patents being issued. Even if we own or license a relevant issued patent, we may not be able to preclude competitors from commercializing drugs that may compete directly with one or more of our products or product candidates, in which event such rights may not provide us with any meaningful competitive advantage. In the absence or upon successful challenge of patent protection, drugs may be subject to generic competition, which could adversely affect pricing and sales volumes of the affected products.

It is generally difficult to determine the relative strength or scope of a biotechnology or pharmaceutical patent position in absolute terms at any given time. The issuance of a patent is not conclusive as to its validity or enforceability, which can be challenged in litigation or via administrative proceedings. The license agreements from which we derive or out-license intellectual property provide for various royalty, milestone and other payment, commercialization, sublicensing, patent prosecution and enforcement, insurance, indemnification and other obligations and rights, and are subject to certain reservations of rights. While we generally have the right to defend and enforce patents licensed to or by us, either in the first instance or if the licensor or licensee chooses not to do so, we must usually bear the cost of doing so. Under our license agreement with Salix, Salix generally has the first right to control the defense and enforcement of our Relistor patents. With respect to Japan, Ono has certain limited rights to prosecute, maintain and enforce relevant intellectual property. We may incur substantial costs in seeking to uphold the validity of patents or to prevent infringement. If the outcome of a dispute or contest is adverse to us, third parties may be able to use our

patented invention without payment to us. Third parties may also avoid our patents through design innovation.

Patents have a limited life and expire by law.

In addition to uncertainties as to scope, validity, enforceability and changes in law, patents by law have limited lives. Upon expiration of patent protection, our drug candidates and/or products may be subject to generic competition, which could adversely affect pricing and sales volumes of the affected products.

With respect to PSMA ADC, currently issued composition-of-matter patents comprising co-owned and in-licensed properties have expiration ranges of 2022 to 2023 in the U.S. and 2022 to 2026 ex-U.S. Corresponding patent applications as well as patent applications directed to methods of use (except for the U.S. patent expiring in 2023) are pending worldwide, which if issued would have expiration ranges from 2022 to 2029. We view all of these patents as significant.

Table of Contents

Owned and in-licensed properties relating to the 1404 product candidate have expiration ranges of 2020 to 2029; we view as most significant the composition-of-matter patent on the compound, as well as technetium-99 labeled forms, which expires in 2029. Additional U.S. patents are directed to various inventions relating to the product candidate, and corresponding patent applications are pending worldwide.

With regard to our Relistor-related intellectual property, the composition-of-matter patent for the active ingredient of Relistor, methylnaltrexone, was invented in the 1970's and has expired. The University, as well as Progenics and its collaborators, have extended the methylnaltrexone patent estate with additional patents and pending patent applications covering various inventions relating to the product. Salix has listed in the FDA Orange Book four U.S. patents relating to subcutaneous Relistor, which have expiration dates ranging from 2017 to 2030, and one patent (expiring in 2024) with Health Canada. A patent issued in September 2013 provides protection for the oral methylnaltrexone product until 2031.

We depend on intellectual property licensed from third parties and unpatented technology, trade secrets and confidential information. If we lose any of these rights, including by failing to achieve milestone requirements or to satisfy other conditions, or if they or data embodying or relevant to them are compromised by disruptions or breaches of information or data security, our business, results of operations and financial condition could be harmed.

Most of our product candidates, including Relistor, incorporate intellectual property licensed from third parties. For example, PSMA ADC utilizes technology licensed to us from Sloan-Kettering Institute for Cancer Research, through Cytogen Corporation, and Seattle Genetics, Inc. We can lose the right to patents and other intellectual property licensed to us if the related license agreement is terminated due to a breach by us or otherwise. Our ability, and that of our collaboration partners, to commercialize products incorporating licensed intellectual property would be impaired if the related license agreements were terminated. In addition, we are required to make substantial cash payments, achieve milestones and satisfy other conditions, including filing for and obtaining marketing approvals and introducing products, to maintain rights under our intellectual property licenses. Due to the nature of these agreements and the uncertainties of research and development, we may not be able to achieve milestones or satisfy conditions to which we have contractually committed, and as a result may be unable to maintain our rights under these licenses. If we do not comply with our license agreements, the licensors may terminate them, which could result in our losing our rights to, and therefore being unable to commercialize, related products.

We also rely on unpatented technology, trade secrets and confidential information. Third parties may independently develop substantially equivalent information and techniques or otherwise gain access to our technology or disclose our technology, and we may be unable to effectively protect our rights in unpatented technology, trade secrets and confidential information. We require each of our employees, consultants and advisors to execute a confidentiality agreement at the commencement of an employment or consulting relationship with us. These agreements may, however, not provide effective protection in the event of unauthorized use or disclosure of confidential information. Any loss of trade secret protection or other unpatented technology rights could harm our business, results of operations and financial condition.

Progenics and other businesses and organizations worldwide, and in particular technology-intensive activities such as biotechnology research and development, are increasingly dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to facilitate or perform basic research and development functions, business processes, internal and external communications, and other critical functions. Progenics relies on such systems for most aspects of its business. The size and complexity of computer, communications and other electronic networked data generation, storage and transfer systems make them potentially vulnerable to breakdown, malicious intrusion, computer viruses and data security breaches by unauthorized third parties, employees or others. Such events may permit unauthorized persons to access, misappropriate and/or destroy sensitive data and result in the impairment or disruption of important business processes, loss of trade secrets or other

proprietary intellectual property or public exposure of personal information (including sensitive personal information) of employees, business partners, clinical trial patients, customers and others. Any of the foregoing could have a material adverse effect on our business, prospects, operating results, and financial condition.

If we do not achieve milestones or satisfy conditions regarding some of our product candidates, we may not maintain our rights under related licenses.

We are required to make substantial cash payments, achieve milestones and satisfy other conditions, including filing for and obtaining marketing approvals and introducing products, to maintain rights under our intellectual property licenses. Due to the nature of these agreements and the uncertainties of research and development, we may not be able to achieve milestones or satisfy conditions to which we have contractually committed, and as a result may be unable to maintain our rights under these licenses. If we do not comply with our license agreements, the licensors may terminate them, which could result in our losing our rights to, and therefore being unable to commercialize, related products.

Table of Contents

If we infringe third-party patent or other intellectual property rights, we may need to alter or terminate a product development program.

There may be patent or other intellectual property rights belonging to others that require us to alter our products, pay licensing fees or cease certain activities. If our products infringe patent or other intellectual property rights of others, the owners of those rights could bring legal actions against us claiming damages and seeking to enjoin manufacturing and marketing of the affected products. If these legal actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to manufacture or market the affected products. We may not prevail in any action brought against us, and any license required under any rights that we infringe may not be available on acceptable terms or at all. We are aware of intellectual property rights held by third parties that relate to products or technologies we are developing. For example, we are aware of other groups investigating PSMA or related compounds, monoclonal antibodies directed at PSMA and targets relevant to PSMA ADC, and methylnaltrexone and other peripheral opioid antagonists, and of patents held, and patent applications filed, by these groups in those areas. While the validity of these issued patents, patentability of these pending patent applications and applicability of any of them to our programs are uncertain, if asserted against us, any related patent or other intellectual property rights could adversely affect our ability to commercialize our products.

Research, development and commercialization of a biopharmaceutical often requires choosing between alternative development and optimization routes at various stages in the development process. Preferred routes depend on subsequent discoveries and test results and cannot be predicted with certainty at the outset. There are numerous third-party patents in our field, and we may need to obtain a license under a patent in order to pursue the preferred development route of one or more of our products or product candidates. The need to obtain a license would decrease the ultimate profitability of the applicable product. If we cannot negotiate a license, we might have to pursue a less desirable development route or terminate the program altogether.

We are dependent upon third parties for a variety of functions. These arrangements may not provide us with the benefits we expect.

We rely on third parties to perform a variety of functions. We are party to numerous agreements which place substantial responsibility on clinical research organizations, consultants and other service providers for the development of our approved product and our product candidates. We also rely on medical and academic institutions to perform aspects of our clinical trials of product candidates. In addition, an element of our research and development strategy has been to in-license technology and product candidates from academic and government institutions in order to minimize investments in early research. We have entered into agreements under which we are now dependent on Ono and Salix for the commercialization and development of Relistor. We may not be able to maintain our relationships with them, or establish new ones for Relistor or other product candidates on beneficial terms. We may not be able to enter new arrangements without undue delays or expenditures, and these arrangements may not allow us to compete successfully. Moreover, if third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct clinical trials in accordance with regulatory requirements or applicable protocols, our product candidates may not be approved for marketing and commercialization or such approval may be delayed. If that occurs, we or our collaborators will not be able, or may be delayed in our efforts, to commercialize our product candidates.

We lack sales and marketing infrastructure and related staff, which will require significant investment to establish and in the meantime may make us dependent on third parties for their expertise in this area.

We have no established sales, marketing or distribution infrastructure. If we receive marketing approval for a pharmaceutical product, significant investment, time and managerial resources will be required to build the commercial infrastructure required to market, sell and support it. Should we choose to commercialize a product

directly, we may not be successful in developing an effective commercial infrastructure or in achieving sufficient market acceptance. Alternatively, we may choose to market and sell products through distribution, co-marketing, co-promotion or licensing arrangements with third parties. We may also consider contracting with a third party professional pharmaceutical detailing and sales organization to perform the marketing function for one or more products. To the extent that we enter into distribution, co-marketing, co-promotion, detailing or licensing arrangements for the marketing and sale of product candidates, any revenues we receive will depend primarily on the efforts of third parties. We will not control the amount and timing of marketing resources these third parties devote to our products.

Table of Contents

We are exposed to product liability claims, and in the future may not be able to obtain insurance against claims at a reasonable cost or at all.

Our business exposes us to product liability risks, which are inherent in the testing, manufacturing, marketing and sale of pharmaceutical products. We may not be able to avoid product liability exposure. If a product liability claim is successfully brought against us, our financial position may be adversely affected. Under our license agreement with Salix, we are responsible for product liability claims arising out of clinical trials that were conducted under our supervision. We are indemnified by Salix under our license agreement with Salix for product liability exposure arising from its marketing and sales of Relistor, and maintain our own product liability insurance coverage in the amount of \$10.0 million per occurrence, subject to a deductible and a \$10.0 million annual aggregate limitation and other clinical trial or other insurance as required by contract and local laws. Pursuant to our transition agreement with Wyeth Pharmaceuticals, we released Wyeth from its indemnification responsibility for product liability exposure arising from its marketing and sales of Relistor. Product liability insurance for the biopharmaceutical industry is generally expensive, when available at all, and may not be available to us at a reasonable cost in the future. Our current insurance coverage and indemnification arrangements may not be adequate to cover claims brought against us, and are in any event subject to the insuring or indemnifying entity discharging its obligations to us.

We handle hazardous materials and must comply with environmental laws and regulations, which can be expensive and restrict how we do business. If we are involved in a hazardous waste spill or other accident, we could be liable for damages, penalties or other forms of censure.

Our research and development work and manufacturing processes involve the use of hazardous, controlled and radioactive materials. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials. Despite procedures that we implement for handling and disposing of these materials, we cannot eliminate the risk of accidental contamination or injury. In the event of a hazardous waste spill or other accident, we could be liable for damages, penalties or other forms of censure. We may be required to incur significant costs to comply with environmental laws and regulations in the future.

If we lose key management and scientific personnel on whom we depend, our business could suffer.

We are dependent upon our key management and scientific personnel, the loss of whom could require us to identify and engage qualified replacements, and could cause our management and operations to suffer in the interim. Competition for qualified employees among companies in the biopharmaceutical industry is intense. Future success in our industry depends in significant part on the ability to attract, retain and motivate highly skilled employees, which we may not be successful in doing.

Heath care reform measures could adversely affect our operating results and our ability to obtain marketing approval of and to commercialize our product candidates.

In the U.S. and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the health care system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements. In the U.S., federal legislation has changed the way Medicare covers and pays for pharmaceutical products. Cost reduction initiatives and other provisions of legislation have decreased coverage and reimbursement. Though such legislation applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage

policy and payment limitations in setting their own reimbursement rates. More recent legislation is intended to broaden access to health insurance, further reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, and impose new taxes and fees on the health industry and additional health policy reforms. New laws impose significant annual fees on companies that manufacture or import branded prescription drug products, and contain substantial new compliance provisions, which in each case may affect our business practices with health care practitioners. Subject to federal and state agencies issuing regulations or guidance, it appears likely that new laws will continue to pressure pharmaceutical pricing, especially under the Medicare program, and may also increase regulatory burdens and operating costs. We cannot be sure whether additional legislative changes will be enacted, whether the FDA regulations, guidance or interpretations will be changed or what the impact of such changes on the marketing approvals of our product candidates, if any, may be.

Table of Contents

Our and/or our collaborators' relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us or them to criminal sanctions, civil penalties, program exclusion, contractual damages, reputational harm and diminished profits and future earnings.

Health care providers, physicians and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our or our collaborators' future arrangements with third-party payors and customers may expose us or them to broadly applicable fraud and abuse and other health care laws and regulations that may constrain the business or financial arrangements and relationships through which we or our collaborators market, sell and distribute our products that obtain marketing approval. Efforts to ensure that business arrangements comply with applicable health care laws and regulations involve substantial costs. It is possible that governmental authorities will conclude that our or our collaborators' business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If such operations are found to be in violation of any of these laws or other applicable governmental regulations, we or the collaborator may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of related operations. If physicians or other providers or entities involved with our products are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which may adversely affect us.

We no longer derive significant funds from federal government grants and research contracts.

While we have in the past been awarded federal government grants and research contracts, in particular from the National Institutes of Health, we do not currently have significant funding from such sources, and do not expect to apply for such funding in the foreseeable future.

Our future depends on the proper management of our current and future business operations, including those of Molecular Insight, and their associated expenses.

Our business strategy requires us to manage our business to provide for the continued development and potential commercialization of our proprietary and partnered product candidates. Our strategy also calls for us to undertake increased research and development activities and to manage an increasing number of relationships with partners and other third parties, while simultaneously managing the capital necessary to support this strategy. These tasks are significantly increased as a result of our acquisition of Molecular Insight. If we are unable to manage effectively our current operations and any growth we may experience, our business, financial condition and results of operations may be adversely affected. If we are unable to effectively manage our expenses, we may find it necessary to reduce our personnel-related costs through reductions in our workforce, which could harm our operations, employee morale and impair our ability to retain and recruit talent. Furthermore, if adequate funds are not available, we may be required to obtain funds through arrangements with partners or other sources that may require us to relinquish rights to certain of our technologies, products or future economic rights that we would not otherwise relinquish or require us to enter into other financing arrangements on unfavorable terms.

Progenics has a history of operating losses, as does Molecular Insight, which has also been reorganized under the U.S. Bankruptcy Code.

Progenics has incurred substantial losses throughout its history. A large portion of our revenue has historically consisted of upfront and milestone from licensing transactions. We have reported operating losses for 2013 and 2012 and while we reported operating income for 2011, as a result of a one-time upfront payment from Salix, the timing and amount of any similar transactions in the future is highly unpredictable and uncertain. Without upfront or other such payments, we operate at a loss, due in large part to the significant research and development expenditures

required to identify and validate new product candidates and pursue our development efforts. Moreover, we have derived no significant revenue from product sales and have only in the last several years derived revenue from royalties. We may not achieve significant product sales or royalty revenue for a number of years, if ever. We expect to incur net operating losses and negative cash flow from operations in the future, which could increase significantly if we expand our clinical trial programs and other product development efforts, including those attendant to the product candidates and programs originally developed by Molecular Insight. Our ability to achieve and sustain profitability is dependent in part on obtaining regulatory approval for and then commercializing our product candidates, either alone or with others. We may not be able to develop and commercialize products beyond subcutaneous Relistor for OIC in patients with advanced illness. Our operations may not be profitable even if any of our other product candidates under development are commercialized.

Molecular Insight incurred net losses every year from its inception in 1997 and generated no significant revenue from product sales and only limited revenue from licenses. In December 2010, Molecular Insight filed a voluntary petition in the United States Bankruptcy Court for the District of Massachusetts seeking relief under the provisions of Chapter 11 of the U.S. Bankruptcy Code (Case No. 10-23355). It operated its business and managed its properties as a debtor in possession under bankruptcy protection until emerging from bankruptcy in May 2011.

Table of Contents

Our ability to use net operating losses to offset future taxable income is subject to certain limitations.

We currently have significant net operating losses (NOLs) that may be used to offset future taxable income. The U.S. Internal Revenue Code limits the amount of taxable income that may be offset annually by NOL carryforwards after a change in control (generally greater than 50% change in ownership) of a loss corporation, and our use of NOL carryforwards may be further limited as a result of any future equity transactions that result in an additional change of control.

Progenics' stock price has a history of volatility and may be affected by selling pressure, including in the event of substantial sales of Progenics stock by former Molecular Insight stockholders. You should consider an investment in Progenics stock as risky and invest only if you can withstand a significant loss.

Our stock price has a history of significant volatility. It has varied between a high of \$6.47 and a low of \$2.53 in 2013 and between a high of \$11.34 and a low of \$1.41 in 2012. Factors that may have a significant impact on the market price of our common stock include the results of clinical trials and pre-clinical studies undertaken by us or others; delays, terminations or other changes in development programs; developments in marketing approval efforts, such as the FDA's July 2012 Complete Response Letter with respect to the sNDA for Relistor subcutaneous injection for the treatment of OIC in adult patients with chronic, non-cancer pain; developments in collaborator or other business relationships, particularly regarding Relistor, PSMA ADC or other significant products or programs; technological innovation or product announcements by us, our collaborators or our competitors; patent or other proprietary rights developments; governmental regulation; changes in reimbursement policies or health care legislation; safety and efficacy concerns about products developed by us, our collaborators or our competitors; our ability to fund ongoing operations; fluctuations in our operating results; general market conditions; and the reporting of or commentary on such matters by the press and others. At times, our stock price has been volatile even in the absence of significant news or developments. The stock prices of biotechnology companies and securities markets generally have been subject to dramatic price swings in recent years, and financial and market conditions during that period have resulted in widespread pressures on securities of issuers throughout the world economy.

Our stockholders may be diluted, and the price of our common stock may decrease, as a result of future issuances of securities, exercises of outstanding stock options, or sales of outstanding securities.

We expect to issue additional common stock in public offerings, private placements and/or through our January 2014 Sales Agreement with Cantor Fitzgerald & Co., pursuant to which we may sell from time to time up to \$50 million of our stock, and to issue options to purchase common stock for compensation purposes. We may issue preferred stock, restricted stock units or securities convertible into or exercisable or exchangeable for our common stock, All such issuances would dilute existing investors and could lower the price of our common stock. Sales of substantial numbers of outstanding shares of common stock, such as sales by former Molecular Insight stockholders of unregistered shares received in the acquisition (including shares held in a 15-month escrow which expires in April 2014), could also cause a decline in the market price of our stock. We require substantial external funding to finance our research and development programs and may seek such funding through the issuance and sale of our common stock, which we have recently done in follow-on primary offerings in late 2012, mid-2013 and February 2014. We have recently established a new shelf registration statement, which we used for our most recent offering and may be used to issue up to approximately an additional \$110 million of common stock and other securities before any underwriter discounts, commissions and offering expenses. We also have in place registration statements covering shares issuable pursuant to our equity compensation plans, and sales of our securities under them could cause the market price of our stock to decline. Sales by existing stockholders or holders of options or other rights may have an adverse effect on our ability to raise capital and may adversely affect the market price of our common stock.

Our principal stockholders are able to exert significant influence over matters submitted to stockholders for approval.

