OXIGENE INC

FORM 10-K
(Annual Report)

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Telephone	650-635-7000
CIK	0000908259
Symbol	OXGN
SIC Code	2836 - Biological Products, Except Diagnostic Substances
Industry	Biotechnology & Drugs
Sector	Healthcare
Fiscal Year	12/31

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2015

OR

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

For the transition period from _____to _____

Commission File Number: 0-21990

OXiGENE, INC.

(Exact name of registrant as specified in its charter)

Delaware	**13-3679168**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
701 Gateway Boulevard, Suite 210 South San Francisco, CA	**94080**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code: (650) 635-7000

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 $.01 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 ☐ No ☒

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

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 ☒ No ☐

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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

The aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the common stock was last sold, as of June 30, 2015 was approximately $37,122,000.

As of March 23, 2016, the aggregate number of outstanding shares of common stock of the registrant was 26,544,934.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive Proxy Statement for the 2016 Annual Meeting of Stockholders are incorporated by reference into Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K.

SAFE HARBOR FOR FORWARD-LOOKING STATEMENTS UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report on Form 10-K ("Annual Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. We generally identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "could," "would," "intend," "target," "aim," "project," "contemplate," "believe," "estimate," "predict," "potential," "seek," "indicate," or "continue" or the negative of these terms or other similar words, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements regarding our or our management's expectations, hopes, beliefs, intentions or strategies regarding the future, such as our estimates regarding anticipated operating losses, future performance, future revenues and projected expenses; our liquidity and our expectations regarding our needs for and ability to raise additional capital; our ability to maintain the listing of our common stock on The NASDAQ Capital Market; our ability to select and capitalize on commercially desirable product opportunities as a result of limited financial resources; our ability to manage our expenses effectively and raise the funds needed to continue our business; our ability to retain the services of our current executive officers, directors and principal consultants; the competitive nature of our industry and the possibility that our products or product candidates may become obsolete; our ability to obtain and maintain regulatory approval of our existing products and any future products we may develop; the clinical development of and the process of commercializing CA4P, which is also known as combretastatin A4-phosphate, fosbretabulin or fosbretabulin tromethamine; the efficacy of the combination of CA4P with bevacizumab; the clinical development of and the process of commercializing OXi4503; the combination of OXi4503 with cytarabine; the initiation, timing, progress and results of our preclinical and clinical trials, research and development programs; regulatory and legislative developments in the United States and foreign countries; the timing, costs and other limitations involved in obtaining regulatory approval for any product; the further preclinical or clinical development and commercialization of our product candidates; our ability to obtain orphan drug exclusivity for some of our product candidates; the potential benefits of our product candidates over other therapies; our ability to enter into and maintain any collaboration with respect to product candidates; our ability to continue to develop or commercialize our products or product candidates in the event any license agreements in place with third parties expire or are terminated; the performance and conduct of third parties, including our third-party manufacturers and third party service providers used in our clinical trials; our ability to obtain and maintain intellectual property protection for our products and operate our business without infringing upon the intellectual property rights of others; the potential liability exposure related to our products and our insurance coverage for such exposure; the successful development of our sales and marketing capabilities; the size and growth of the potential markets for our products and our ability to serve those markets; the rate and degree of market acceptance of any future products; the volatility of the price of our common stock; the dilutive effects of potential future equity issuances; our expectation that no dividends will be declared on our common stock in the foreseeable future; our ability to maintain an effective system of internal controls; the payment and reimbursement methods used by private or governmental third-party payers; and other factors discussed elsewhere in this Annual Report or any document incorporated by reference herein or therein.

The words "may," "will," "should," "expect," "plan," "anticipate," "could," "would," "intend," "target," "aim," "project," "contemplate," "believe," "estimate," "predict," "potential," "seek," "indicate," or "continue" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. The forward-looking statements contained in this Annual Report are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described in the section titled "Risk Factors." Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. The sections captioned "Risk Factors" and "Business," as well as other sections in this Annual Report or incorporated by reference into this Annual Report, discuss some of the factors that could contribute to these differences.

The forward-looking statements made in this Annual Report relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events.

This Annual Report also contains market data related to our business and industry. These market data include projections that are based on a number of assumptions. While we believe these assumptions to be reasonable and sound as of the date of this Annual Report, if these assumptions turn out to be incorrect, actual results may differ from the projections based on these assumptions. As a result, the markets for our product candidates may not grow at the rates projected by these data, or at all. The failure of these markets to grow at these projected rates may have a material adverse effect on our business, results of operations, financial condition and the market price of our common stock.