At 2013 year end, our directors and executive officers together beneficially owned or controlled approximately six percent of our outstanding common shares, including shares currently issuable upon option exercises, and our five largest other stockholders approximately 52 percent. Should these parties choose to act alone or together, they could exert significant influence in determining the outcome of corporate actions requiring stockholder approval and otherwise control our business. This control could, among other things, have the effect of delaying or preventing a change in control of the Company, adversely affecting our stock price.

Anti-takeover provisions may make removal of our Board and/or management more difficult, discouraging hostile bids for control that may be beneficial to our stockholders.

Our Board is authorized, without further stockholder action, to issue from time to time shares of preferred stock in one or more designated series or classes. The issuance of preferred stock, as well as provisions in some outstanding stock options that provide for acceleration of exercisability upon a change of control, and Section 203 and other provisions of the Delaware General Corporation Law could make a takeover or the removal of our Board or management more difficult; discourage hostile bids for control in which stockholders may receive a premium for their shares; and otherwise dilute the rights of common stockholders and depress the market price of our stock.

Table of Contents

Item 1B. Unresolved Staff Comments

We responded to SEC staff comments issued in the third quarter of 2013 regarding recent Exchange Act filings, substantially all of which were addressed in our third quarter Form 10-Q and resolved as of December 31, 2013. We amended our 2012 Form 10-K to address remaining comments on January 17, 2014 and the Staff informed us on January 22 that it has completed its review.

Item 2. Properties

At December 31, 2013, we occupied approximately 72,900 square feet of laboratory and office space in Tarrytown, New York, pursuant to lease agreements expiring in December 2020 under which we pay rent and facilities charges including utilities, taxes and operating expenses.

Item 3. Legal Proceedings

Progenics is a party to a proceeding brought by a former employee complaining that the Company violated the anti-retaliation provisions of the federal Sarbanes-Oxley law by terminating the former employee. The Company believes the former employee's claims are without merit and is contesting the matter vigorously. The federal District Court hearing the case issued last July an order denying our motion for summary judgment dismissing the former employee's complaint, making it likely that the proceeding will continue to trial. Given the inherent uncertainty attendant to the proceeding, it is not possible at this time to estimate the likelihood or potential magnitude of any outcome, and we have accordingly not recorded any associated liability in the Consolidated Financial Statements.

Progenics last October commenced an arbitration with Ono under the provisions of the parties' License Agreement for development and commercialization of subcutaneous Relistor in Japan, following a communication from Ono that it has determined to discontinue development because of "commercial concerns" that Ono contends would permit it to cease development and terminate the Agreement. Progenics is not in default under the Agreement, and Ono has neither asserted that Progenics is, nor terminated the Agreement. See Item 1A, Risk Factors.

Item 4. Not Applicable

PART II

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

Price Range of Common Stock

Our common stock is quoted on The NASDAQ Stock Market LLC under the symbol PGNX. The following table sets forth, for the periods indicated, the high and low sales price per share of the common stock, as reported on NASDAQ.

	High	Low
2013: Fourth quarter	\$5.90	\$3.45
Third quarter	6.47	4.36
Second quarter	5.57	3.54
First quarter	5.96	2.53
2012: Fourth quarter	\$3.30	\$1.41
Third quarter	11.00	2.81

 Second quarter
 11.34
 7.44

 First quarter
 10.50
 8.32

On March 7, 2014, the last sale price for our common stock, as reported by The NASDAQ Stock Market LLC, was \$4.70. There were approximately 85 holders of record of our common stock as of that date.

Table of Contents

Comparative Stock Performance Graph

The graph below compares, for the past five years, the cumulative stockholder return on our common stock with the cumulative stockholder return of (i) the NASDAQ Stock Market (U.S.) Index and (ii) the NASDAQ Pharmaceutical Index, assuming an investment in each of \$100 on December 31, 2008.

Effective January 2014, NASDAQ OMX, which provides us with total return values for the Comparative Stock Performance Graph, is replacing values prepared by the Center for Research in Security Prices (CRSP) at the University of Chicago "in an effort to provide a greater level of transparency and leverage [its] existing universe of indexes." As a result, our performance graphs going forward will be using the replacement indices provided by NASDAQ OMX Global Indexes: the NASDAQ U.S. Benchmark TR Index and the ICB: 4577 Pharmaceuticals (Subsector) Index. Please note that information for the NASDAQ Stock Market (U.S.) and the NASDAQ Pharmaceutical indices is provided only from December 31, 2008 through December 31, 2013, the last day this data was made available to us by NASDAQ OMX. The following graph compares, for the past five years, the cumulative stockholder return on our common stock with the cumulative stockholder return of the replacement indices, assuming an investment in each of \$100 on December 31, 2008.

Dividends

Progenics has never paid any dividends, and we currently anticipate that all earnings, if any, will be retained for development of our business and no dividends will be declared in the foreseeable future.

Table of Contents

Item 6. Selected Financial Data

The selected financial data presented below as of December 31, 2013 and 2012 and for each of the three years in the period ended December 31, 2013 are derived from our audited financial statements, included elsewhere herein. The selected financial data presented below with respect to the balance sheet data as of December 31, 2011, 2010 and 2009 and for each of the two years in the period ended December 31, 2010 are derived from our audited financial statements not included herein. The data set forth below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Financial Statements and related Notes included elsewhere herein.

	Years Ended December 31,					
	20	13	2012	2011	2010	2009
	(in thousands, except per share data)					
Statement of Operations Data:			_	-		
Revenues:						
Royalty income	\$5	,923	\$4,963	\$3,046	\$1,826	\$2,372
Collaboration revenue	1	,595	8,525	76,764	1,413	44,351
Research grants	2	75	488	4,810	4,573	1,968
Other revenues	6	9	72	176	140	256
Total revenues	7	,862	14,048	84,796	7,952	48,947
Expenses:						
Research and development	3	3,903	31,840	53,183	50,640	49,798
License fees - research and development	5	67	1,170	578	1,270	1,058
Royalty expense	6	24	499	405	241	237
General and administrative	1	4,809	14,706	18,248	22,832	25,106
Depreciation and amortization	9	39	1,324	2,066	2,853	5,078
Total expenses	5	0,842	49,539	74,480	77,836	81,277
Operating (loss) income	(4	42,980)	(35,491)	10,316	(69,884)	(32,330)
Other income:						
Interest income	4	6	60	65	64	1,481
Gain on sale of marketable securities	-		-	-	-	237
Total other income	4	6	60	65	64	1,718
Net (loss) income before provision for income t	axes (4	42,934)	(35,431)	10,381	(69,820)	(30,612)
Income tax benefit	3	62	-	-	95	_
Net (loss) income	\$(4	42,572)	\$(35,431)	\$10,381	\$(69,725)	\$(30,612)
Per share amounts on net (loss) income:						
Basic	\$(0	0.76)	\$(1.02	\$0.31	\$(2.14)	\$(0.98)
Diluted	\$(0	0.76)	\$(1.02	\$0.31	\$(2.14)	\$(0.98)
	Decembe	-				
	2013	2012	2011	2010	2009	
	(in thous	ands)				
Balance Sheet Data:	* · · · · · · · ·	* = 0				
Cash and cash equivalents	\$65,860			105 \$47,9		
Auction Rate and marketable securities	2,208	3,2	-		•	
Working capital	64,055	-				
Total assets	114,54			-	738 113,6	013
Deferred revenue - current	-	838			-	
Deferred revenue - long term	-	-	162		-	
Other liabilities - long term	28,935	1,0	78 1,49	97 1,63	35 -	

Total stockholders' equity 78,979 66,568 71,801 51,308 107,607

Table of Contents

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)

Overview

General. As discussed in Business, above, we are conducting phase 2 clinical trials of two product candidates for prostate cancer, and resuming a pivotal phase 2 trial of an ultra-orphan radiotherapy candidate for pheochromocytoma. We have also decided to move forward MIP-1095, a compound originally developed by Molecular Insight, into clinical development, and expect to file an IND application in the U.S. later this year.

Our acquisition last year of the privately-held Molecular Insight included the issuance of Progenics common stock in a private transaction not taxable to Progenics, and its agreement to pay potential milestones, in cash or Progenics stock at its option, of up to \$23 million, contingent upon achieving specified commercialization events and up to \$70 million contingent upon achieving specified sales targets relating to the acquired company's products. As described in Note 2 to the Consolidated Financial Statements, the acquisition was accounted for using the acquisition method of accounting, under which the acquired company's assets and liabilities were recorded at their estimated respective fair values as of the acquisition date in our consolidated financial statements. The difference between the estimated fair value of the acquisition consideration and fair value of the identifiable net assets represents potential future economic benefits arising from combining the companies, and has been recorded as goodwill. The results of operations of the acquired company's business from January 18, 2013, the closing date of the acquisition, the estimated fair market values of the assets acquired and liabilities assumed, and goodwill are included in our consolidated financial statements since the date of the acquisition and are included in the discussion and analysis below.

We have licensed Relistor to Salix Pharmaceuticals, and have partnered other internally-developed or acquired compounds and technologies with third parties. We continue to consider opportunities for strategic collaborations, out-licenses and other arrangements with biopharmaceutical companies involving proprietary research, development and clinical programs, and may in the future also in-license or acquire additional oncology compounds and/or programs.

Our current principal sources of revenue from operations are royalty, commercialization milestone and revenue-sharing payments from Salix's Relistor operations. Royalty and milestone payments from Relistor depend on success in development and commercialization, which is dependent on many factors, such as Salix's efforts, decisions by the FDA and other regulatory bodies such as the Complete Response Letter mentioned in Business and Risk Factors, competition from drugs for the same or similar indications, and the outcome of clinical and other testing of Relistor. As previously reported, Progenics in October 2013 commenced an arbitration with Ono under the provisions of the parties' License Agreement, following a communication from Ono that it has determined to discontinue development of subcutaneous Relistor in Japan because of "commercial concerns" that Ono contends would permit it to cease development and terminate the Agreement. Progenics is not in default under the Agreement, and Ono has neither asserted that Progenics is, nor terminated the Agreement. See Risk Factors.

We fund our operations to a significant extent from capital-raising. During 2013, we completed an underwritten public offering of 9.8 million shares of common stock at a public offering price of \$4.40 per share, resulting in net proceeds of approximately \$40.1 million, and in early 2014 sold an additional 8.75 million shares at \$4.60 per share, for net proceeds of approximately \$37.5 million.

Most of our expenditures are for research and development activities. During 2013, expenses for Oncology, primarily related to PSMA ADC, 1404, AzedraTM and 1095, were \$33.5 million compared to \$29.1 million in 2012 and \$22.2 million in 2011. Expenses for Relistor and Other programs in 2013 were \$0.9 million and \$0.7 million, respectively, compared to \$1.7 million and \$2.7 million in 2012 and \$23.2 million and \$8.8 million in 2011. We expect to incur significant development expenses for our PSMA ADC, 1404, AzedraTM and 1095 product candidates as clinical trials progress, while expenses, and the resulting reimbursement revenue, related to Relistor depend on the amount of

research and development work we perform upon request by Salix or Ono.

At December 31, 2013, we held \$65,860 in cash and cash equivalents, an increase of \$7,022 from \$58,838 at 2012 year-end. We expect that this amount, together with the additional 2014 public offering proceeds, will be sufficient to fund operations as currently anticipated beyond one year. We expect to incur operating losses during the near term. At December 31, 2013, cash, cash equivalents and auction rate securities increased \$5,990 to \$68,068 from \$62,078 at December 31, 2012.

If we do not realize sufficient royalty or other revenue from Relistor, or are unable to enter into favorable collaboration, license, asset sale, capital raising or other financing transactions, we will have to reduce, delay or eliminate spending on certain programs, and/or take other economic measures.

28

Table of Contents

Relistor has been approved by regulatory authorities in the U.S., countries in the E.U., Canada and Australia since 2008 for treatment of OIC in advanced-illness patients receiving palliative care when laxative therapy has not been sufficient. Salix is responsible for further developing and commercializing Relistor, including completing clinical development necessary to support regulatory marketing approvals for potential new indications (such as chronic pain) and formulations of the drug, such as oral methylnaltrexone. Under our Agreement with Salix, we are eligible to receive (i) a development milestone of up to \$40 million upon U.S. marketing approval for subcutaneous Relistor in non-cancer pain patients (the proposed indication addressed in the Complete Response Letter mentioned above), (ii) a development milestone of up to \$50 million upon U.S. marketing approval of an oral formulation of Relistor, (iii) up to \$200 million of commercialization milestone payments upon achievement of specified U.S. sales targets, (iv) royalties ranging from 15 to 19 percent of net sales by Salix and its affiliates, and (v) 60% of any upfront, milestone, reimbursement or other revenue (net of costs of goods sold, as defined, and territory-specific research and development expense reimbursement) Salix receives from sublicensees outside the U.S. In the event either marketing approval is subject to a Black Box Warning or Risk Evaluation and Mitigation Strategy (REMS), payment of a substantial portion of the milestone amount would be deferred, and subject, to achievement of the first commercialization milestone (payable on annual U.S. sales first exceeding \$100 million).

Salix has secured distribution for Relistor in the European territory and has licensed Link Medical Products Pty Limited for distribution in Australia, New Zealand, South Africa and certain other markets in Asia. Salix is continuing efforts to secure additional distribution partners and/or sublicensees in Europe and elsewhere.

Results of Operations (amounts in thousands unless otherwise noted)

				2013	2012
				vs.	VS.
	2013	2012	2011	2012	2011
				Percent	
				Change	
Revenues	\$7,862	\$14,048	\$84,796	(44 %)	(83 %)
Expenses	(50,842)	(49,539)	(74,480)	3 %	(33 %)
Operating (loss) income	(42,980)	(35,491)	10,316	21 %	(444 %)
Other income	46	60	65	(23 %)	(8 %)
Income tax benefit	362	-	-	100%	N/ A
Net (loss) income	\$(42,572)	\$(35,431)	\$10,381	20 %	(441%)

Revenues:

Sources of revenue during the years indicated below included license and other agreements with Salix and other collaborators, research grants from the National Institutes of Health (NIH) and, to a small extent, sales of research reagents.

Sources of Revenue	2013	2012	2011	vs. 2012 Percent Change		
Royalty income	-	\$4,963	\$3,046	19 %	63	%
Collaboration revenue		8,525	76,764	(81%)	(89	%)

Edgar Filing: PROGENICS PHARMACEUTICALS INC - Form 10-K

Research grants	275	488	4,810	(44%)	(90 %)
Other revenues	69	72	176	(4 %)	(59 %)
Total	\$7,862	\$14,048	\$84,796	(44%)	(83 %)

Table of Contents

Royalty income. During the last three years, we recognized royalty income primarily based on the below net sales of Relistor reported by Salix or a former collaborator, and net sales reported by other licensees.

Relistor Net Sales Reported by Collaborators Years Ended December 31, 2013 2012 2011 U.S. \$35,000 \$29,200 \$21,500 Ex-U.S. 4,400 4,000 5,500 Global \$39,400 \$33,200 \$27,000

Collaboration revenue:

During 2013, we recognized revenue from upfront and reimbursement payments from partnering arrangements consisting of (i) \$676 from amortization of upfront payments for partnering the Company's PRO 140 and C. difficile programs, (ii) \$420 from amortization of upfront payment and expense reimbursement for licensing 1404 in Japan, (iii) \$295 from amortization of upfront payment and expense reimbursement for licensing Relistor, and (iv) a \$189 upfront payment from another licensee.

During 2012, we recognized \$7,949 of revenue from upfront and reimbursement payments from PRO 140 and C. difficile partnering. As of December 31, 2012, \$676 is recorded in deferred revenue – current.

During 2012 and 2011, we recognized \$558 and \$75,091, respectively, of revenue from Salix, which includes \$204 and \$59,634, respectively, from the upfront cash payment under our License Agreement, \$225 in 2011 in respect of Salix ex-U.S. sublicensee revenue and \$354 and \$15,232, respectively, as reimbursement of expenses. As of December 31, 2012, \$162 is recorded in deferred revenue – current. During 2011 we recognized \$1,630 of revenue from a former collaborator as reimbursement of expenses under a transition agreement; we received no such reimbursement in 2013 or 2012.

During 2013, 2012 and 2011, we recognized \$13, \$18 and \$43, respectively, of reimbursement revenue for activities requested by a collaborator.

Research grants. During the last three years, we recognized the amounts in the above table as revenue from federal government grants from the NIH to support research and development programs. Decreases in grant revenue resulted from lower reimbursable expenses year-to-year. We do not expect to recognize revenue from the NIH in the near future.

Other revenues, primarily from orders for research reagents, decreased as shown in the above table.

Expenses:

Research and Development Expenses include scientific labor, clinical trial costs, supplies, product manufacturing costs, consulting, license fees, royalty payments and other operating expenses. Research and development expenses increased to \$35,094 for 2013 from \$33,509 for 2012 and decreased from \$54,166 for 2011. During 2013, the increase in research and development expenses compared to those in 2012 was primarily due to higher clinical trial costs related to PSMA ADC and 1404, and rent expense, partially offset by lower compensation, contract manufacturing and subcontracting and license fee expenses. See Liquidity and Capital Resources – Uses of Cash, for details of the changes in these expenses by project. Salix reimbursed us for development expenses we incurred related to Relistor; most of these expenses were incurred and reimbursed in 2011. Portions of our expenses during the periods presented were funded through grants from the NIH (see Revenues- Research Grants). The changes in research and development

expense, by category of expense, are as follows:

2013 2012 vs. vs.
2013 2012 2011 2012 2011

Percent change

Salaries and benefits \$12,481 \$15,372 \$18,658 (19%) (18 %)

2013 vs. 2012 Salaries and benefits decreased due to a decline in average headcount, and reflecting a non-recurring retirement expense of \$1,804 incurred in the first quarter of 2012.

2012 vs. 2011 Salaries and benefits decreased due to a decline in average headcount and lower accrued bonus expense, partially offset by the above non-recurring retirement expense and accrued severance expense related to additional headcount reductions in the third quarter.

Table of Contents

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Share-based compensation \$2,524 \$4,568 \$4,499 (45%) 2 %

2013 vs. 2012 Share-based compensation decreased primarily due to lower equity incentives expenses, and reflecting non-recurring 2012 retirement-related option and restricted stock expense noted below.

2012 vs. 2011 Share-based compensation increased primarily due to the acceleration of options and restricted stock expenses of \$1,638 resulting from a former senior executive retirement, partially offset by lower restricted stock expenses and elimination of employee stock purchase plan expenses resulting from the 2011 termination of those plans.

For 2011, share-based compensation included restricted stock and option plan expenses from (i) accelerated vesting of outstanding awards to non-management employees in connection with a change in program eligibility and termination of the Company's employee stock purchase plans (the latter of which resulted in a decline in share-based compensation), and (ii) a shift in headcount from general and administrative departments to research and development. See Critical Accounting Policies – Share-Based Payment Arrangements.

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Clinical trial costs \$8,862 \$2,692 \$10,099 229% (73 %)

2013 vs. 2012 Clinical trial costs increased primarily due to higher expenses for Oncology (\$6,214), partially offset by decreased expenses in Other programs (\$27) and Relistor (\$17).

2012 vs. 2011 Clinical trial costs decreased primarily due to lower clinical trial activities related to Relistor (\$9,132), partially offset by increased expenses in Oncology (\$1,700), primarily related to PSMA ADC and Other (\$25).

2013 2012 vs. vs.
2013 2012 2011 2012 2011

Percent
Laboratory and manufacturing supplies and equipment \$632 \$592 \$4,203 7% (86 %)

2013 vs. 2012 Laboratory and manufacturing supplies and equipment increased by \$511 for Other programs, including second quarter impairment losses from the write-off of laboratory equipment in connection with an amendment to the Company's Tarrytown lease, partially offset by lower Oncology expenses (\$471), primarily from a decline in lab supplies for PSMA ADC.

2012 vs. 2011 Laboratory and manufacturing supplies and equipment decreased due to lower expenses in (i) Relistor (\$2,197), (ii) Oncology (\$388), reflecting a decline in manufacturing supplies for PSMA ADC, and (iii) Other (\$1,026).

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent
Contract manufacturing and subcontractors \$2,042 \$3,111 \$6,713 (34%) (54 %)

2013 vs. 2012 Contract manufacturing and subcontractors decreased due to lower expenses for Oncology (\$571), Other (\$353), and Relistor (\$145).

2012 vs. 2011 Contract manufacturing and subcontractors decreased due to lower expenses for Relistor (\$2,399), reflecting a decrease in purchases of subcutaneous Relistor related products, and Other (\$1,596), partially offset by an increase in Oncology (\$393).

Expenses in this category relate to the conduct of clinical trials, including manufacture by third parties of drug materials, testing, analysis, formulation and toxicology services, and vary as the timing and level of such services are required.

Table of Contents

```
2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Consultants $905 $330 $1,270 174% (74 %)
```

2013 vs. 2012 Consultants expense increased primarily due to higher expenses for Oncology (\$613), partially offset by lower expenses for Other programs (\$27) and Relistor (\$11).

2012 vs. 2011 Consultants expense decreased due to lower expenses in 2012 for Relistor regulatory and other activities (\$816), Oncology (\$18) and Other programs (\$106).

Expenses in this category relate to monitoring ongoing clinical trials and reviewing data from completed trials including the preparation of filings and vary as the timing and level of such services are required.

2013 vs. 2012 License fees decreased due to lower expenses for Oncology (\$573) and Other programs (\$30).

2012 vs. 2011 License fees increased due to higher expenses for clinical trial initiation in Oncology (\$902), partially offset by lower expenses for Relistor (\$156) and Other programs (\$154).

2013 vs. 2012 The increase in royalty expense was due to higher net sales of Relistor in 2013.

2012 vs. 2011 The increase in royalty expense was due to higher net sales of Relistor in 2012.

```
2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Other operating expenses $6,457 $5,175 $7,741 25% (33 %)
```

2013 vs. 2012 Other operating expenses increased from 2012 primarily due to increases in rent (\$1,131), as a result of lease amendment and termination expenses, travel (\$106), other operating expenses (\$140) and insurance (\$57), partially offset by a decrease in facilities (\$152).

2012 vs. 2011 Other operating expenses decreased primarily due to decreases in rent (\$1,943), travel (\$111), insurance (\$55) and other operating expenses (\$489), partially offset by increases in expenses for facilities (\$32).

General and Administrative Expenses increased to \$14,809 for 2013 from \$14,706 for 2012 and decreased from \$18,248 for 2011, as follows:

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Salaries and benefits \$4,821 \$6,493 \$7,228 (26%) (10 %)

2013 vs. 2012 Salaries and benefits decreased primarily due to 2012 accrued severance expense resulting from headcount reductions, while the average headcount remained unchanged.

2012 vs. 2011 Salaries and benefits decreased due to a decline in average headcount in the general and administrative departments and lower accrued bonus expense in 2012, partially offset by an increase in accrued severance expense related to additional headcount reductions in the third quarter.

Table of Contents

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Share-based compensation \$1,022 \$1,968 \$1,863 (48%) 6 %

2013 vs. 2012 Share-based compensation decreased due to lower equity incentives expenses, which included restructuring expenses in 2012.

2012 vs. 2011 Share-based compensation increased due to higher stock option expenses in connection with the third quarter 2012 restructuring, partially offset by lower restricted stock and elimination of employee stock purchase plans expenses resulting from the 2011 termination of those plans.

For 2011, share-based compensation reflected accelerated vesting in connection with termination of employee stock purchase plans.

2013 2012 vs. vs. vs.
2013 2012 2011 2012 2011
Percent change

Consulting and professional fees \$3,922 \$2,362 \$4,389 66% (46 %)

2013 vs. 2012 Consulting and professional fees increased due to higher consulting (\$697), patent (\$457), legal (\$256), audit (\$101) and other fees (\$49).

2012 vs. 2011 Consulting and professional fees decreased due to lower consulting (\$1,246), audit (\$297), patent (\$294), accounting (\$91), legal (\$63) and other fees (\$36).

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change
Other operating expenses \$4,325 \$3,883 \$4,768 11% (19 %)

2013 vs. 2012 Other operating expenses increased due to higher expenses for market research (\$158), recruiting (\$112), investor relations (\$109) and taxes (\$108) and other operating expenses (\$127), partially offset by a decreases in rent (\$172).

2012 vs. 2011 Other operating expenses decreased due to lower expenses for rent (\$646), investor relations (\$63), taxes (\$30) and other operating expenses (\$359), partially offset by an increases in recruiting (\$137), computer software (\$66) and travel (\$10).

2013 2012 vs. vs. 2013 2012 2011 2012 2011 Percent change

Depreciation and amortization \$939 \$1,324 \$2,066 (29%) (36 %)

2013 vs. 2012 Depreciation and amortization expense decreased primarily due to lower leasehold improvements and machinery and equipment fixed asset balances.

2012 vs. 2011 Depreciation and amortization expense decreased primarily due to lower machinery and equipment fixed asset balances.

Intangible impairment charges and change in contingent consideration liability

2013 As of December 31, 2013 indefinite-lived intangible assets decreased by \$919, from \$32.3 million to \$31.4 million, resulting from our annual impairment testing, with the corresponding expense recorded in the general and administrative expenses in the Consolidated Statements of Operations. This impairment was the result of change in the estimated timing of beginning cash inflows from 2014 to 2018 and an increase in discount rate from 15% to 18% for the Onalta intangible asset. In addition, the fourth quarter review of the contingent consideration liability fair value resulted in a \$200 decrease, from \$15.9 million to \$15.7 million, which has also been recorded in the general and administrative expenses in the Consolidated Statements of Operations. The decrease in contingent consideration liability was due to an increase in the discount period.

Table of Contents

Other income:

2013 2012 vs. vs.
2013 2012 2011 2012 2011
Percent change

Interest income \$ 46 \$ 60 \$ 65 (23%) (8 %)

2013 vs. 2012 Interest income decreased due to lower average interest rates in 2013 than in 2012, partially offset by increases resulting from higher average balances of cash equivalents.

2012 vs. 2011 Interest income decreased to \$60 from \$65 over the period.

Interest income, as reported, is primarily the result of investment income from auction rate securities held by us.

Income Taxes:

For 2013, income tax benefit of \$362 resulted from the change in the difference between carrying amounts of in-process research and development assets for financial reporting purposes and the amounts used for income tax purposes. For 2012 and 2011, there was no provision for income taxes due to a pre-tax loss for 2012 and the 2011 pre-tax income amount was completely offset by our available net operating loss carry-forwards.

Net (Loss) Income:

2013 net loss was \$42,572, compared to net loss of \$35,431 for 2012, and net income of \$10,381 for 2011.

Liquidity and Capital Resources

We have to date funded operations principally through payments received from private placements of equity securities, public offerings of common stock, collaborations, grants and contracts, royalties, interest on investments and proceeds from the exercise of outstanding options and warrants.

We received in 2013 a \$5,000 upfront payment from partnering of the C. difficile program and are eligible to receive future milestone and royalty payments. This receipt resulted in the reversal in 2013 of deferred tax assets and liabilities established in 2012 to reflect the net tax effects of temporary differences between the carrying amounts of certain assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

We received in 2012 a \$3,500 payment upon sale of our PRO 140 program and are eligible to receive future milestone and royalty payments in respect of this asset.

Under the Salix License Agreement, we received in 2011 a \$60,000 upfront cash payment and \$225 in respect of Salix ex-U.S. sublicensee revenue and are eligible to receive development and commercialization milestone payments plus royalties on net sales and 60% of any upfront, milestone, reimbursement or other revenue (net of costs of goods sold, as defined, and territory-specific research and development expense reimbursement) Salix receives from ex-U.S. sublicensees.

Our expenses and reimbursement revenue related to Relistor have declined substantially since Salix assumed direct responsibility for expenses under third-party contracts we have assigned to it. Under the Salix License Agreement, we are reimbursed for Salix approved full-time equivalents (FTE) and third-party development expenses incurred and

paid by us after February 3, 2011.

Table of Contents

At December 31, 2013, we held \$65,860 in cash and cash equivalents, an increase of \$7,022 from \$58,838 at December 31, 2012. We expect that this amount will be sufficient to fund operations as currently anticipated beyond one year. In addition, at December 31, 2013 and 2012, our investment in auction rate securities classified as long-term assets on the Consolidated Balance Sheets amounted to \$2,208 and \$3,240, respectively.

If we do not realize sufficient royalty or other revenue from Relistor or other collaboration, license, asset sale, capital raising or other financing transactions, we will have to reduce, delay or eliminate spending on certain programs, and/or take other economic measures.

Cash used in operating activities for 2013 and 2012 was \$36,107 and \$34,644, respectively, due to excess of expenditures on our research and development programs and general and administrative costs over cash received from collaborators and government grants. Our cash flow from operating activities was positive for 2011, due to the receipt of a \$60,000 Salix upfront payment, \$225 in respect of Salix ex-U.S. sublicensee revenue and \$16,289 in reimbursement payments from Salix and Wyeth, partially offset by expenditures on our research and development programs and general and administrative costs. See Risk Factors.

In 2013, we completed an underwritten public offering under our 2011 shelf registration statement of 9.8 million shares of common stock at a public offering price of \$4.40 per share (including the underwriters' overallotment option), resulting in net proceeds of approximately \$40.1 million. In December 2012, we completed a public offering of 12.7 million shares of common stock for net proceeds of approximately \$23.3 million. During the first quarter of 2014, we established a \$150 million replacement shelf registration statement which we used for our recent underwritten public offering of 8.75 million shares of common stock at a public offering price of \$4.60 per share, resulting in net proceeds of approximately \$37.5 million. We may utilize this shelf registration for the issuance of up to approximately \$110 million of additional common stock and other securities.

Sources of Cash

Operating Activities. During 2013 we received \$9,686 under our collaborations, primarily consisting of (i) \$5,125 in upfront and reimbursement payments from partnering of the C. difficile program, (ii) \$3,952 in royalties and reimbursements from Salix, (iii) payments totaling \$224 from out-licenses of other assets, and (iv) \$385 in reimbursement payments relating to 1404. During 2012 we received \$9,393 under collaborations, out-licenses and sale of assets, consisting of (i) \$404 in reimbursement payments under the Salix License Agreement, (ii) \$5,461 in royalties from Salix, (iii) \$3,500 from the sale of our PRO 140 program and (iv) \$28 under another out-license. During 2011 we received \$79,998 under our collaborations, consisting of (i) \$60,000 Salix upfront cash payment and \$225 in respect of Salix ex-U.S. sublicensee revenue, (ii) \$14,659 in reimbursement payments under the Salix License Agreement, (iii) \$1,767 in royalties from Salix, (iv) \$3,317 pursuant to our former collaboration with Wyeth Pharmaceuticals and (v) \$30 under another out-license.

We have in the past partially funded research programs through awards from the NIH, which we do not expect to receive in the foreseeable future. For 2013, 2012 and 2011, we received \$287, \$576 and \$5,178, respectively, of revenue from all of our NIH awards.

Changes in Accounts receivable and Accounts payable for 2013, 2012 and 2011 resulted from the timing of receipts from Salix, Wyeth, Ono, Fuji, other partnering transactions, and NIH, and payments made to trade vendors in the normal course of business.

We have no committed external sources of funding or capital other than agreements under which collaborators and licensees have contractual obligations to make payments to us. Other than revenues from Relistor, we expect no significant product revenues in the immediate or near-term future, as it will take significant time to bring any of our current product candidates to the commercial marketing stage.

Investing Activities. Approximately 92% of our \$65,860 in cash and cash equivalents at December 31, 2013 was invested in money market funds. Auction rate securities of \$2,208 consist of securities collateralized by student loan obligations subsidized by the U.S. government, \$1,100 of which was redeemed at par during the first and second quarters of 2013. These auction rate securities are rated investment grade by the Standard & Poor's and Moody's rating agencies and have scheduled maturities greater than ten years. During 2013, we realized \$174 of proceeds from sales of fixed assets.

Financing Activities. During 2013, net cash provided by financing activities included \$40,078 in net proceeds from the issuance of 9.775 million shares of common stock. In addition, during 2013, 2012 and 2011, we received cash of \$71, \$306 and \$3,726, respectively, from exercise of stock options, sales of common stock in satisfaction of severance obligations (in 2012) and under the now-discontinued employee stock purchase plans (in 2011). The amount of cash we receive from these sources fluctuates commensurate with headcount levels and changes in the common stock price on the grant date for options exercised, and on the sale date for shares sold under the employee stock purchase plans.

Table of Contents

Unless we obtain regulatory approval for additional product candidates and/or enter into agreements with corporate collaborators with respect to other proprietary assets, we will be required to fund our operations through sales of common stock or other securities or royalty or other financing agreements. Adequate additional funding may not be available to us on acceptable terms or at all. Our inability to raise additional capital on terms reasonably acceptable to us may seriously jeopardize the future success of our business.

Uses of Cash

Operating Activities. The majority of our cash has been used to advance our research and development programs, including conducting pre-clinical studies and clinical trials, pursuing regulatory approvals for product candidates, filing and prosecuting patent applications and defending patent claims. Included in the 2012 period presented below is \$2,073 of cash disbursements incurred in connection with a former senior executive first quarter retirement. For various reasons, including the early stage of certain of our programs, the timing and results of our clinical trials, our dependence in certain instances on third parties, many of which are outside of our control, we cannot estimate the total remaining costs to be incurred and timing to complete all our research and development programs.

Research and development costs incurred by project over the past three years were as follows:

	2013	2012	2011
Oncology	\$33.4	\$29.1	\$22.2
Relistor	0.9	1.7	23.2
Other programs	0.8	2.7	8.8
Total	\$35.1	\$33.5	\$54.2

We will require additional funding to continue our research and product development programs, conduct pre-clinical studies and clinical trials, pursue regulatory approvals for our product candidates, file and prosecute patent applications and enforce or defend patent claims, if any, fund other operating expenses, and fund product in-licensing and any possible acquisitions.

Investing Activities. During the past three years, we have spent \$137, \$767 and \$226, respectively, on capital expenditures.

Contractual Obligations

Our funding requirements, both for the next 12 months and beyond, will include required payments under operating leases and fixed and contingent payments under licensing, collaboration and other agreements, including those to which our Molecular Insight subsidiary is a party. The following table summarizes our contractual obligations as of December 31, 2013 for future payments under these agreements, including Molecular obligations:

	Payments due by Year-end				
	Total	2014	2015-2016	2017-2018	Thereafter
	(in milli	ons)			
Operating leases	\$13.9	\$1.9	\$3.8	\$4.0	\$ 4.2
License, collaboration and other agreements:					
Fixed payments	1.3	0.3	0.4	0.6	-
Contingent payments (1)	105.7	-	2.3	7.7	95.7
Total	\$120.9	\$2.2	\$6.5	\$12.3	\$ 99.9

(1) Based on assumed achievement of milestones covered under each agreement, the timing and payment of which is highly uncertain.

We periodically assess the scientific progress and merits of each of our programs to determine if continued research and development is commercially and economically viable. Certain of our programs have been terminated due to the lack of scientific progress and prospects for ultimate commercialization. Because of the uncertainties associated with research and development in these programs, the duration and completion costs of our research and development projects are difficult to estimate and are subject to considerable variation. Our inability to complete research and development projects in a timely manner or failure to enter into collaborative agreements could significantly increase capital requirements and adversely affect our liquidity.

Table of Contents

Our cash requirements may vary materially from those now planned because of results of research and development and product testing, changes in existing relationships or new relationships with licensees, licensors or other collaborators, changes in the focus and direction of our research and development programs, competitive and technological advances, the cost of filing, prosecuting, defending and enforcing patent claims, the regulatory approval process, manufacturing and marketing and other costs associated with the commercialization of products following receipt of regulatory approvals and other factors.

The above discussion contains forward-looking statements based on our current operating plan and the assumptions on which it relies. There could be deviations from that plan that would consume our assets earlier than planned.

Off-Balance Sheet Arrangements and Guarantees

We have no obligations under off-balance sheet arrangements and do not guarantee the obligations of any other unconsolidated entity.

Critical Accounting Policies

We prepare our financial statements in conformity with accounting principles generally accepted in the U.S. Our significant accounting policies are disclosed in Note 3 to our financial statements included in this Report. The selection and application of these accounting principles and methods requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, as well as certain financial statement disclosures. We evaluate these estimates on an ongoing basis. We base these estimates on historical experience and on various other assumptions that we believe reasonable under the circumstances. The results of these evaluations form the basis for making judgments about the carrying values of assets and liabilities that are not otherwise readily apparent. While we believe that the estimates and assumptions we use in preparing the financial statements are appropriate, they are subject to a number of factors and uncertainties regarding their ultimate outcome and, therefore, actual results could differ from these estimates.

The critical accounting policies we use and the estimates we make are described below. These are policies and estimates that we believe are the most important in portraying our financial condition and results of operations, and that require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. We have discussed the development, selection and disclosure of these critical accounting policies and estimates with the Audit Committee of our Board of Directors.

Revenue Recognition. We recognize revenue from all sources based on the provisions of the SEC's Staff Accounting Bulletin (SAB) No. 104 (SAB 104) and ASC 605 Revenue Recognition.

The FASB's ASC 605 Revenue Recognition specifies how to separate deliverables in multiple-deliverable arrangements, and how to measure and allocate arrangement consideration to one or more units of accounting, and provides that the delivered item(s) are separate units of accounting, if (i) the delivered item(s) have value to a collaborator on a stand-alone basis, and (ii), if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in our control. We adopted this update on January 1, 2011.

Royalty revenue is recognized based upon net sales of related licensed products, and is recognized in the period the sales occur, provided that the royalty amounts are fixed or determinable, collection of the related receivable is reasonably assured and we have no remaining performance obligations under the arrangement providing for the royalty.

Amounts not expected to be recognized within one year of the balance sheet date are classified as long-term deferred revenue. The classification of deferred revenue as short-term or long-term is based upon the periods in which we expect to perform our collaboration arrangement obligations including non-reimbursable technical assistance.

Share-Based Payment Arrangements. Our share-based compensation of employees includes non-qualified stock options and restricted stock, which are compensatory under ASC 718 Compensation – Stock Compensation. We account for share-based compensation to non-employees, including non-qualified stock options and restricted stock, in accordance with ASC 505 Equity.

The fair value of each non-qualified stock option award is estimated on the date of grant using the Black-Scholes option pricing model. The model requires input assumptions with respect to (i) expected volatility of our common stock, which is based upon the daily quoted market prices on The NASDAQ Stock Market LLC over a period equal to the expected term, (ii) the period of time over which employees, officers, directors and non-employee consultants are expected to hold their options prior to exercise, (iii) expected dividend yield (zero in our case due to never having paid dividends and not expecting to pay dividends in the future), and (iv) risk-free interest rates for periods within the expected term of the options, which are based on the U.S. Treasury yield curve in effect at the time of grant.

Historical volatilities are based upon daily quoted market prices of our common stock on The NASDAQ Stock Market LLC over a period equal to the expected term of the related equity instruments. We rely only on historical volatility since we believe it is generally viewed as providing the most reliable indication of future volatility. In estimating expected future volatility, we assume it will be consistent with historical; we calculate historical volatility using a simple average calculation; we use available historical data for the length of the option's expected term, and we consistently use a sufficient number of price observations. Since our stock options are not traded on a public market, we do not use implied volatility.