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PART I

ITEM 1. *BUSINESS*

Our Business

Overview

We are a biopharmaceutical company focused on the development of vascular disrupting agents, or VDAs, for the treatment of cancer. VDAs selectively target the vasculature of cancer tumors and obstruct a tumor's blood supply without disrupting the blood supply to normal tissues. Treatment with VDAs has been shown to lead to significant central tumor necrosis, which refers to the death of cancer cells.

VDAs are in a class of drugs called vascular targeted therapies, or VTTs, which also includes anti-angiogenic agents, or AAs. There are over 12 AAs approved in the U.S. for over 15 different oncology indications, and according to Datamonitor, 2015 sales for AAs are estimated to exceed $10 billion. Genentech's bevacizumab (Avastin ®) has the greatest market share in the class, with 2015 estimated sales of approximately $6.7 billion. Bevacizumab and other AA drugs work by preventing the growth of new blood vessels which can supply nutrients to tumor cells.

We are seeking to realize the full potential of VTTs in oncology by using the combination of VDAs and AAs to treat cancer tumors. When VDAs and AAs are used in combination, our VDAs have been shown to directly cut off the blood supply to the interior of the tumor, while the AA inhibits angiogenesis, which is the process by which new blood vessels form and re-vascularize the tumor. Our current VDA development plans are focused on this combination, in which the mechanism of action of each drug complements that of the other — disrupting tumor blood supply in two different ways instead of just one. We believe that the indirect inhibition on angiogenesis (provided by the AA) combined with the direct effect on established tumor blood vessels (provided by the VDA) would result in a significantly greater benefit to patients than the anti-vascular effect of either drug alone. Our belief is supported by both clinical and preclinical studies, which demonstrate an increased benefit in terms of progression-free survival from treatment with our VDA, known as CA4P, when it is used in combination with approved AAs. Historically, however, the majority of our clinical trials have used VDAs as a single agent.

We are currently developing two clinical stage investigational drugs, both VDAs– CA4P and OXi4503. Our lead compound is CA4P, which is also known as combretastatin A4-phosphate, fosbretabulin tromethamine, fosbretabulin and ZYBRESTAT ®. The largest clinical trial of CA4P conducted to date was a recent phase 2 clinical trial in recurrent ovarian cancer sponsored by the Gynecologic Oncology Group, or GOG, which was completed in 2014 and met its primary endpoint by demonstrating an improvement in progression-free survival for the patients who received CA4P. This trial, referred to as GOG-0186I, compared treatment with CA4P plus bevacizumab to treatment with bevacizumab alone. Based on the positive results of this clinical trial, we plan to initiate a phase 2/3 clinical trial in platinum-resistant ovarian cancer, which will compare treatment with CA4P, bevacizumab and chemotherapy to treatment with bevacizumab and chemotherapy. CA4P is also being studied in combination with pazopanib (Votrient ®) in an on-going phase 1b/2 clinical trial in recurrent ovarian cancer that is sponsored by The Christie Hospital NHS Foundation Trust in the United Kingdom. Our second compound, OXi4503, is being studied in combination with cytarabine in a phase 1/2 clinical trial in the United States in patients with relapsed or refractory acute myeloid leukemia (AML) or myelodysplastic syndromes (MDS).

We have been granted orphan drug designation for CA4P for the treatment of ovarian cancer in the United States and the European Union, and for OXi4503 for the treatment of AML in the United States and the European Union.

To date, we have observed CA4P to be well tolerated in over 450 patients and to have clinical activity in a variety of indications in addition to ovarian cancer.

CA4P Development Program

CA4P is a reversible tubulin binding agent that selectively targets the endothelial cells that make up the blood vessel walls in most solid tumors. CA4P causes these endothelial cells to change into a balloon shape,

which obstructs the flow of blood to the tumor and starves the tumor of vital nutrients including oxygen. This deprivation, also known as tumor hypoxia, results in rapid downstream tumor cell death. Although CA4P acts rapidly, within minutes of infusion, and its circulating half-life is approximately 4 hours, the swelling effect caused by CA4P on the endothelial cells generally lasts for several weeks. CA4P is given to patients via a 10 minute intravenous infusion.