Table of Contents

The expected term of options granted represents the period of time that options granted are expected to be outstanding based upon historical data related to exercise and post-termination cancellation activity. The expected term of stock options granted to our Chief Executive Officer (CEO) and non-employee directors, consultants and officers are calculated separately from stock options granted to other employees.

We apply a forfeiture rate to the number of unvested awards in each reporting period in order to estimate the number of awards that are expected to vest. Estimated forfeiture rates are based upon historical data on vesting behavior of employees. We adjust the total amount of compensation cost recognized for each award, in the period in which each award vests, to reflect the actual forfeitures related to that award. Changes in our estimated forfeiture rate will result in changes in the rate at which compensation cost for an award is recognized over its vesting period.

Changes in the assumptions used to compute the fair value of the option awards are likely to affect their fair value and the amount of compensation expense recognized in future periods. A higher volatility, longer expected term and higher risk-free rate increases the resulting compensation expense recognized in future periods as compared to prior periods. Conversely, a lower volatility, shorter expected term and lower risk-free rate decreases such expense recognized in future periods as compared to prior periods.

For performance stock option awards to our CEO (awarded in 2012 and 2011 only), vesting occurs upon achievement of specified performance-based milestones. The awards, which have an exercise price equal to the closing price of our common stock on the date of grant, are valued using the Black-Scholes option pricing model: the expense related to these grants is recognized during the period, if any, in which each performance milestone is achieved.

Clinical Trial and Other Research and Development Expenses. Clinical trial expenses, which are included in research and development expenses, represent obligations resulting from contracts with various clinical investigators and clinical research organizations in connection with conducting clinical trials for our product candidates. Such costs are expensed as incurred, and are generally based on the total number of patients in the trial, the rate at which the patients enter the trial and the period over which the clinical investigators and clinical research organizations to provide services. We believe that this method best aligns the efforts expended on a clinical trial with the expenses we record. We adjust our rate of clinical expense recognition if actual results differ from our estimates. In addition to clinical trial expenses, we estimate the amounts of other research and development expenses, for which invoices have not been received at the end of a period, based upon communication with third parties that have provided services or goods during the period. Such estimates are subject to change as additional information becomes available.

Fair Value Measurements. Our available-for-sale investment portfolio consists of money market funds and \$2.4 million face amount of auction rate securities (ARS), and is recorded at fair value in the accompanying Consolidated Balance Sheets in accordance with ASC 320 Investments – Debt and Equity Securities. The change in the fair value of these investments is recorded as a component of other comprehensive income (loss). We expect to recover the amortized cost of all of our investments at maturity. We currently do not anticipate having to sell these securities in order to operate our business and we believe that it is not more likely than not that we will be required to sell these securities before recovery of principal. We do not believe the carrying values of our ARS investments are other than temporarily impaired and therefore expect the positions will eventually be liquidated without significant loss. We monitor markets for our investments and consider the impact, if any, of market conditions on the fair market value of our investments.

Valuation of securities is subject to uncertainties that are difficult to predict, such as changes to credit ratings of the securities and/or underlying assets supporting them, default rates applicable to the underlying assets, underlying collateral value, discount rates, counterparty risk, ongoing strength and quality of market credit and liquidity and general economic and market conditions. The valuation of the ARS in our portfolio is based on an internal analysis of timing of expected future successful auctions, collateralization of underlying assets of the security and credit quality of the security.

In –Process Research and Development and Goodwill. In connection with the acquisition of Molecular Insight, we have established a policy for accounting for intangible assets, under which in process research and development (IPR&D) and goodwill are initially measured at fair value and capitalized as an intangible asset and an impairment test for these intangibles is performed annually in the fourth quarter, unless impairment indicators require an earlier evaluation. Upon and subject to commercialization of these candidates, the IPR&D will be amortized over the relevant estimated useful life.

Contingent Consideration Liability. The estimated fair value of the contingent consideration liability, initially measured and recorded on the acquisition date, is considered to be a Level 3 instrument and is reviewed quarterly, or whenever events or circumstances occur that indicate a change in fair value. The contingent consideration liability is recorded at fair value at the end of each period.

Table of Contents

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Our primary investment objective is to preserve principal. Our money market funds and ARS have interest rates that were variable and totaled \$62,572 at December 31, 2013. As a result, we do not believe that these investment balances have a material exposure to interest-rate risk.

At that date, we held approximately \$2,208 (3.53% of assets measured at fair value) carrying amount of ARS, in respect of which we have received all scheduled interest payments. The principal amount of these remaining ARS will not be accessible until the issuer calls or restructures the underlying security, the underlying security matures and is paid or a buyer outside the auction process emerges.

We continue to monitor the market for ARS and consider the impact, if any, of market conditions on the fair market value of these investments. We believe that the failed auctions experienced to date are not a result of the deterioration of the underlying credit quality of these securities, although valuation of them is subject to uncertainties that are difficult to predict, such as changes to credit ratings of the securities and/or the underlying assets supporting them, default rates applicable to the underlying assets, underlying collateral value, discount rates, counterparty risk, ongoing strength and quality of market credit and liquidity, and general economic and market conditions. We do not believe the carrying values of the ARS that we hold are other than temporarily impaired and therefore expect the positions will eventually be liquidated without significant loss.

The valuation of the ARS we hold is based on an internal analysis of timing of expected future successful auctions, collateralization of underlying assets of the security and credit quality of the security. As a result of re-evaluating the valuation of these securities as of December 31, 2013, we reduced the temporary impairment amount to \$192 from \$260 at December 31, 2012. A 100 basis point increase to our internal analysis would result in a \$24 increase in the temporary impairment of these securities as of December 31, 2013.

Item 8. Financial Statements and Supplementary Data

See page F-1, Index to Consolidated Financial Statements.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the timelines specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (CEO) and Principal Financial Officer (PFO), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. We have a Disclosure Committee consisting of members of our senior management which monitors and implements our policy of disclosing material information concerning the Company in accordance with applicable law.

As required by SEC Rule 13a-15(e), we carried out an evaluation, under the supervision and with the participation of our management, including our CEO and PFO, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based on the foregoing, our CEO and PFO concluded that our current disclosure controls and procedures, as designed and implemented, were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting, as such term is defined in the Exchange Act Rules 13a-15(f) and 15d-15(f) during our fiscal quarter ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

Management's Report on Internal Control Over Financial Reporting

Internal control over financial reporting is a process designed by, or under the supervision of, our CEO and PFO and effected by our Board, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management is responsible for establishing and maintaining adequate internal control over financial reporting which includes policies and procedures that:

Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets;

Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorization of management and directors; and

Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has used the framework set forth in the report entitled Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework), known as COSO, to evaluate the effectiveness of our internal control over financial reporting. Management has concluded that our internal control over financial reporting was effective as of December 31, 2013. The effectiveness of our internal control over financial reporting has been audited by Ernst & Young LLP, an independent registered public accounting firm, as of December 31, 2013 as stated in their report which is provided below.

Table of Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Progenics Pharmaceuticals, Inc.

We have audited Progenics Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (the COSO criteria). Progenics Pharmaceuticals, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Progenics Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Progenics Pharmaceuticals, Inc. as of December 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for the years then ended of Progenics Pharmaceuticals, Inc. and our report dated March 13, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Hartford, Connecticut March 13, 2014

Item 9B. Other Information

None.

Table of Contents

PART III

The information required by the Form 10-K Items listed in the following table will be included under the respective headings specified for such Items in our definitive proxy statement for our 2014 Annual Meeting of Stockholders to be filed with the SEC:

Item of Form 10-K Location in 2014 Proxy Statement

Election of Directors.

Executive and Other Officers.

Corporate Governance.

Item Directors, Executive Officers and 10. Corporate Governance Code of Business Ethics and Conduct.*

Section 16(a) Beneficial Ownership Reporting and Compliance.

*The full text of our Code of Business Ethics and Conduct is available on

our website (www.progenics.com).

Executive Compensation.

Item 11. Executive Compensation Compensation Committee Report.

Compensation Committee Interlocks and Insider Participation.

Item Security Ownership of Certain Beneficial Owners and

12. Management and Related Stockholder Matters

Equity Compensation Plan Information. Security Ownership of Certain Beneficial

Owners and Management.

Item 13. Certain Relationships and Related Transactions, and

Director Independence

Certain Relationships and Related

Transactions.

Affirmative Determinations Regarding Director Independence and Other Matters.

Item Principal Accounting Fees and

14. Services

Fees Billed for Services Rendered by our Independent Registered Public

Accounting Firm.

Pre-approval of Audit and Non-Audit Services by the Audit Committee.

Table of Contents

PART IV

Item 15. Exhibits, Financial Statement Schedules

The following documents or the portions thereof indicated are filed as a part of this Annual Report.

(a) Documents filed as part of this Annual Report:

Consolidated Financial Statements of Progenics Pharmaceuticals, Inc.:

Reports of Independent Registered Public Accounting Firms

Consolidated Balance Sheets at December 31, 2013 and 2012

Consolidated Statements of Operations for the years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Cash Flows for the years ended December 31, 2013, 2012 and 2011

Notes to Consolidated Financial Statements

(b) Financial Statement Schedules

Schedule II – Valuation and Qualifying Accounts

Financial statement schedules referred to in Item 12-01 of Regulation S-X and not listed above are inapplicable and therefore have been omitted.

(c) Item 601 Exhibits

Exhibits required to be filed by Item 601 of Regulation S-K are listed in the Exhibit Index immediately following the signature page of this Report and incorporated herein by reference.

Table of Contents

PROGENICS PHARMACEUTICALS, INC. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Reports of Independent Registered Public Accounting Firms	F-2
Financial Statements:	
Consolidated Balance Sheets at December 31, 2013 and 2012	F-3
Consolidated Statements of Operations for the years ended December 31, 2013, 2012 and 2011	F-4
Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2013, 2012 and	F-5
<u>2011</u>	r-3
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2013, 2012 and 2011	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2013, 2012 and 2011	F-7
Notes to Consolidated Financial Statements	F-8
F-1	

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Progenics Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Progenics Pharmaceuticals, Inc. as of December 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for the years then ended. Our audits also included the financial statement schedule listed in the Index at Item 15(b). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Progenics Pharmaceuticals, Inc. at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Progenics Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated March 13, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP Hartford, Connecticut March 13, 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Progenics Pharmaceuticals, Inc.

In our opinion, the consolidated statements of operations, comprehensive income (loss), of stockholders' equity and of cash flows for the year ended December 31, 2011 present fairly, in all material respects, the results of operations and cash flows of Progenics Pharmaceuticals, Inc. and its subsidiaries for the year ended December 31, 2011, in conformity with accounting principles generally accepted in the United States of America. 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 audit. We conducted our audit of these statements 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP New York, New York March 15, 2012

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

CONSOLIDATED BALANCE SHEETS

(amounts in thousands, except for par value and share amounts)

	December 3 2012	31, 2012
Acceta	2012	2012
Assets Current assets:		
	\$65,860	\$58,838
Cash and cash equivalents Accounts receivable, net	2,879	6,937
Other current assets	1,943	1,692
Total current assets	70,682	
Auction rate securities	2,208	67,467 3,240
Fixed assets, at cost, net of accumulated depreciation and amortization	2,413	3,399
Intangible assets, net (Note 3)	31,379	5,599 -
Goodwill	7,702	-
Deferred tax assets – long term	7,702	2,052
Other assets	157	2,032 150
Total assets	\$114,541	\$76,308
Total assets	\$114,541	\$ 70,308
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	\$6,512	\$5,640
Deferred tax liability - current	ψ0,312 -	2,069
Deferred tax habitty - current Deferred revenue - current	_	838
Other current liabilities	115	115
Total current liabilities	6,627	8,662
Contingent consideration liability	15,700	-
Deferred tax liability - long term	12,321	_
Other liabilities	914	1,078
Total liabilities	35,562	9,740
Commitments and contingencies (Note 10)	33,302	2,740
Stockholders' equity:		
Preferred stock, \$.001 par value; 20,000,000 shares authorized; issued and outstanding – none	<u>. </u>	_
Common stock, \$.0013 par value; shares authorized - 160,000,000 in 2013 and 80,000,000 in		
2012; issued – 61,025,404 in 2013 and 46,765,472 in 2012	79	61
Additional paid-in capital	548,510	493,613
Accumulated deficit	(466,677)	
Accumulated other comprehensive loss	(192)	
Treasury stock, at cost (200,000 shares in 2013 and 2012)	(2,741)	
Total stockholders' equity	78,979	66,568
Total liabilities and stockholders' equity	\$114,541	\$76,308
Total Intelligent und modelinates equity	Ψ111,071	ψ / O,500
The accompanying notes are an integral part of the financial statements.		

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

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(amounts in thousands, except net (loss) income per share)

	Years Ended December 31,		
	2013	2012	2011
Revenues:		*	** *
Royalty income	\$5,923	\$4,963	\$3,046
Collaboration revenue	1,595	8,525	76,764
Research grants	275	488	4,810
Other revenues	69	72	176
Total revenues	7,862	14,048	84,796
Expenses:			
Research and development	33,903	31,840	53,183
License fees – research and development	567	1,170	578
Royalty expense	624	499	405
General and administrative	14,809	14,706	18,248
Depreciation and amortization	939	1,324	2,066
Total expenses	50,842	49,539	74,480
Operating (loss) income	(42,980)	(35,491)	10,316
Other income:			
Interest income	46	60	65
Total other income	46	60	65
Net (loss) income before provision for income taxes	(42,934)	(35,431)	10,381
Income tax benefit	362	-	-
Net (loss) income	\$(42,572)	\$(35,431)	\$10,381
Net (loss) income per share - basic		, ,	\$0.31
Weighted-average shares - basic	55,798	34,754	33,375
Net (loss) income per share - diluted	, ,	,	\$0.31
Weighted-average shares - diluted	55,798	34,754	33,494

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

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME (amounts in thousands)

	Years Ended December 31,		
	2013	2012	2011
Net (loss) income	\$(42,572)	\$(35,431)	\$10,381
Other comprehensive income:			
Net change in unrealized loss on auction rate securities	68	8	24
Total other comprehensive income	68	8	24
Comprehensive (loss) income	\$(42,504)	\$(35,423)	\$10,405

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

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

For the Years Ended December 31, 2013, 2012 and 2011 (amounts in thousands)

	Commor	n Stock	Additional		Accumula Other Compreh	Tı	easur	ry Stock	
	C1		Paid-In	Accumulated		C1			 1
Balance at December 31, 2010 Net loss	Shares 33,326	43 Amoun	\$453,353	Deficit \$ (399,055) 10,381	(Loss)) \$ (292			Amount \$(2,741)	Total \$51,308 10,381
Other comprehensive income Compensation expenses for share-based payment	-	-	-	-	24	-		-	24
arrangements	-	-	6,362	-	-	-		-	6,362
Forfeitures of restricted stock Sale of common stock under employee stock purchase plans		-	-	-	-	-		-	-
and exercise of stock options	758	1	3,725	-	-	-		-	3,726
Balance at December 31, 2011	34,046	44	463,440	(388,674) (268) (200)	(2,741)	71,801
Net income	-	-	-	(35,431) -	-		-	(35,431)
Other comprehensive income Compensation expenses for share-based payment	-	-	-	-	8	-		-	8
arrangements Sale of common stock in public offering, net of underwriting discounts and commissions (\$1,518) and	-	-	6,536	-	-	-		-	6,536
offering expenses (\$434)	12,650	17	23,331	-	-	-		-	23,348
Forfeitures of restricted stock Sale of common stock under employee stock purchase plans	(6)	-	-	-	-	-		-	-
and exercise of stock options	75	-	306	-	-	-		-	306
Balance at December 31, 2012	46,765	61	493,613	(424,105)	(260) (2	200)	(2,741)	66,568
Net loss	-	-	-	(42,572) -	-		-	(42,572)
Other comprehensive income Compensation expenses for share-based payment	-	-	-	-	68	-		-	68
arrangements Acquisition of subsidiary, net	-	-	3,546	-	-	-		-	3,546
of issuance costs Sale of common stock in public offering, net of underwriting discounts and commissions (\$2,581) and	4,472	6	11,214	-	-	-		-	11,220
offering expenses (\$351)	9,775	12	40,066	-	-	-		-	40,078

Forfeitures of restricted stock (1) - - - - - - - - - - - - - - - - T1

Exercise of stock options 14 - 71 - - - - - 71

Balance at December 31, 2013 61,025 \$ 79 \$ 548,510 \$ (466,677) \$ (192) (200) \$ (2,741) \$ 78,979

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

F-6

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS (amounts in thousands)

	Years End	ed December 2012	er 31, 2011
Cash flows from operating activities:			
Net (loss) income	\$(42,572)	\$(35,431)	\$10,381
Adjustments to reconcile net (loss) income to net cash (used in) provided by			
operating activities:			
Depreciation and amortization	939	1,324	2,066
Losses (gains) on sales of fixed assets	204	(327)	-
Intangible impairment charge	919	-	-
Deferred income tax	(362)	-	-
Change in contingent consideration liability	(200)	-	-
Expenses for share-based compensation awards	3,546	6,536	6,362
Changes in assets and liabilities:			
Decrease (increase) in accounts receivable	4,114	(5,421)	767
Decrease (increase) in other current assets	336	(754)	882
Decrease (increase) in deferred tax and other assets	2,044	(2,002)	1,050
(Decrease) in accounts payable and accrued expenses	(1,956)	(691)	(3,352)
(Decrease) increase in deferred revenue – current	(886)	634	204
(Decrease) increase in deferred tax and other current liabilities	(2,069)	2,069	3
(Decrease) increase in deferred revenue - long term	-	(162)	162
(Decrease) in other liabilities	(164)	(419)	(138)
Net cash (used in) provided by operating activities	(36,107)	(34,644)	18,387
Cash flows from investing activities:			
Cash acquired in acquisition of subsidiary	1,888	-	-
Capital expenditures	(137)	(767)	(226)
Proceeds from sales of fixed assets	174	390	-
Proceeds from redemption of auction rate securities	1,100	100	300
Net cash provided by (used in) investing activities	3,025	(277)	74
Cash flows from financing activities:			
Equity issuance costs in connection with acquisition of subsidiary	(45)	-	-
Proceeds from public offering of common stock, net of underwriting discounts and			
commissions and offering expenses	40,078	23,348	-
Proceeds from the exercise of stock options and sale of common stock under the			
employee stock purchase plans	71	306	3,726
Net cash provided by financing activities	40,104	23,654	3,726
Net increase (decrease) in cash and cash equivalents	7,022	(11,267)	22,187
Cash and cash equivalents at beginning of period	58,838	70,105	47,918
Cash and cash equivalents at end of period	\$65,860	\$58,838	\$70,105
Supplemental disclosure of cash flow information:			
Contingent consideration liability	\$15,700	\$-	\$-
Stock acquisition consideration	\$11,265	\$-	\$-

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

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(amounts in thousands, except per share amounts or as otherwise noted)

1. Organization and Business

Progenics Pharmaceuticals, Inc. ("Progenics," "we" or "us") develops innovative medicines for oncology. Our clinical development efforts center on late-stage oncology assets. We are conducting phase 2 clinical trials of two product candidates for prostate cancer: our therapeutic candidate, PSMA ADC, a fully human monoclonal antibody-drug conjugate (ADC), and 1404 (trofolastat), an imaging agent candidate, and resuming a pivotal phase 2 clinical trial of AzedraTM, our ultra-orphan radiotherapy candidate for pheochromocytoma. We have also decided to move forward MIP-1095, a compound originally developed by Molecular Insight, into clinical development, and expect to file an IND application in the U.S. later this year.

We have licensed our first commercial drug, Relistor[®] (methylnaltrexone bromide) subcutaneous injection for the treatment of opioid induced constipation (OIC), to Salix Pharmaceuticals, Inc., and have partnered other internally-developed or acquired compounds and technologies with third parties. We continue to consider opportunities for strategic collaborations, out-licenses and other arrangements with biopharmaceutical companies involving proprietary research, development and clinical programs, and may in the future also in-license or acquire additional oncology compounds and/or programs.