Our primary focus for 2016 will be the development of CA4P for platinum-resistant ovarian cancer.

Ovarian Cancer

Approximately 22,000 women in the U.S. are diagnosed with ovarian cancer each year. This form of cancer begins in the ovaries and often spreads to the rest of the pelvis and abdomen prior to detection, resulting in a relatively poor prognosis. More than 60% of women diagnosed with ovarian cancer are in stage III or IV, making ovarian cancer difficult to treat and often fatal, with a five-year survival rate of approximately 45% — a rate which is largely unchanged since the 1990s. Overall, approximately 80% of patients diagnosed with ovarian epithelial, fallopian tube, and primary peritoneal cancer will relapse after first-line platinum-based and taxane-based chemotherapy. When treating recurrent ovarian cancer, the time between receiving the last dose of platinum-based chemotherapy and disease recurrence is used to help determine the choice of chemotherapy used in the next line of treatment. Patients are said to have “platinum-resistant” disease if the disease progresses within six months of completing platinum-based chemotherapy. One quarter of those who relapse after initial treatment, or more than 4,300 women, will have platinum-resistant cancer, the most difficult-to-treat form of the disease. Additionally, a majority of patients who are not initially platinum-resistant and who may achieve a full remission following first-line therapy will also develop recurrent disease. There are relatively few cancer therapies that have been approved for the treatment of ovarian cancer including platinum-resistant cancer. Approved drugs include bevacizumab, carboplatin and cisplatin, gemcitabine, doxorubicin, paclitaxel and olaparib. Many patients eventually become resistant to platinum-based therapies, and new treatment agents are needed. Due to the unmet need in the treatment of ovarian cancer and the small size of the indication in terms of number of patients, we have been granted an orphan drug designation in both the U.S. and the European Union for the use of CA4P in the treatment of ovarian cancer.

CA4P in Combination with Bevacizumab—Completed Phase 2 Clinical Trial with Positive Results

Genentech’s bevacizumab is an anti-vascular endothelial growth factor, or VEGF, monoclonal antibody which has been approved for the treatment of ovarian cancer in the United States and elsewhere. The GOG-0186I clinical trial was conducted by the GOG, now part of NRG Oncology, under the sponsorship of the Cancer Therapy Evaluation Program (CTEP) of the National Cancer Institute (NCI), and was a randomized, two-arm phase 2 clinical trial evaluating CA4P plus bevacizumab compared to bevacizumab alone in patients with recurrent ovarian cancer.

The GOG-0186I clinical trial enrolled a total of 107 patients with both platinum-sensitive and platinum-resistant recurrent ovarian cancer at 67 clinical sites in the United States. The results indicated a statistically significant increase in progression-free survival (PFS) in the combination arm, which was the primary endpoint of the trial, with a p-value of 0.049 (pre-specified analysis using a one-sided test; 10% level of significance). The hazard ratio was 0.685, with a 90% 2-sided confidence interval (CI) of 0.47 ~1.00. Median PFS was 7.3 months for CA4P plus bevacizumab (n=54), compared to 4.8 months for bevacizumab alone (n= 53). Patients in both arms were treated until disease progression or adverse effects prohibited further therapy.

In a post-hoc subgroup analysis, data showed that patients who were platinum-resistant had an even greater improvement in PFS with the combination. Among the 27 patients who were platinum-resistant, median PFS was 6.7 months for those receiving CA4P plus bevacizumab compared to 3.4 months for those receiving bevacizumab alone, and the results were statistically significant with a p-value of 0.01 and a hazard ratio of 0.57. These findings suggest that adding CA4P to bevacizumab has a greater effect in the difficult-to-treat platinum-resistant patient group than it does for platinum-sensitive patients. Although the results were stronger for the platinum-resistant patients, a post-hoc subgroup analysis among the 80 patients who were platinum-sensitive still showed a numerical improvement in PFS for the combination therapy, with a median PFS of 7.6 months for those receiving

CA4P plus bevacizumab compared to 6.1 months for those receiving bevacizumab alone, although the results were not statistically significant, with a p-value of 0.139 and a hazard ratio of 0.67.