Our current principal sources of revenue from operations are royalty, commercialization milestone and revenue-sharing payments from Salix's Relistor operations. Royalty and milestone payments from Relistor depend on success in development and commercialization, which is dependent on many factors, such as Salix's efforts, decisions by the FDA and other regulatory bodies such as the July 2012 Complete Response Letter in respect of the Relistor chronic pain sNDA, competition from drugs for the same or similar indications, and the outcome of clinical and other testing of Relistor.

We fund our operations to a significant extent from capital-raising. During 2013, we completed an underwritten public offering of 9.8 million shares of common stock at a public offering price of \$4.40 per share, resulting in net proceeds of approximately \$40.1 million, and in early 2014 sold an additional 8.75 million shares at \$4.60 per share for net proceeds of approximately \$37.5 million.

Progenics commenced principal operations in 1988, became publicly traded in 1997 and throughout has been engaged primarily in research and development efforts, establishing corporate collaborations and related activities. Certain of our intellectual property rights are held by wholly owned subsidiaries. All of our operations are conducted at our facilities in Tarrytown, New York. We operate under a single research and development segment.

Funding and Financial Matters. At December 31, 2013, we held \$65.9 million in cash and cash equivalents, an increase of \$7.1 million from \$58.8 million at December 31, 2012. We expect that this amount, together with the additional 2014 public offering proceeds, will be sufficient to fund operations as currently anticipated beyond one year. We may require additional funding in the future, and if we are unable to conclude favorable collaboration, license, asset sale, capital raising or other financing transactions, we will have to reduce, delay or eliminate spending on some current operations, and/or reduce salary and other overhead expenses, to extend our remaining operations. We expect to incur operating losses during the near term. At December 31, 2013, cash, cash equivalents and auction rate securities increased \$6.0 million to \$68.1 million from \$62.1 million at December 31, 2012.

2. Acquisition of Molecular Insight Pharmaceuticals, Inc.

Molecular Insight's operations from January 18, 2013, the date we acquired this subsidiary which significantly expanded the Company's focus on PSMA as an oncology target while broadening the oncology pipeline, are included in the Consolidated Financial Statements. The acquisition consideration included 4,566,210 shares (500,000 of which were placed in an escrow expiring in April 2014) of Progenics common stock in a private transaction not taxable to Progenics. (The closing NASDAQ market price of Progenics' freely transferable common shares on January 18, 2013 was \$2.83 per share.) Under the acquisition agreement, Progenics also agreed to pay to the stockholders potential milestones, in cash or Progenics stock at Progenics' option, of up to \$23 million contingent upon achieving specified commercialization events and up to \$70 million contingent upon achieving specified sales targets relating to all MIP products. Of the 500,000 placed in escrow, shares have been returned to Progenics to date pursuant to financial adjustment provisions of the agreement.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

The acquisition was accounted for using the acquisition method of accounting, under which assets and liabilities of the acquired entity are recorded at their respective fair values as of the acquisition date (estimated as described below) and added to those of the acquiring entity. The difference between the estimated fair value of the acquisition consideration paid and fair value of the identifiable net assets represents potential future economic benefits arising from combining Progenics and MIP, taking into account a deferred tax liability related to in process research and development (IPR&D) intangible assets, and has been recorded as goodwill. The results of operations of MIP's business, the estimated fair market values of the assets acquired and liabilities assumed, and goodwill are included in our consolidated financial statements since the date of the acquisition.

During the year ended December 31, 2013, the Company incurred \$790 in transaction costs related to the acquisition, which primarily consisted of legal, accounting and valuation-related expenses and reduced additional paid-in capital in the first quarter of 2013 by \$45 for acquisition-related equity issuance costs. The transaction costs were recorded in general and administrative expenses in the accompanying consolidated statements of operations. During the year ended December 31, 2013, MIP's business contributed \$884 of revenues and \$11,379 of net loss.

Purchase Price Allocation: We have accounted for the Molecular Insight acquisition by allocating our estimate of the fair market value of the consideration we paid to the fair values of the assets acquired and liabilities assumed at the effective date of the acquisition, estimated using the valuation models summarized below. Given the uniqueness of and uncertainties attendant to the assets and liabilities, the derived values do not reflect actual transactions or quoted prices. Acquired intangible assets, including goodwill, are not deductible for tax purposes.

	Amount
Consideration:	
Progenics common stock consideration paid	\$11,265
Contingent consideration (pursuant to future milestone obligations)	15,900
Total consideration	27,165
Tangible assets acquired and liabilities assumed:	
Cash and cash equivalents	1,888
Accounts receivable	56
Other current assets	529
Fixed assets	249
Accounts payable, accrued expenses and deferred revenue - current	(2,876)
Deferred tax liability – long term	(12,683)
Total tangible assets acquired and liabilities assumed	(12,837)
Intangible assets – in process research and development	32,300
Total tangible and intangible assets acquired and liabilities assumed	19,463
Goodwill	\$7,702

Intangible assets and goodwill: In connection with the acquisition of Molecular Insight, in process research and development and goodwill are initially measured at estimated fair value and capitalized as an intangible asset. We perform an impairment test for these intangibles annually in the fourth quarter, unless impairment indicators require an earlier evaluation. Upon and subject to commercialization of the Company's product candidates, the IPR&D will be

amortized over its estimated useful life.

We valued as intangible assets the in process research and development projects acquired as follows:

(i) 1404, an imaging agent in phase 2 development, at an estimated fair value of \$23.2 million resulting from a probability adjusted discounted cash flow model which includes estimates of significant cash inflows beginning in 2017 and a 18% discount rate;

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

- (ii) Azedra, a small molecule candidate for the treatment of pheochromocytoma and paraganglioma in phase 2b development, and for neuroblastoma in phase 2a development, at an estimated fair value of \$4.9 million resulting from a probability adjusted discounted cash flow model which includes estimates of significant cash inflows beginning in 2017 and a 15% discount rate;
- (iii) small molecule candidate MIP-1095, in preclinical development for the treatment of prostate cancer, at an estimated fair value of \$2.7 million resulting from a probability adjusted discounted cash flow model which includes estimates of significant cash inflows beginning in 2021 and a 20% discount rate; and
- (iv) Onalta, a drug candidate in phase 2 development for the treatment of metastatic carcinoid and pancreatic neuroendocrine tumors, at an estimated fair value of \$1.5 million resulting from a probability adjusted discounted cash flow model which includes estimates of significant cash inflows beginning in 2014 and a 15% discount rate.

On the acquisition date, we recorded a contingent consideration liability at an estimated fair value of \$15.9 million resulting from probability adjusted discounted cash flow and Monte Carlo simulation models which include estimates of significant milestone payments to former MIP stockholders under the acquisition agreement ranging from 2016 to 2022 and risk adjusted discount rates ranging from 10% to 12.5%.

Pro forma financial information (unaudited): The following unaudited pro forma information presents the results of operations of the combined companies for the periods indicated as if the acquisition had been consummated on January 1, 2012, combining the respective historical results of Progenics and MIP for each period. Non-recurring transaction expenses of \$790, incurred in the year ended December 31, 2013, are reflected in the pro forma information as if these were incurred in the corresponding 2012 period, due to the pro forma assumption of January 1, 2012 as the date of the acquisition consummation.

	Three Months				
	Ended		Year Ended		
	December 31,		December	31,	
	2013	2012	2013	2012	
Revenues	\$2,968	\$12,801	\$7,867	\$18,235	
Net loss	(8,551)	(3,458)	(43,736)	(57,877)	
Basic and diluted loss per share	(0.14)	(0.08)	(0.78)	(1.48)	

3. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared on the basis of accounting principles generally accepted in the U.S. (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. On an ongoing basis, the Company evaluates its estimates, including but not limited to those related to collectability of receivables, intangible assets and contingencies. As additional information becomes available or actual amounts become determinable, the recorded estimates are revised and reflected in the operating results. Actual results could differ from those estimates.

Consolidation

The consolidated financial statements include the accounts of Progenics and PSMA LLC, as of and for the years ended December 31, 2013, 2012 and 2011 and Molecular from January 18, 2013, the date we acquired this subsidiary. Inter-company transactions have been eliminated in consolidation.

Revenue Recognition

We recognize revenue from all sources based on the provisions of the SEC's Staff Accounting Bulletin (SAB) No. 104 (SAB 104) and ASC 605 Revenue Recognition. Under ASC 605, delivered items are separate units of accounting, provided (i) the delivered items have value to a collaborator on a stand-alone basis, and (ii) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered items is considered probable and substantially in our control. A separate update to ASC 605 provides guidance on the criteria that should be met when determining whether the milestone method of revenue recognition is appropriate. F-10

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

If we are involved in a steering or other committee as part of a multiple-deliverable arrangement, we assess whether our involvement constitutes a performance obligation or a right to participate. For those committees that are deemed obligations, we will evaluate our participation along with other obligations in the arrangement and will attribute revenue to our participation through the period of our committee responsibilities. We recognize revenue for payments that are contingent upon performance solely by our collaborator immediately upon the achievement of the defined event if we have no related performance obligations. Reimbursement of costs is recognized as revenue provided the provisions of ASC 605 are met, the amounts are determinable and collection of the related receivable is reasonably assured.

Amounts received prior to satisfying the above revenue recognition criteria are recorded as deferred revenue. Amounts not expected to be recognized within one year of the balance sheet date are classified as long-term. The estimate of the classification of deferred revenue as short- or long-term is based upon the period in which we expect to perform joint committee services.

Royalty revenue is recognized in the period the sales occur, provided the royalty amounts are fixed or determinable, collection of the related receivable is reasonably assured and we have no remaining performance obligations under the arrangement providing for the royalty.

During the past three years, we also recognized revenue from sales of research reagents and from government research grants, awarded to us by the National Institutes of Health (NIH), which we used in proprietary research programs. NIH grant revenue is recognized as efforts are expended and as related program costs are incurred. We performed work under the NIH grants on a best-effort basis.

Under Molecular's 2013 license of certain research, development and commercialization rights to OnaltaTM, we received a \$0.2 million in upfront payment and are eligible for future milestone and royalty payments. In consideration for the upfront payment, we have delivered relevant know-how (including patent rights), inventory and non-reimbursable services.

In the fourth quarter of 2012, we out-licensed our C. difficile program to MedImmune, LLC for a \$5.0 million upfront payment, and the right to receive potential future milestone and royalty payments. In consideration for the upfront payment, we have delivered relevant know-how (including patent rights) and non-reimbursable services.

Under our 2012 agreement with CytoDyn Inc. for our PRO 140 program, we received \$3.5 million payment and are eligible for future milestone and royalty payments. In consideration for the upfront payment, we have delivered relevant know-how (including patent rights), inventory and non-reimbursable services.

Under our license agreement, Salix is responsible for further developing and commercializing Relistor worldwide other than Japan. In consideration of the \$60.0 million upfront payment from Salix, we have granted Salix an exclusive license of relevant know-how, patent rights and technology, assigned relevant third-party contracts, and served on joint committees provided for in the License Agreement through end of 2013.

These deliverables, which have stand-alone value and represent separate units of accounting, include (i) the exclusive license which was delivered for revenue recognition purposes during the 2011 second quarter, (ii) performing reimbursable development services at Salix's direction during the 2011 second quarter, the period in which we and Salix finalized the development plan, and (iii) joint committee services, which have been performed through 2013. We

determined that the license has stand-alone value as the license was delivered to Salix for revenue recognition purposes in the second quarter of 2011 and Salix is responsible for continuing research and development.

We developed a best estimate of selling price for each deliverable as vendor-specific objective evidence and third-party evidence was not available. We allocated the best estimate of selling price, on a relative basis, to each of the three units of accounting as the \$60.0 million upfront payment was the only payment from Salix which was fixed and determinable at the inception of the arrangement. As a result, \$58.4 million, \$1.1 million and \$0.5 million was allocated to the license, reimbursable development services and our participation in the joint committees as provided in the License Agreement, respectively. We recognized \$58.4 million for the license and relevant know-how, patent rights and technology and \$1.1 million for the reimbursable development services, respectively, during the second quarter of 2011, the period in which we delivered these items and performed the development services. We recognized \$0.2 million, \$0.2 million and \$59.6 million during 2013, 2012 and 2011, respectively. At December 31, 2012, the remaining deferred revenue of \$0.2 million, pertaining to joint committee services, was recognized as collaboration revenue in 2013, as such activities were performed.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

Ono is responsible for developing and commercializing subcutaneous Relistor in Japan, including conducting the clinical development necessary to support regulatory marketing approval. Ono will own the filings and approvals related to subcutaneous Relistor in Japan. In addition to the \$15.0 million upfront payment from Ono, we are entitled to receive up to an additional \$20.0 million, payable upon achievement by Ono of its development milestones. Ono is also obligated to pay to us royalties and commercialization milestones on sales by Ono of subcutaneous Relistor in Japan. Ono has the option to acquire from us the rights to develop and commercialize in Japan other formulations of Relistor, including intravenous and oral forms, on terms to be negotiated separately. Ono may request us to perform activities related to its development and commercialization responsibilities, beyond our participation in joint committees and specified technology transfer-related tasks, at its expense payable at the time we perform such services. Revenue earned from activities we perform for Ono is recorded in collaboration revenue. See Note 10.

Research and Development Expenses

Research and development expenses include costs directly attributable to the conduct of research and development programs, including the cost of salaries, payroll taxes, employee benefits, materials, supplies, maintenance of research equipment, costs related to research collaboration and licensing agreements, the purchase of in-process research and development, the cost of services provided by outside contractors, including services related to our clinical trials, the full cost of manufacturing drug for use in research, pre-clinical development and clinical trials. All costs associated with research and development are expensed as incurred.

At each period end, we evaluate the accrued expense balance related to these activities based upon information received from the suppliers and estimated progress towards completion of the research or development objectives to ensure that the balance is reasonably stated. Such estimates are subject to change as additional information becomes available.

Use of Estimates

Significant estimates include useful lives of fixed assets, the periods over which certain revenues and expenses will be recognized, including collaboration revenue recognized from non-refundable up-front licensing payments and expense recognition of certain clinical trial costs which are included in research and development expenses, the amount of non-cash compensation costs related to share-based payments to employees and non-employees and the periods over which those costs are expensed, the likelihood of realization of deferred tax assets and the assumptions used in the valuations of in-process research and development and contingent consideration liability.

Patents

As a result of research and development efforts conducted by us, we have applied, or are applying, for a number of patents to protect proprietary inventions. All costs associated with patents are expensed as incurred.

Net (Loss) Income Per Share

We prepare earnings per share (EPS) data in accordance with ASC 260 Earnings Per Share. Basic net (loss) income per share amounts have been computed by dividing net (loss) income by the weighted-average number of common shares outstanding during the period. For 2013 and 2012, we reported net losses and, therefore, potential common shares, amounts of unrecognized compensation expense and windfall tax benefits have been excluded from diluted net loss per share since they would be anti-dilutive. For 2011, we reported net income, and the computation of diluted

earnings per share is based upon the weighted-average number of our common shares and dilutive effect, determined using the treasury stock method, of potential common shares outstanding including amounts of unrecognized compensation expense. As of December 31, 2012 and 2011, 28 and 98, respectively, shares of unvested restricted stock outstanding have non-forfeitable rights to dividends; all such shares were vested at the end of December 31, 2013. The allocation of 2013 and 2012 net losses and the 2011 net income to these participating securities pursuant to the two-class method is not material to both basic and diluted earnings per share.

Concentrations of Credit Risk

Financial instruments which potentially subject Progenics to concentrations of risk consist principally of cash, cash equivalents, auction rate securities and receivables. We invest our excess cash in money market funds. We have established guidelines that relate to credit quality, diversification and maturity and that limit exposure to any one issue of securities. We hold no collateral for these financial instruments.

F-12

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

Cash and Cash Equivalents

We consider all highly liquid investments which have maturities of three months or less, when acquired, to be cash equivalents. The carrying amount reported in the balance sheet for cash and cash equivalents approximates its fair value. Cash and cash equivalents subject us to concentrations of credit risk. At December 31, 2013 and 2012, we have invested approximately \$60,364 and \$56,224, respectively, in cash equivalents in the form of money market funds with one major investment company and held approximately \$4,898 and \$2,614, respectively, in a single commercial bank.

Accounts Receivable

We estimate the level of accounts receivable which ultimately will be uncollectable based on a review of specific receivable balances, industry experience and the current economic environment. We reserve for affected accounts receivable an allowance for doubtful accounts, which at December 31, 2013 was \$7.

Auction Rate Securities

In accordance with ASC 320 Investments – Debt and Equity Securities, investments are classified as available-for-sale. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in comprehensive (loss) income. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income or expense. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense. In computing realized gains and losses, we compute the cost of its investments on a specific identification basis. Such cost includes the direct costs to acquire the securities, adjusted for the amortization of any discount or premium. The fair value of auction rate securities has been estimated based on a three-level hierarchy for fair value measurements. Interest and dividends on securities classified as available-for-sale are included in interest income (see Note 4).

At December 31, 2013 and 2012, our investment in auction rate securities (recorded as long-term assets in the Consolidated Balance Sheets) amounted to \$2,208 and \$3,240, respectively. Valuation of securities is subject to uncertainties that are difficult to predict, such as changes to credit ratings of the securities and/or the underlying assets supporting them, default rates applicable to the underlying assets, underlying collateral value, discount rates, counterparty risk, ongoing strength and quality of market credit and liquidity and general economic and market conditions. The valuation of the auction rate securities we hold is based on an internal analysis of timing of expected future successful auctions, collateralization of underlying assets of the security and credit quality of the security. We re-evaluated the valuation of these securities as of December 31, 2013 and the temporary impairment amount decreased \$68 from \$260 at December 31, 2012 to \$192. All income generated from these investments was recorded as interest income (see Note 4).

In-Process Research and Development and Goodwill

The fair values of in-process research and development (IPR&D) acquired in business combinations are capitalized. The Company utilizes the "income method," which applies a probability weighting that considers the risk of development and commercialization to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, patent protection,

historical pricing of similar products and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. This analysis is performed for each project independently. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets are amortized over the remaining useful life or written off, as appropriate. IPR&D intangible assets which are determined to have a decline in their fair value are adjusted downward and an expense is recognized as part of the general and administrative expenses in the Consolidated Statements of Operations. These are tested at least annually or when a triggering event occurs that could indicate a potential impairment.

Goodwill represents excess consideration in a business combination over the fair value of identifiable net assets acquired. Goodwill is not amortized, but is subject to impairment testing at least annually or when a triggering event occurs that could indicate a potential impairment. The Company determines whether goodwill may be impaired by comparing the fair value of the reporting unit, calculated as the product of shares outstanding and the share price as of the end of a period, to its carrying value. No goodwill impairment has been recognized as of December 31, 2013. The Company has determined that it has only one reporting unit, which includes the acquired Molecular Insight. F-13

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

The following table reflects the components of the finite lived intangible assets as of December 31, 2013:

			Net
	Gross	Accumulated	Carrying
	Amount	Amortization	Value
Finite lived intangible assets	\$ 21	\$ 2	\$ 19
Total	\$ 21	\$ 2	\$ 19

The weighted-average remaining life of the finite lived intangible assets is five years at December 31, 2013.

Amortization expense is calculated on a straight-line basis over the estimated useful life of the asset. Amortization expense for the period from January 18, 2013 to December 31, 2013 was \$2. Estimated amortization expense related to intangible assets existing as of December 31, 2013 is approximately \$4 annually for each of the succeeding five years.

The following table summarizes the activity related to the Company's goodwill and indefinite lived IPR&D:

	Goodwill	IPR&D
Balance at January 1, 2013	\$ -	\$-
Increase related to MIP acquisition	7,702	32,300
Reclassification to finite lived IPR&D	-	(21)
Impairment	-	(919)
Balance at December 31, 2013	\$ 7,702	\$31,360

Fair Value Measurements

In accordance with ASC 820 Fair Value Measurements and Disclosures, we use a three-level hierarchy for fair value measurements of certain assets and liabilities for financial reporting purposes that distinguishes between market participant assumptions developed from market data obtained from outside sources (observable inputs) and our own assumptions about market participant assumptions developed from the best information available to us in the circumstances (unobservable inputs). We assign hierarchy levels to assets constituting our available-for-sale portfolio and to our contingent consideration liability arising from the MIP acquisition based on our assessment of the transparency and reliability of the inputs used in the valuation. ASC 820 defines the three hierarchy levels as:

- · Level 1 Valuations based on unadjusted quoted market prices in active markets for identical securities.
- Level 2 Valuations based on observable inputs other than Level 1 prices, such as quoted prices for similar assets at the measurement date, quoted prices in markets that are not active or other inputs that are observable, either directly or indirectly.
- Level 3 Valuations based on unobservable inputs that are significant to the overall fair value measurement, which as noted above involve management judgment.

Recurring Fair Value Measurements

We believe the carrying amounts of the Company's cash equivalents, accounts receivable, other current assets, other assets (restricted cash providing collateral for a letter of credit securing lease obligations) and accounts payable and accrued expenses approximated their fair values as of December 31, 2013 and 2012, due to their short-term nature; we consider them Level 1 instruments.

The fair value of the contingent consideration liability, consisting of future potential milestone payments related to the MIP acquisition was \$15.7 million as of December 31, 2013 and \$15.9 million as January 18, 2013, the acquisition date (see Note 2). The fair value of the contingent consideration liability is categorized as a Level 3 instrument, as displayed in Note 4. The Company records the contingent consideration liability at fair value with changes in estimated fair values recorded in general and administrative expenses in the Consolidated Statements of Operations. As of December 31, 2013, we reassessed the fair value of the contingent consideration and recorded a \$0.2 million decrease, due to an increase in the discount period, and a corresponding credit in the general and administrative expenses in the fourth quarter of 2013. The December 31, 2013 contingent consideration of \$15.7 million results from probability adjusted discounted cash flow and Monte Carlo simulation models which include estimates of significant milestone payments to former MIP stockholders under the acquisition agreement ranging from 2017 to 2022 and risk adjusted discount rates ranging from 10% to 12.5%. F-14

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

Nonrecurring Fair Value Measurements

The Company's non-financial assets, such as intangible assets and property and equipment, are measured and recorded at fair value on the acquisition date, and if indicators of impairment exist, we assess recoverability by measuring the amount of any impairment by comparing the carrying value of the asset to its then-current estimated fair value (for intangible assets) or to market prices for similar assets (for property and equipment). If the carrying value is not recoverable we record an impairment charge as a general and administrative expense in the Consolidated Statements of Operations. The company reassessed the value of the indefinite lived intangible assets and recorded a non-cash charge to earnings of \$919 in the fourth quarter of 2013. This impairment was the result of change in the Level 3 assumptions: (i) the timing of the estimated beginning of cash inflows from 2014 to 2018 and (ii) an increase in discount rate from 15% to 18% for the Onalta intangible asset. In connection with the second quarter amendment of the Company's Tarrytown lease, we recognized impairment losses of \$347 on leasehold improvements and machinery and equipment removed from service which are included in Research and development expenses in our accompanying Consolidated Statements of Operations for the year ended December 31, 2013. As a result of closing our biologics pilot facilities in 2011, an impairment loss of \$22 was included in Research and development expenses in our accompanying Consolidated Statement of Operations during 2011. No impairments occurred for the year ended December 31, 2012.

Other current assets are comprised of prepaid expenses, interest, deferred tax asset and other receivables of \$1,943 and \$1,692 at December 31, 2013 and 2012, respectively, which are expected to be settled within one year. Restricted cash of \$157 and \$150 at December 31, 2013 and 2012, respectively, consists of collateral for a letter of credit securing lease obligations. We believe the carrying value of these assets approximates fair value.

Fixed Assets

Leasehold improvements, furniture and fixtures, and equipment are stated at cost. Furniture, fixtures and equipment are depreciated on a straight-line basis over their estimated useful lives. Leasehold improvements are amortized on a straight-line basis over the life of the lease or of the improvement, whichever is shorter. Costs of construction of long-lived assets are capitalized but are not depreciated until the assets are placed in service.

Expenditures for maintenance and repairs which do not materially extend the useful lives of the assets are charged to expense as incurred. The cost and accumulated depreciation of assets retired or sold are removed from the respective accounts and any gain or loss is recognized in operations. The estimated useful lives of fixed assets are as follows:

Computer equipment 3 years
Machinery and equipment 5-7 years
Furniture and fixtures 5 years

Leasehold improvements Earlier of life of improvement or lease

Deferred Lease Liability and Incentive

Our lease agreements include fixed escalations of minimum annual lease payments and we recognize rental expense on a straight-line basis over the lease terms and record the difference between rent expense and current rental payments as deferred rent. Deferred lease incentive includes a construction allowance from our landlord which is

amortized as a reduction to rental expense on a straight-line basis over the lease term. As of December 31, 2013 and 2012, the Consolidated Balance Sheets include the following: F-15

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

	2013	2012
Other current liabilities:		
Deferred lease incentive	\$115	\$115
Total other current liabilities	\$115	\$115
Other liabilities:		
Deferred lease liability	\$224	\$273
Deferred lease incentive	690	805
Total other liabilities	\$914	\$1,078

Income Taxes

We account for income taxes in accordance with the provisions of ASC 740 Income Taxes, which requires that we recognize deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined on the basis of the difference between the tax basis of assets and liabilities and their respective financial reporting amounts (temporary differences) at enacted tax rates in effect for the years in which the temporary differences are expected to reverse. A valuation allowance is established for deferred tax assets for which realization is uncertain.

In accordance with ASC 718 Compensation – Stock Compensation and ASC 505 Equity, we have made a policy decision related to intra-period tax allocation, to account for utilization of windfall tax benefits based on provisions in the tax law that identify the sequence in which amounts of tax benefits are used for tax purposes (i.e., tax law ordering).

Uncertain tax positions are accounted for in accordance with ASC 740 Income Taxes, which prescribes a comprehensive model for the manner in which a company should recognize, measure, present and disclose in its financial statements all material uncertain tax positions that we have taken or expect to take on a tax return. ASC 740 applies to income taxes and is not intended to be applied by analogy to other taxes, such as sales taxes, value-add taxes, or property taxes. We review our nexus in various tax jurisdictions and our tax positions related to all open tax years for events that could change the status of our ASC 740 liability, if any, or require an additional liability to be recorded. Such events may be the resolution of issues raised by a taxing authority, expiration of the statute of limitations for a prior open tax year or new transactions for which a tax position may be deemed to be uncertain. Those positions, for which management's assessment is that there is more than a 50 percent probability of sustaining the position upon challenge by a taxing authority based upon its technical merits, are subjected to the measurement criteria of ASC 740. We record the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. Any ASC 740 liabilities for which we expect to make cash payments within the next twelve months are classified as "short term." In the event that we conclude that we are subject to interest and/or penalties arising from uncertain tax positions, we will record interest and penalties as a component of income taxes (see Note 13).

Risks and Uncertainties

We have to date relied principally on external funding, collaborations with Salix, Fuji and others, out-licensing and asset sale arrangements, royalty and product revenue to finance our operations. There can be no assurance that our research and development will be successfully completed, that any products developed will obtain necessary marketing approval by regulatory authorities or that any approved products will be commercially viable. In addition,

we operate in an environment of rapid change in technology, and we are dependent upon satisfactory relationships with our partners and the continued services of our current employees, consultants and subcontractors. We are also dependent upon Salix, Fuji and Ono fulfilling their manufacturing obligations, either on their own or through third-party suppliers. For 2013, 2012 and 2011, the primary sources of our revenues were Salix, Ono, Fuji, asset out-licensing and disposition, and research grant revenues from the NIH. There can be no assurance that revenues from asset out-licensing and disposition, Salix, Ono and Fuji or from research awards will continue. Substantially all of our accounts receivable at December 31, 2013 and 2012 were from the above-named sources.

Comprehensive (Loss) Income

Comprehensive (loss) income represents the change in net assets of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Our comprehensive (loss) income includes net (loss) income adjusted for the change in net unrealized gain or loss on auction rate securities. The disclosures required by ASC 220 Comprehensive Income for 2013, 2012 and 2011 have been included in the Consolidated Statements of Comprehensive (Loss) Income. There was no income tax expense/benefit allocated to any component of Other Comprehensive (Loss) Income (see Note 13). F-16

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

Impact of Recently Adopted Accounting Standards

In February 2013, the FASB issued ASU No. 2013-02, which requires presentation of amounts reclassified out of accumulated other comprehensive income by component. The ASU is effective for reporting periods beginning after December 15, 2012. We adopted this new standard on January 1, 2013 and it had no material impact on our consolidated financial statements.

4. Fair Value Measurements

We record auction rate securities at fair value in the accompanying Consolidated Balance Sheets in accordance with ASC 320 Investments – Debt and Equity Securities. The change in the fair value of these securities is recorded as a component of other comprehensive (loss) income. We also record the contingent consideration liability resulting from the MIP acquisition at fair value in accordance with ASC 820-10-50.

The following tables present our money market funds, included in cash and cash equivalents, and auction rate securities assets and contingent consideration liability measured at fair value on a recurring basis as of the dates indicated, classified by valuation hierarchy:

		Fair Value December Quoted Prices in Active Markets for		013	ents	at
	Balance	Identical	_		Si	gnificant
	at	Assets	Obser	vable		nobservable
	December	(Level	Inputs		In	puts
	31, 2013	1)	(Level	2)	(L	Level 3)
Assets:						
Money market funds	\$ 60,364	\$60,364	\$	-	\$	-
Auction rate securities	2,208	-		-		2,208
Total Assets	\$ 62,572	\$60,364	\$	-	\$	2,208
Liability:						
Contingent consideration	\$ 15,700	\$-	\$	-	\$	15,700
Total Liability	\$ 15,700	\$-	\$	-	\$	15,700
		Fair Value			nts a	t
	D 1	December	-		α.	
	Balance	Quoted	Signific	ant	_	nificant
	at D	Prices	Other	1.1		observable
	December	in	Observa	able	Inp	
	31, 2012	Active	Inputs		(Le	evel 3)

```
Markets (Level 2)
                                 for
                                 Identical
                                 Assets
                                 (Level
                                 1)
Money market funds
                      $ 56,224
                                 $56,224 $
                                                       $ -
Auction rate securities
                       3,240
                                                          3,240
Total
                      $ 59,464
                                 $56,224 $
                                                       $ 3,240
```

At December 31, 2013, we hold \$2,208 in auction rate securities which are classified as Level 3. The fair value of these securities includes \$2,208 of U.S. government subsidized securities collateralized by student loan obligations, with maturities greater than 10 years. We will not realize cash in respect of the principal amount of these securities until the issuer calls or restructures the security, the security reaches any scheduled maturity and is paid, or a buyer outside the auction process emerges. As of December 31, 2013, we have received all scheduled interest payments on these securities, which, in the event of auction failure, are reset according to the contractual terms in the governing instruments.

<u>Table of Contents</u>
PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

The valuation of auction rate securities we hold is based on Level 3 unobservable inputs which consist of our internal analysis of (i) timing of expected future successful auctions or issuer calls of the securities, (ii) collateralization of underlying assets of the security and (iii) credit quality of the security. Significant increases (decreases) in the redemption period or discount rates would result in a significantly lower (higher) fair value measurement. In re-evaluating the valuation of these securities as of December 31, 2013, the temporary impairment amount, the duration of which is greater than 12 months, decreased from \$260 at December 31, 2012, to \$192, which is reflected as a part of accumulated other comprehensive loss on our accompanying Consolidated Balance Sheets and based on such re-evaluation, we believe that we have the ability to hold these securities until recovery of fair value. Due to the uncertainty related to the liquidity in the auction rate security market and therefore when individual positions may be liquidated, we have classified these auction rate securities as long-term assets on our accompanying Consolidated Balance Sheets. We continue to monitor markets for our investments and consider the impact, if any, of market conditions on the fair market value of our investments. We do not believe the carrying values of our investments are other than temporarily impaired and therefore expect the positions will eventually be liquidated without significant loss.

The estimated fair value of the contingent consideration liability of \$15.7 million represents future potential milestone payments to former MIP stockholders. The Company considers this liability a Level 3 instrument (one with significant unobservable inputs) in the fair value hierarchy. The estimated fair value was determined based on probability adjusted discounted cash flow and Monte Carlo simulation models that included significant estimates and assumptions pertaining to commercialization events and sales targets. The most significant unobservable inputs were the probabilities of achieving regulatory approval of the development projects and subsequent commercial success, and discount rates. Significant changes in any of the probabilities of success would result in a significantly higher or lower fair value measurement, respectively. Significant changes in the probabilities as to the periods in which milestones will be achieved would result in a significantly lower or higher fair value measurement, respectively. The Company records the contingent consideration liability at fair value with changes in estimated fair values recorded in general and administrative expenses in the Consolidated Statements of Operations.

The following table presents quantitative information pertaining to the fair value measurement of the Level 3 inputs: F-18

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

	Fair Value as of December 31, 2013	Valuation Technique	Unobservable Input	Range (Weighted Average)
Asset:				
Auction Rate Securities	\$ 2,208	Discounted cash flow model	Redemption period	5 to 15 years (6 years) 0.25% - 3.00%
Contingent consideration liability:			Discount rate	(1.55%)
Azedra		Probability adjusted discounted		
commercialization	\$ 2,300	cash flow model	Probability of success Period of milestone expected	40%
			achievement Discount rate	2017 10%
			Discount rate	10%
1404 commercialization	\$ 2,000	Probability adjusted discounted cash flow model	Probability of success Period of milestone expected	31%
			achievement	2018
			Discount rate	10%
MIP-1095	Φ.500	Probability adjusted discounted	D 1 177 C	100
commercialization	\$ 500	cash flow model	Probability of success Period of milestone expected	19%
			achievement	2021
			Discount rate	10%
Net sales targets	\$ 10,900	Monte-Carlo simulation	Probability of success Period of milestone expected	19% - 40% (32.8%)
			achievement Discount rate	2018 - 2022 12.5%
	Fair Value as of December			
	31, 2012		observable Input Range (Weigh	ted Average)

Asset:

4 to 15 years

Discounted cash flow model Redemption period (5.9 years) Auction Rate Securities \$ 3,240

Discount rate

0.125% - 2.102% (0.71%)

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

For those financial instruments with significant Level 3 inputs, the following table summarizes the activities for the periods indicated:

Description Balance at beginning of period	Asset – A Rate Secu Fair Valu Measurer Using Significat Unobserv Inputs (Level 3) 2013 \$3,240	urities ue ments nt vable
Transfers into Level 3	-	-
Total realized/unrealized gains (losses)		
Included in net income (loss) Included in comprehensive income (loss)	- 68	8
Settlements	(1,100)	
Balance at end of period	\$2,208	\$3,240
Total amount of unrealized gains (losses) for the period included in other comprehensive loss	, ,	. ,
attributable to the change in fair market value of related assets still held at the reporting date	\$-	\$-
	Liability Continge Consider Fair Valu Measurer Using Significa Unobserv Inputs (Level 3)	ent ation ne ments nt vable
Description	2013	2012
Balance at beginning of period	\$ -	\$ -
Fair value of contingent consideration – acquisition of Molecular Insight	15,900	-
Fair value adjustment to contingent consideration included in net loss	(200) -
Balance at end of period	\$ 15,700	\$ -
Changes in unrealized gains or losses for the period included in earnings (or changes in net assets) for liabilities held at the end of the reporting period	\$ (200) \$ -

The following tables summarize the amortized cost basis, the aggregate fair value and gross unrealized holding gains and losses at December 31, 2013 and 2012:

Amortized Fair Unrealized Holding 2013: Cost Basis Value Gain(Losses) Net

Edgar Filing: PROGENICS PHARMACEUTICALS INC - Form 10-K

Maturities greater than ten years:

	Amortized	Fair	Unrealized Holding
2012:	Cost Basis	Value	Gain(Losses) Net
Maturities greater than ten years:			
Auction rate securities	\$ 2,500	\$2,300	\$- \$ (200) \$(200)
Investments without stated maturity dates:			
Auction rate securities	1,000	940	- (60) (60)
	\$ 3,500	\$3,240	\$- \$ (260) \$(260)

We compute the cost of its investments on a specific identification basis. Such cost includes the direct costs to acquire the securities, adjusted for the amortization of any discount or premium.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

The following table shows the gross unrealized losses and fair value of our auction rate securities with unrealized losses that are not deemed to be other-than-temporarily impaired, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, at December 31, 2013 and 2012.

	Less than 12	12 Months or	
2013:	Months	Greater Total	
	Fair Unrealized	Fair Unrealized Fair	Unrealized
Description of Securities	ValueLosses	Value Losses Value	Losses
Auction rate securities	\$ - \$ -	\$2,208 \$ (192) \$2,208	\$ (192)
Total	\$ - \$ -	\$2,208 \$ (192) \$2,208	
	Less than 12	12 Months or	
2012:	Months	Greater Total	
2012.	Fair Unrealized		Unrealized
Description of Securities	Valudosses	Value Losses Value	Losses
Auction rate securities	\$ - \$ -	\$3,240 \$ (260) \$3,240	\$ (260)
Total	\$ - \$ -	\$3,240 \$ (260) \$3,240	

Other-than-temporary impairment analysis on auction rate securities. The unrealized losses on our auction rate securities resulted from an internal analysis of timing of expected future successful auctions, collateralization of underlying assets of the security and credit quality of the security. At December 31, 2013 there was one and at December 31, 2012, there were two securities with a gross unrealized loss position of \$192 and \$260 (\$2,208 and \$3,240 of the total fair value), respectively.

The severity of the unrealized losses for auction rate securities at December 31, 2013 and 2012 was 8 percent below amortized cost, and the weighted average duration of the unrealized losses for these securities was 70 and 58 months, respectively.

We have evaluated our individual auction rate securities holdings for other-than-temporary impairment and determined that the unrealized losses as of December 31, 2013 and 2012 are attributable to uncertainty in the liquidity of the auction rate security market. Because we do not intend to sell these securities, and believe it is not more likely than not that we would be required to sell these securities before recovery of principal, we do not consider these securities to be other-than-temporarily impaired at December 31, 2013 and 2012.

5. Accounts Receivable

Our accounts receivable represent amounts due to Progenics from collaborators, royalties, research grants and the sales of research reagents and as of December 31, 2013 and 2012, consisted of the following:

	2013	2012
Collaborators	\$12	\$6,125
Royalties	2,862	781
Research grants	-	12
Other	12	19

	2,886	6,937
Less, allowance for doubtful accounts	(7)	-
Total	\$2,879	\$6,937

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted) 6. Fixed Assets

Fixed assets as of December 31, 2013 and 2012 consisted of the following:

	2013	2012
Computer equipment	\$2,234	\$2,166
Machinery and equipment	7,091	8,031
Furniture and fixtures	170	133
Leasehold improvements	5,020	5,327
Other	16	12
	14,531	15,669
Less, accumulated depreciation and amortization	(12,118)	(12,270)
Total	\$2,413	\$3,399

At December 31, 2013 and 2012, \$2.0 million and \$2.6 million, respectively, of leasehold improvements, net were being amortized over periods of 8.5-10.8 years, under leases with terms through December 31, 2020.

7. Accounts Payable and Accrued Expenses

The carrying value of our accounts payable and accrued expenses approximates fair value, as it represents amounts due to vendors and employees, which will be satisfied within one year. Accounts payable and accrued expenses as of December 31, 2013 and 2012, consisted of the following:

	2013	2012
Accrued consulting and clinical trial costs	\$2,672	\$2,193
Accrued payroll and related costs	2,123	1,552
Restructuring accrual	-	813
Legal and professional fees	608	774
Accounts payable	793	229
Other	316	79
Total	\$6.512	\$5.640

8. Restructuring

We reduced headcount in the third and fourth quarters of 2011, resulting in a restructuring accrual of \$1.3 million for severance and related benefits which were paid through August 2012. We incurred other exit and contract termination costs, including expenses related to a lease amendment and consolidation of employees within reduced facility space. We also reduced headcount in the third quarter of 2012, resulting in a restructuring accrual of \$1.9 million which was paid through August 2013, and the first quarter of 2013, resulting in an approximately \$1.5 million restructuring accrual which was paid through the end of 2013. During the second quarter of 2013, we incurred other exit and contract termination costs, including lease termination and amendment and consolidation expenses (\$1,359).

Activity in the restructuring accrual, which is included in accounts payable and accrued expenses in our Consolidated Balance Sheets, and in research and development and general and administrative expenses in the Consolidated Statements of Operations, is specified below.

F-22

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

	Severance	;			
	and	Other	Contract	Total	
	Related	Exit	Termination	Restructur	ing
	Benefits	Costs	Costs	Accrual	
Balance at December 31, 2010	\$ -	\$-	\$ -	\$ -	
Additions, net	1,341	8	292	1,641	
Payments	(770) (2)	(138) (910)
Balance at December 31, 2011	571	6	154	731	
Additions, net	1,905	184	3	2,092	
Payments	(1,663) (190)	(157) (2,010)
Balance at December 31, 2012	813	-	-	813	
Additions, net	1,492	15	1,359	2,866	
Payments	(2,305) (15)	(1,359) (3,679)
Balance at December 31, 2013	\$ -	\$-	\$ -	\$ -	

9. Stockholders' Equity

We are authorized to issue 160.0 million shares of Common Stock, par value \$.0013, and 20.0 million shares of preferred stock, par value \$.001. The Board of Directors has the authority to issue common and preferred shares, in series, with rights and privileges as determined by the Board of Directors. In July 2013, we completed a public offering of 9,775 shares of common stock, with net proceeds of approximately \$40.1 million.

10. Commitments and Contingencies

a. Operating Leases

As of December 31, 2013, we leased office, manufacturing and laboratory space, under lease agreements expiring in December 2020.

Rental payments are recognized as rent expense on a straight-line basis over the term of the lease. In addition to rents due under these agreements, we are obligated to pay additional facilities charges, including utilities, taxes and operating expenses.

As of December 31, 2013, future minimum annual payments under all operating lease agreements are as follows:

	Minimum
	Annual
Years ending December 31,	Payments
2014	\$ 1,841
2015	1,887
2016	1,934
2017	1,983
2018	2,032
Thereafter	4,218
Total	\$ 13,895

Rental expense totaled approximately \$3,548, \$2,074 and \$3,475 for 2013, 2012 and 2011, respectively. For 2013 and 2012, amounts paid exceeded rent expense by \$164 and \$419, respectively, due to the recognition of lease incentives. For 2011, we recognized rent expense in excess of amounts paid of \$63, due to the recognition of escalation clauses and lease incentives. Additional facility charges, including utilities, taxes and operating expenses, for 2013, 2012 and 2011 were approximately \$2,330, \$2,845 and \$4,033, respectively. F-23

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

b. Licensing, Service and Supply Agreements

Progenics and its subsidiaries have entered into intellectual property-based license and service agreements in connection with product development programs, and have recognized milestone, license and sublicense fees and supply costs, included in research and development expenses, totaling approximately \$567, \$1,170 and \$578 during the last three years, respectively.

	Paid from		
	inception		
	to	(4)	
	December	Future (1)	
	31, 2013	Commitment	ts Terms
Progenics agreemen	ts with:		
			Annual license fee payments, milestones and royalties, as applicable,
Lonza Sales AG	\$ 909	\$ 824	in respect of oncology and other products.
PSMA LLC agreem	ents with:		
			Milestone and periodic maintenance payments to use ADC technology to link chemotherapeutic agents to monoclonal antibodies
Seattle Genetics,			that target prostate specific membrane antigen. ADC technology is
Inc.	4,400	13,900	based in part on technology licensed by SGI from third parties.
Amgen Fremont,			
Inc. (formerly			Milestones and royalties to use XenoMouse® technology for
Abgenix)	1,350	5,750	generating fully human antibodies to PSMA LLC's PSMA antigen.
Former member of	,	,	Annual minimum royalty payments and milestones to use technology
PSMA LLC	278	52,188	related to PSMA.
TOWNTELL	270	32,100	related to 1 51411.
	Paid from acquisition date to		
	December	Future (1)	
	31, 2013	Commitment	ts Terms
MIP agreements with:			

University of Zurich and the Paul			Annual maintenance and license fee payments, milestones and
Scherrer Institute	65	1,225	royalties in respect of licensed technology related to 1404.
University of			Annual minimum royalty, administration and milestone payments in
Western Ontario	4	374	respect of licensed technology related to Azedra.
Novartis Pharma			
AG and other			Milestone and royalty payments in respect of licensed technology
interests	-	4,600	related to Onalta.
Bayer Schering			Milestone and royalty payments in respect of licensed technology
Pharma AG	-	9,000	related to a MIP asset.

(1) Amounts based on known contractual obligations as specified in the respective license agreements, which are dependent on the achievement or occurrence of future milestones or events and exclude amounts for royalties which are dependent on future sales and are unknown.

We are seeking to out-license or terminate non-germane Molecular Insight licenses and service agreements, as to which we have paid \$216 through December 31, 2013, and have future commitments of \$3,453, subject to occurrence of future milestones or events.

c. Consulting Agreements

As part of our research and development efforts, we have from time to time entered into consulting agreements with external scientific specialists. These agreements contain various terms and provisions, including fees to be paid by us and royalties, in the event of future sales, and milestone payments, upon achievement of defined events, payable by us. Certain of these scientists are advisors to Progenics, and some have purchased our Common Stock or received stock options which are subject to vesting provisions. We have recognized expenses with regard to the consulting agreements of \$39, \$8 and \$27 for 2013, 2012 and 2011, respectively. Those expenses include the fair value of stock options granted during 2013 and 2011, which were fully vested at grant date, of approximately \$7 and \$11, respectively. Such amounts of fair value are included in research and development expense for each year presented (see Note 11).

<u>Table of Contents</u> PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

d. Retirement Agreement

On March 14, 2012, Progenics and company founder Paul J. Maddon entered into an agreement providing for his retirement as Chief Science Officer. In connection with Dr. Maddon's retirement and termination of his employment agreement, Progenics agreed to pay him an amount equal to \$1,789 and provide other benefits under the agreement.

e. Related Party Agreement

In December 2012, Progenics entered into a financial advisory agreement with MTS Health Partners, L.P., of which the Company's Board Chair is a Senior Managing Director and partner, on customary terms and conditions, whereby, in 2013, MTS has received monthly retainers totaling \$55 during the term of the agreement and \$300 for MTS' services in connection with the Molecular Insight acquisition described in Note 2. This agreement was terminated in June 2013.

f. Legal Proceedings

Progenics is a party to a proceeding brought by a former employee complaining that the Company violated the anti-retaliation provisions of the federal Sarbanes-Oxley law by terminating the former employee. The Company believes the former employee's claims are without merit and is contesting the matter vigorously. The federal District Court hearing the case issued in July 2013 an order denying our motion for summary judgment dismissing the former employee's complaint, making it likely that the proceeding will continue to trial. Given the inherent uncertainty attendant to the proceeding, it is not possible at this time to estimate the likelihood or potential magnitude of any outcome, and we have accordingly not recorded any associated liability in these Consolidated Financial Statements.

Progenics in October 2013 commenced an arbitration with Ono under the provisions of the parties' License Agreement, following a communication from Ono that it has determined to discontinue development of subcutaneous Relistor in Japan because of "commercial concerns" that Ono contends would permit it to cease development and terminate the Agreement. Under our Agreement with Ono, Ono may cease development of subcutaneous Relistor only if it terminates the License Agreement, which it may do unilaterally only if Progenics is in material default. Progenics is not in default under the Agreement, and Ono has neither asserted that Progenics is, nor terminated the Agreement.

11. Share-Based Payment Arrangements

Our share-based compensation to employees includes non-qualified stock options, restricted stock and shares issued under our Purchase Plans, which are compensatory under ASC 718 Compensation – Stock Compensation. During the second quarter of 2011, we accelerated the vesting of outstanding awards to non-management employees in connection with a change in program eligibility and termination of the Company's employee stock purchase plans. We account for share-based compensation to non-employees, including non-qualified stock options and restricted stock, in accordance with ASC 505 Equity.

Compensation cost for share-based awards will be recognized in our financial statements over the related requisite service periods; usually the vesting periods for awards with a service condition. We have made an accounting policy decision to use the straight-line method of attribution of compensation expense, under which the grant date fair value of share-based awards will be recognized on a straight-line basis over the total requisite service period for the total award.

We have adopted two stock incentive plans, the 1996 Amended Stock Incentive Plan (terminated in 2006) and the 2005 Stock Incentive Plan. Under these Plans as amended, up to 5,000 and 8,450 shares of common stock, respectively, have been reserved for the issuance of awards to employees, consultants, directors and other individuals who render services to Progenics (collectively, Awardees). The Plans contain anti-dilution provisions in the event of a stock split, stock dividend or other capital adjustment as defined. Each Plan provides for the Board or Committee to grant to Awardees stock options, stock appreciation rights, restricted stock, performance awards or phantom stock, as defined (collectively, Awards). The Committee is also authorized to determine the term and vesting of each Award and the Committee may in its discretion accelerate the vesting of an Award at any time. Stock options granted under the Plans generally vest pro rata over three to five years and have terms of ten years. Restricted stock issued under either Plan generally vested annually over three to five years, unless specified otherwise by the Committee. The exercise price of outstanding non-qualified stock options is usually equal to the fair value of our common stock on the date of grant. The exercise price of non-qualified stock options granted from the 2005 Plan and incentive stock options (ISO) granted from the Plans may not be lower than the fair value of our common stock on the dates of grant. At December 31, 2013, 2012 and 2011, all outstanding stock options were non-qualified options. The 2005 Plan will terminate in April 2015; options granted before termination of the Plans will continue under the respective Plans until exercised, cancelled or expired.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

We apply a forfeiture rate to the number of unvested awards in each reporting period in order to estimate the number of awards that are expected to vest. Estimated forfeiture rates are based upon historical data on vesting behavior of employees. We adjust the total amount of compensation cost recognized for each award, in the period in which each award vests, to reflect the actual forfeitures related to that award. Changes in our estimated forfeiture rate will result in changes in the rate at which compensation cost for an award is recognized over its vesting period.

Under ASC 718 Compensation – Stock Compensation, the fair value of each non-qualified stock option award is estimated on the date of grant using the Black-Scholes option pricing model, which requires input assumptions noted in the following table. Ranges of assumptions for inputs are disclosed where the value of such assumptions varied during the related period. Historical volatilities are based upon daily quoted market prices of our common stock on The NASDAQ Stock Market LLC over a period equal to the expected term of the related equity instruments. We rely only on historical volatility since it provides the most reliable indication of future volatility. Future volatility is expected to be consistent with historical; historical volatility is calculated using a simple average calculation; historical data is available for the length of the option's expected term and a sufficient number of price observations are used consistently. Since our stock options are not traded on a public market, we do not use implied volatility. For 2013, 2012 and 2011 our expected term was calculated based upon historical data related to exercise and post-termination cancellation activity; accordingly, for grants issued to employees and directors and officers (excluding our former CEO in 2011), we are using expected terms of 5.3 and 7.4 years, 5.4 and 7.4 years and 5.3 and 7.4 years, respectively. The expected term of stock options granted to our former CEO in 2011 was calculated separately from stock options granted to employees and directors and officers, and was 8 years for 2011. The expected term for options granted to non-employees was also calculated separately from stock options granted to employees and directors and officers and was ten years, which is the contractual term of those options. We have never paid dividends and do not expect to pay dividends in the future. Therefore, our dividend rate is zero. The risk-free rate for periods within the expected term of the options is based on the U.S. Treasury yield curve in effect at the time of grant. The following table presents assumptions used in computing the fair value of option grants during 2013, 2012 and 2011:

	2013	2012	2011
Expected volatility	73% – 90 %	70% - 85 %	68% - 78 %
Expected dividends	Zero	Zero	Zero
Expected term (years)	5.3 - 10	5.3 - 10	5.3 - 10
Weighted average expected term (years)	5.96	6.11	6.17
Risk-free rate	0.76% - 2.83%	0.57% - 1.71%	0.77% - 2.97%

A summary of option activity under the Plans as of December 31, 2013 and changes during the year then ended is presented below:

Options	Shares	Exercise	Weighted Average Remaining Contractual Term (Yr.)	Intrinsic
Outstanding at January 1, 2013	5,366	\$ 12.27		

Edgar Filing: PROGENICS PHARMACEUTICALS INC - Form 10-K

Granted	1,018	5.13		
Exercised	(14)	5.08		
Forfeited	(608)	10.63		
Expired	(463)	14.70		
Outstanding at December 31, 2013	5,299	10.89	5.82	\$ 304
Exercisable at December 31, 2013	3,875 \$	3 12.45	4.86	\$ 118

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

The weighted average grant-date fair value of options granted under the Plans during 2013, 2012 and 2011 was \$3.74, \$6.38 and \$5.51, respectively. The total intrinsic value of options exercised during 2013, 2012 and 2011 was \$11, \$174 and \$345, respectively.

The options granted under the Plans, described above, include non-qualified stock options granted to our former CEO on July 3, 2006. For the 2006 award, the requisite service period is the shortest of the explicit or implied service periods and the explicit service period for this award is nine years and 11 months from the grant date. On July 1, 2011 and March 1, 2012, we granted option awards to our CEO which vests on the basis of the achievement of specified performance-based milestones. The options have exercise prices equal to the closing price of our common stock on the dates of grant. The awards are valued using the Black-Scholes option pricing model. The expense related to the grants with performance and market-based milestones will be recognized over the shortest estimated time for the achievement of the performance or market conditions. The awards will not vest unless one of the milestones is achieved or the market condition is met. Changes in the estimate of probability of achievement of any performance or market condition will be reflected in compensation expense of the period of change and future periods affected by the change.

At December 31, 2013, the estimated requisite service periods for the 2006, 2011 and 2012 awards, described above, were 2.5, 1.0 and 1.0 years, respectively. For 2013, 2012 and 2011, the total compensation expense recognized for the performance-based options was \$0.1 million, \$2.0 million and \$0.4 million, respectively.

A summary of the status of our outstanding restricted stock awarded under the Plans as of December 31, 2013 and changes during the year then ended is presented below:

		Weighted	
		Average	
		Grant-Date	
Restricted Stock Awards	Shares	Fair Value	
Nonvested at January 1, 2013	28	\$ 5.35	
Granted	-	-	
Vested	(27)	5.35	
Forfeited	(1)	5.35	
Nonvested at December 31, 2013	-	\$ -	

Two employee stock purchase plans (the Purchase Plans), the 1998 Employee Stock Purchase Plan (the Qualified Plan) and the 1998 Non-Qualified Employee Purchase Plan (the Non-Qualified Plan), as amended, provided for the issuance of up to 4,400 and 1,100 shares of common stock, respectively. Issuances of common stock under the Purchase Plans, terminated by the Company during the second quarter of 2011, provided for the grant to all employees of options to use an amount equal to 25% of their quarterly compensation, as such percentage was determined by the Board of Directors prior to the date of grant, to purchase shares of our common stock at a price per share equal to the lesser of the fair market value of the common stock on the date of grant or 85% of the fair market value on the date of exercise. Options were granted automatically on the first day of each fiscal quarter and expired six months after the date of grant. The Qualified Plan was not available to employees owning more than five percent of the common stock and imposed certain other quarterly limitations on option grants. Options under the Non-Qualified Plan were granted to the extent that option grants were restricted under the Qualified Plan.

The fair value of shares purchased under the Purchase Plans was estimated on the date of grant in accordance with ASC 718 Compensation – Stock Compensation, via the same option valuation model used for options granted under the Plans, but with the following assumptions during 2011:

2011

Expected volatility 43% - 51 %

Expected dividends zero

Expected term 6 months

Risk-free rate 0.06% - 0.22%

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

Purchases of common stock under the Purchase Plans during 2011 are summarized as follows:

	Qualified Plan		Non-Qualified Plan	
		Weighted Average		Weighted Average
	Shares Purcha Reide Range	Grant-Date	Shares Purcha Reid e Range	Grant-Date Fair Value
2011	428 \$4.62 - \$5.65	\$ 0.88	162 \$4.62 - \$5.65	\$ 0.84

The total compensation expense of shares, granted to both employees and non-employees, under all of our share-based payment arrangements that was recognized in operations during 2013, 2012 and 2011 was:

	2013	2012	2011
Recognized as:			
Research and Development	\$2,524	\$4,568	\$4,499
General and Administrative	1,022	1,968	1,863
Total	\$3,546	\$6,536	\$6,362

No tax benefit was recognized related to such compensation cost because of the Company's net operating losses and the related deferred tax assets were fully offset by valuation allowance. Accordingly, no amounts related to windfall tax benefits have been reported in cash flows from operations or cash flows from financing activities for the periods presented.

As of December 31, 2013, there was \$4.4 million of total unrecognized compensation cost related to non-vested stock options under the 1996 and 2005 Plans. Those costs are expected to be recognized over a weighted average period of 2.1 years. Cash received from exercises under all share-based payment arrangements for 2013 was \$0.1 million. We issue new shares of our common stock upon share option exercises.

In applying the treasury stock method for the calculation of diluted EPS, amounts of unrecognized compensation expense and windfall tax benefits are required to be included in the assumed proceeds in the denominator of the diluted EPS calculation unless they are anti-dilutive. We incurred net losses for 2013 and 2012 and, therefore, such amounts have not been included in the calculations for those periods since they would be anti-dilutive. As a result, basic and diluted EPS are the same for the 2013 and 2012 periods. We reported net income for 2011 and included the dilutive effect of unrecognized compensation expense in the assumed proceeds in the denominator of the diluted EPS calculation. We have made an accounting policy decision to calculate windfall tax benefits/shortfalls, for purposes of diluted EPS calculation, excluding the impact of deferred tax assets. This policy decision will apply when we have net income and windfall tax benefits/shortfalls are realizable.

12. Employee Savings Plan

The terms of the amended and restated Progenics Pharmaceuticals 401(k) Plan (the Amended Plan), among other things, allow eligible employees to participate in the Amended Plan by electing to contribute to the Amended Plan a percentage of their compensation to be set aside to pay their future retirement benefits. During the three years ended December 31, 2013, we matched 50% of those employee contributions that are equal to 5%-8% of compensation and

are made by eligible employees to the Amended Plan (the Matching Contribution). In addition, we may also make a discretionary contribution each year on behalf of all participants who are non-highly compensated employees. We made Matching Contributions of approximately \$330, \$535 and \$597 to the Amended Plan for 2013, 2012 and 2011, respectively. No discretionary contributions were made during those years.

13. Income Taxes

We account for income taxes using the liability method in accordance with ASC 740 Income Taxes. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

F-28

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

There is no provision or benefit for federal or state income taxes for 2013, 2012 and 2011, other than \$0.4 million income tax benefit in 2013, resulting from the change in the temporary difference between carrying amounts of in-process research and development assets for financial reporting purposes and the amounts used for income tax purposes. We have completed a calculation through March 31, 2011, under Internal Revenue Code Section 382, the results of which indicate that past ownership changes will limit utilization of NOLs in the future. Ownership changes subsequent to March 31, 2011, may further limit the future utilization of net operating loss and tax credit carry-forwards as defined by the federal and state tax codes.

Deferred tax assets and liabilities as of December 31, 2013 and 2012, consisted of the following:

	2013	2012
Deferred tax assets:		
Depreciation and amortization	\$6,165	\$6,497
R&E tax credit carry-forwards	5,129	11,843
NYS investment tax credit carry-forwards	1,095	1,084
AMT credit carry-forwards	211	211
Net operating loss carry-forwards	190,263	112,966
Capitalized research and development expenditures	25,231	30,884
Stock compensation	13,826	14,436
Other items	1,097	2,193
Total gross deferred tax assets	243,017	180,114
Less: Valuation allowance	(243,017)	(178,045)
Deferred tax assets	-	2,069
Deferred tax liability - current	-	(2,069)
Deferred tax liability – long term	(12,321)	-
Net deferred tax liability	\$(12,321)	\$-

We do not recognize deferred tax assets considering our history of taxable losses and the uncertainty regarding our ability to generate sufficient taxable income in the future to utilize these deferred tax assets. For 2013 and 2012, we incurred net losses for tax purposes. For 2011, we had income for tax purposes and such amount was offset completely by our available net operating loss carry-forwards. We recognized a full tax valuation against deferred taxes at December 31, 2013. In 2012, we recognized deferred income tax assets, net of a valuation allowance, of \$2,069 (\$17 in current assets and \$2,052 in non-current assets) and in 2013 and 2012 we recognized deferred income tax liabilities of \$12,321 and \$2,069, respectively to reflect the net tax effects of temporary differences between the carrying amounts of certain assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The recognition of these deferred income tax assets and liabilities had no effect on our net loss for 2012, however, it resulted in \$362 income tax benefit for 2013.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

The following is a reconciliation of income taxes computed at the Federal statutory income tax rate to the actual effective income tax provision during 2013, 2012 and 2011:

	2013	2012	2011
U.S. Federal statutory rate	(34.0)%	(35.0)%	35.0 %
State income taxes, net of Federal benefit	(4.9)	(5.4)	8.0
Research and experimental tax credit	(3.6)	-	(4.1)
Change in valuation allowance	11.4	34.7	(22.6)
Effect of federal tax rate bracket change on valuation allowance	8.7	-	(34.8)
Equity compensation	3.1	4.2	17.0
Investment tax credit	(0.1)	-	(0.1)
NOL expiration – Section 382	18.6	-	-
Other	-	1.5	1.6
Income tax provision (benefit)	(0.8)%	0.0 %	0.0 %

As of December 31, 2013, we had available, for tax return purposes, unused federal NOLs of approximately \$513.8 million, which will expire in various years from 2018 to 2033, \$18.2 million of which were generated from deductions post January 1, 2006 that, when realized, will reduce taxes payable and will increase paid-in-capital and are not reflected in our deferred tax assets above. Additionally, \$11.2 million of the valuation allowance relates to NOLs attributable to excess tax deductions for equity compensation pre January 1, 2006. When realized this will also be reflected as an increase to paid-in-capital. Also, we had available, for tax return purposes, unused state NOLs of approximately \$453.1 million, which will expire in various years from 2019 to 2033.

We have reviewed our nexus in various tax jurisdictions and our tax positions related to all open tax years for events that could change the status of our ASC 740 Income Taxes liability, if any, or require an additional liability to be recorded. During 2013, 2012 and 2011, we had no unrecognized tax benefits resulting from tax positions during a prior or current period, settlements with taxing authorities or the expiration of the applicable statute of limitations, except for the \$0.4 million income tax benefit recognized in 2013, resulting from the change in the difference between carrying amounts of in-process research and development assets for financial reporting purposes and the amounts used for income tax purposes. We have not, as of yet, conducted a study of our research and development credit carry-forwards. Such a study might result in an adjustment to our research and development credit carry-forwards, but until a study is completed and any adjustment is known, no amounts are being presented as an uncertain tax position under ASC 740-10. A full valuation allowance has been provided against the Company's research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the statements of operations and comprehensive loss if an adjustment was required.

As of December 31, 2013, we are subject to federal and state income tax in the U.S. Open tax years relate to years in which unused net operating losses were generated or, if used, for which the statute of limitation for examination by taxing authorities has not expired. Our open tax years extend back to 1996. No amounts of interest or penalties were recognized in our Consolidated Statements of Operations or Consolidated Balance Sheets as of and for 2013, 2012 and 2011.

Our research and experimental (R&E) tax credit carry-forwards of approximately \$5.1 million at December 31, 2013 expire in various years from 2018 to 2033. During 2013, research and experimental tax credit carry-forwards of approximately \$20 expired. The American Taxpayer Relief Act of 2012, enacted on January 2, 2013, retroactively

reinstated the federal research and development credit for 2012 and extended these credits through 2013.

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued

(amounts in thousands, except per share amounts or as otherwise noted)

As of December 31, 2013, we have not recognized any liability for uncertain tax positions, because of our full valuation allowance. We will recognize interest and penalties related to these positions, should such costs be assessed. As of December 31, 2013, we have not recognized interest and penalties. The recognition of unrecognized tax benefits would not affect our effective tax rate because the tax benefit would be offset by an increase in our valuation allowance.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits for the year ended December 31, 2013.

	2013
Beginning uncertain tax benefits	\$2,661
Current year - increases	-
Current year - decreases	-
Settlements	-
Expired statuses	-
Ending uncertain tax benefits	\$2,661

14. Net Income (Loss) Per Share

Our basic net (loss) income per share amounts have been computed by dividing net (loss) income by the weighted-average number of common shares outstanding during the period. For 2013 and 2012, we reported net losses and, therefore, potential common shares were not included since such inclusion would have been anti-dilutive. For 2011, we reported net income, and the computation of diluted earnings per share is based upon the weighted-average number of our common shares and dilutive effect, determined using the treasury stock method, of potential common shares outstanding. As of December 31, 2012 and 2011, our 28 and 98, respectively, shares of unvested restricted stock with non-forfeitable rights to dividends were outstanding; all such shares were vested at the end of December 31, 2013. The allocation of 2012 net losses and the 2011 net income to these participating securities pursuant to the two-class method is not material to both basic and diluted earnings per share. The calculations of net loss per share, basic and diluted, are as follows:

		Weighted	
		Average	
	Net (Loss)	Common	Per
	Income	Shares	Share
	(Numerator)	(Denominator)	Amount
2013:			
Basic and diluted	\$ (42,572)	55,798	\$ (0.76)
2012:			
Basic and diluted	\$ (35,431)	34,754	\$ (1.02)
2011:			
Basic	\$ 10,381	33,375	\$ 0.31
Dilutive effect of stock options	-	66	
Dilutive effect of restricted stock	-	53	
Diluted	\$ 10,381	33,494	\$ 0.31

During 2013, 2012 and 2011, anti-dilutive common shares excluded from diluted per share amounts consist of the following: F-31

Table of Contents

PROGENICS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - continued (amounts in thousands, except per share amounts or as otherwise noted)

	2013	2012	2011
	Weighted	Weighted	Weighted
	Weighte Average	Weighte Average	Weighte Average
	AverageExercise	AverageExercise	AverageExercise
	Number Price	Number Price	Number Price
Options	5,969 \$ 11.54	5,947 \$ 12.32	4,543 \$ 14.92
Restricted stock	-	60	45
Total	5,969	6,007	4,588

15. Unaudited Quarterly Results (unaudited)

Summarized quarterly financial data during 2013 and 2012 are as follows:

	2013 Qua	rter Ended		
	March		September	December
	31	June 30	30	31
Revenues	\$2,226	\$1,801	\$867	\$ 2,968
Net loss	(11,258)	(12,263)	(10,500)	(8,551)
Net loss per share - basic and diluted	(0.22)	(0.24)	(0.17)	(0.14)
	2012 Qua	rter Ended		
	2012 Qua March	rter Ended	September	December
	_	rter Ended June 30	September 30	December 31
Revenues (1)	March		•	
Revenues (1) Net loss	March 31	June 30 \$1,820	30 \$ 1,117	31 \$ 8,885

⁽¹⁾ Revenues in the fourth quarter of 2012 include \$5.0 million and \$2.8 million from the MedImmune and CytoDyn Agreements, respectively.

16. Subsequent Event

During the first quarter of 2014, we established a \$150 million shelf registration statement (inclusive of approximately \$31.7 million of availability under a superseded registration) which we used for our recent underwritten public offering of 8.75 million shares of common stock at a public offering price of \$4.60 per share, resulting in net proceeds of approximately \$37.5 million.

Table of Contents

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

Allowance for Doubtful Accounts

			<u>Additi</u>	<u>ons</u>	<u>Dedu</u>	<u>ictions</u>		
			Charge	ed to	Acco	ounts		
			Genera	al and	Writ	ten		
	Begin	nning	admini	istrative	Off I	During	Enc	ling
Year ended December 31,	Balar	nce	expens	ses	Perio	od	Bal	ance
(in thousands)			-					
2013	\$	_	\$	7	\$	_	\$	7

Table of Contents

SIGNATURES

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

PROGENICS PHARMACEUTICALS,

INC.

By:/s/ MARK R. BAKER

Mark R. Baker

Chief Executive Officer and Director

(Principal Executive Officer)

Date: March 13, 2014

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

Signature	Capacity	<u>Date</u>
/s/ PETER J. CROWLEY Peter J. Crowley	Chairman	March 13, 2014
/s/ PAUL J. MADDON Paul J. Maddon, M.D., Ph.D.	Vice Chairman	March 13, 2014
/s/ MARK R. BAKER Mark R. Baker	Chief Executive Officer and Director (Principal Executive Officer)	March 13, 2014
/s/ KAREN J. FERRANTE Karen J. Ferrante, M.D.	Director	March 13, 2014
/s/ MICHAEL D. KISHBAUCH Michael D. Kishbauch	Director	March 13, 2014
/s/ DAVID A. SCHEINBERG David A. Scheinberg, M.D., Ph.D.	Director	March 13, 2014
/s/ NICOLE S. WILLIAMS Nicole S. Williams	Director	March 13, 2014
/s/ ANGELO W. LOVALLO, JR. Angelo W. Lovallo, Jr.	Vice President, Finance and Treasurer (Principal Financial and Accounting Officer)	March 13, 2014

Table of Contents

EXHIBIT INDEX

Exhibit	
Number *	Description
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2(2)	Amended and Restated By-laws of the Registrant.
4.1(3)	Specimen Certificate for Common Stock, \$0.0013 par value per share, of the Registrant.
10.5(4)	Amended and Restated 1996 Stock Incentive Plan‡
10.6.3(5)	Amended 2005 Stock Incentive Plan ‡
10.6.4(6)	Form of Non-Qualified Stock Option Award Agreement ‡
10.6.5(6)	Form of Restricted Stock Award Agreement ‡
10.7(7)	Form of Indemnification Agreement‡
10.8.2(8)	Retirement Agreement, dated as of March 14, 2012, between the Registrant and Dr. Paul J. Maddon‡
10.9(3)	Letter dated August 25, 1994 between the Registrant and Dr. Robert J. Israel‡
10.16(9)†	Development and License Agreement, dated April 30, 1999, between Protein Design Labs, Inc. and the Registrant.
	C
10.16.1(10)	Letter Agreement, dated November 24, 2003, relating to the Development and License Agreement between Protein Design Labs, Inc. and the Registrant.
10 10(11)+	
10.19(11)†	Exclusive Sublicense Agreement, dated September 21, 2001, between the Registrant and UR Labs, Inc.
10.19.1(12)	Amendment to Exclusive Sublicense Agreement, dated September 21, 2001, between the Registrant and
	UR Labs, Inc.
10.21.1(13)	Amended and Restated Agreement of Lease, dated October 28, 2009, between BMR-Landmark at
	Eastview LLC and the Registrant.
	Information concerning compensation of the Registrant's non-employee directors is included in the
10.23	Registrant's proxy material for its 2013 Annual Meeting of Stockholders and its Current Report on Form
	8-K filed on
	September 12, 2013 and is incorporated herein by reference.‡
	Option and License Agreement, dated May 8, 1985, by and between the University of Chicago and UR
	Labs, Inc., as amended by (i) Amendment to Option and License Agreement, dated September 17, 1987,
	by and between the University of Chicago and UR Labs, Inc., (ii) Second Amendment to Option and
10.25(14) †	License Agreement, dated March 3, 1989, by and among the University of Chicago, ARCH Development
	Corporation and UR Labs, Inc., and (iii) Letter Agreement Related to Progenics' Relistor In-License
	dated, December 22, 2005, by and among the University of Chicago, acting on behalf of itself and ARCH
	Development Corporation, the Registrant, Progenics Pharmaceuticals Nevada, Inc. and Wyeth, acting
	through its Wyeth Pharmaceuticals Division.
10.26(15)	Membership Interest Purchase Agreement, dated April 20, 2006, between the Registrant Inc. and Cytogen
	Corporation.
10.27(15) +	Amended and Restated PSMA/PSMP License Agreement, dated April 20, 2006, by and among the
10.27(13)	Registrant, Cytogen Corporation and I SWA Development Company LLC.
10.29(16) †	License Agreement, dated as of October 16, 2008, by and among Ono Pharmaceutical Co., Ltd. and the
10.29(10)	Registrant.
	Partial Termination and License Agreement, dated October 16, 2008, by and among Wyeth, acting
10.30(16) †	through Wyeth Pharmaceuticals Division, Wyeth-Whitehall Pharmaceuticals, Inc. and Wyeth-Ayerst
	Lederle, Inc. and the Registrant and Progenics Pharmaceuticals Nevada, Inc.
	Consent, Acknowledgment and Agreement, dated as of October 16, 2008, by and among Wyeth, acting
10.31(16) †	through Wyeth Pharmaceuticals Division, Wyeth-Whitehall Pharmaceuticals, Inc. and Wyeth-Ayerst
	Lederle, Inc., the Registrant and Ono Pharmaceutical Co., Ltd.
10.32(16) †	

2008 Agreement Related to Progenics' MNTX In-License, dated October 16, 2008, by and among the University of Chicago, acting on behalf of itself and ARCH Development Corporation, the Registrant, Progenics Pharmaceuticals Nevada, Inc. and Ono Pharmaceutical Co., Ltd.

E-1

Table of Contents

- 10.34(17) †Collaboration Agreement, effective June 14, 2005, by and between Seattle Genetics, Inc. and PSMA Development Company, LLC.
- 10.37(9) † License Agreement dated as of February 3, 2011, by and between Salix Pharmaceuticals, Inc., the Registrant, Progenics Pharmaceuticals Nevada, Inc. and Excelsior Life Sciences Ireland Limited.
- 10.37.1(9) 2010 Agreement Related to Progenics' MNTX In-License, dated February 3, 2011, by and among the University of Chicago, acting on behalf of itself and ARCH Development Corporation, the Registrant, Progenics Pharmaceuticals Nevada, Inc. and Salix Pharmaceuticals, Inc.

 Stock Purchase and Sale Agreement, dated January 16, 2013, by and between Molecular Insight
- 10.38(18) †Pharmaceuticals, Inc., its Stockholders, the Registrant, and Highland Capital Management, L.P., as Stockholders Representative.
- License Agreement, dated September 1, 2012, by and between FUJIFILM RI Pharma Co., Ltd. and Molecular Insight Pharmaceuticals, Inc.
- 10.40 †† License Agreement, dated May 2, 2012, between Molecular Insight Pharmaceuticals, Inc., the University of Zurich and the Paul Scherrer Institute.
- 10.41(19) License Agreement, dated as of December 15, 2000, between Molecular Insight Pharmaceuticals, Inc. and The Board of Governors of the University of Western Ontario.
- License Agreement, dated as of November 3, 2006, between Molecular Insight Pharmaceuticals, Inc. and Novartis Pharma AG, together with First Amendment, dated January 4, 2007, thereto.

 Controlled Equity OfferingSM Sales Agreement dated as of January 23, 2014, by and between the
- 10.43(20) Registrant and Cantor Fitzgerald & Co. (filed as Exhibit 1.1 to Registration Statement on Form S-3, Commission File No. 333-193521.
- Statement re computation of ratio of earnings (loss) to combined fixed charges and preferred stock dividends.
- 21.1 Subsidiaries of the Registrant.
- 23.1 Consent of PricewaterhouseCoopers LLP.
- 23.2 Consent of Ernst & Young LLP.
- Certification of Mark R. Baker, Chief Executive Officer of the Registrant pursuant to 13a-14(a) and Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended.
- Certification of Angelo W. Lovallo, Jr., Vice President, Finance & Treasurer of the Registrant pursuant to 13a-14(a) and Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended.
- Certification of Mark R. Baker, Chief Executive Officer of the Registrant pursuant to 18 U.S.C.
- Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- Certification of Angelo W. Lovallo, Jr., Vice President, Finance & Treasurer of the Registrant pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 101 Interactive Data File
- 101.INS XBRL Instance Document
- 101.SCH XBRL Taxonomy Extension Schema
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase
- 101.LAB XBRL Taxonomy Extension Label Linkbase
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase
- 101.DEF XBRL Taxonomy Extension Definition Document
- * Exhibits footnoted as previously filed have been filed as an exhibit to the document of the Registrant or other registrant referenced in the footnote below, and are incorporated by reference herein.
- (1) Previously filed in Current Report on Form 8-K filed on June 13, 2013.
- (2) Previously filed in Current Report on Form 8-K filed on March 16, 2012.
- (3) Previously filed in Registration Statement on Form S-1, Commission File No. 333-13627.

- (4) Previously filed in Registration Statement on Form S-8, Commission File No. 333-120508.
- (5) Previously filed in Current Report on Form 8-K filed on June 17, 2013.
- (6) Previously filed in Current Report on Form 8-K filed on July 8, 2008.
- (7) Previously filed in Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.
- (8) Previously filed in Quarterly Report on Form 10-Q for the quarter ended March 31, 2012.
- (9) Previously filed in Quarterly Report on Form 10-Q for the quarter ended June 30, 1999.
- (10) Previously filed in Annual Report on Form 10-K for the year ended December 31, 2004.
- (11) Previously filed in Annual Report on Form 10-K for the year ended December 31, 2002.
- (12) Previously filed in Current Report on Form 8-K filed on September 20, 2004.
- (13) Previously filed in Current Report on Form 8-K filed on November 28, 2012.
- (14) Previously filed in Annual Report on Form 10-K for the year ended December 31, 2005. E-2

Table of Contents

- (15) Previously filed in Quarterly Report on Form 10-Q for the quarter ended June 30, 2006
- (16) Previously filed in Annual Report on Form 10-K for the year ended December 31, 2008.
- (17) Previously filed in Amendment No. 2 to Annual Report on Form 10-K/A for the year ended December 31, 2009.
- (18) Previously filed in Quarterly Report on Form 10-Q for the quarter ended March 31, 2013.
- (19) Previously filed in Registration Statement on Form S-1, Commission File No. 333-129570 filed by Molecular Insight Pharmaceuticals, Inc.
- (20) Previously incorporated in Current Report on Form 8-K filed on January 24, 2014 by reference to Exhibit 1.1 to Registration Statement on Form S-3, Commission File No. 333-193521.
- † Confidential treatment granted as to certain portions omitted and filed separately with the Commission.
- †† Confidential treatment requested as to certain portions omitted and filed separately with the Commission.
- ‡ Management contract or compensatory plan or arrangement.

E-3