In the clinical trial, patients with measurable disease who received the combination of CA4P and bevacizumab also achieved a higher objective response rate, or ORR, a secondary endpoint in the clinical trial, measured according to RECIST criteria. Although not a statistically significant result, patients receiving the combination had an ORR of 35.7% (n=42; CI 90% 23.5 ~ 49.5%) compared to 28.2% for patients on bevacizumab alone (n=39; CI 90% 16.7 ~ 42.3%). In the subgroup of platinum-resistant patients, the addition of CA4P to bevacizumab increased ORR to 40.0% (n=10) compared to 12.5% (n=8) for bevacizumab alone.

Additional secondary endpoints in the clinical trial included safety and overall survival. All adverse events in the clinical trial were manageable, with one Grade 4 event occurring in each treatment arm. Consistent with prior clinical experience with CA4P, patients in the combination arm experienced an increased incidence of Grade 3 hypertension compared to the control arm (18 cases for the combination compared to 10 cases for bevacizumab alone). One patient on the combination regimen had a Grade 3 thromboembolic event. All cases of hypertension were managed with anti-hypertensive treatments, as specified in the clinical trial protocol.

Patients continue to be followed for overall survival (OS). A preliminary analysis after 33 events did not demonstrate a statistically significant difference in OS between the clinical trial arms; however, these OS data were not sufficiently mature to yield any meaningful conclusions. Further analyses of this secondary endpoint will be conducted as the data matures.

The approval of bevacizumab in the U.S. in combination with chemotherapy (paclitaxel, pegylated liposomal doxorubicin, or topotecan) for the treatment of women with platinum-resistant ovarian cancer was based on results from the phase 3 AURELIA trial, which had a primary endpoint of PFS. Bevacizumab is also approved in the EU in combination with different chemotherapy regimens for platinum-resistant and platinum-sensitive ovarian cancer, and the EU approvals were also based on PFS.

CA4P in Combination with Bevacizumab and Physician's Choice Chemotherapy—Phase 2/3 Clinical Trial Planned

Based on the positive overall results from the GOG-0186I clinical trial in recurrent ovarian cancer and also the statistically significant results among the subgroup of platinum-resistant patients, we plan to initiate the FOCUS Study, a phase 2/3 clinical trial of CA4P seeking to demonstrate whether CA4P improves the current standard of care for platinum-resistant ovarian cancer. The current standard of care for platinum-resistant ovarian cancer is treatment with bevacizumab and chemotherapy. The clinical trial is designed with two stages – in the first stage we plan to enroll up to 80 patients and conduct regular interim analyses in order to verify efficacy and confirm powering assumptions for the second stage. In the second stage, we plan to enroll up to 356 additional patients and do not plan to conduct any interim analyses. The primary endpoint of our phase 2/3 clinical trial will be PFS, and we will also evaluate overall response rate, overall survival and other parameters. If results from the second stage of the clinical study meet the primary endpoint, we intend to submit a New Drug Application, or NDA, to the U.S. Food and Drug Administration, or FDA. We expect to begin enrolling patients into this clinical trial during the second quarter of 2016.

CA4P in Combination with Pazopanib—Ongoing Phase 1b Clinical Trial moving into Phase 2

Pazopanib is an anti-angiogenic oral tyrosine kinase inhibitor that is currently approved by the FDA for the treatment of renal cell carcinoma (RCC) and soft tissue sarcoma (STS). Pazopanib is also approved for ovarian and other cancers in the European Union, and was initially developed by GlaxoSmithKline, then sold to Novartis in 2015. We believe that using CA4P in combination with pazopanib may provide a clinically active yet potentially better tolerated alternative to the current standard of care, cytotoxic chemotherapy, for relapsed ovarian cancer.

In October 2014, the first patient was enrolled in a phase 1b/2 trial of pazopanib with and without CA4P in advanced recurrent ovarian cancer. We will incur limited costs for this trial, which is sponsored by The Christie Hospital NHS Foundation Trust and coordinated by the Manchester Academic Health Science Centre, Trials

Coordination Unit, or MAHSC-CTU, with additional support from The University of Manchester, the Royal Marsden NHS Foundation Trust and Mount Vernon Cancer Centre (part of the East and North Hertfordshire NHS Trust).

The trial design consists of a phase 1b dose escalation portion with the combination of pazopanib and CA4P, which has been completed, and then a randomized phase 2 portion comparing pazopanib alone versus pazopanib plus CA4P in patients with relapsed ovarian cancer. The clinical trial is expected to enroll approximately 128 patients at sites in the U.K. The primary endpoint of the trial is PFS, and secondary endpoints include safety, overall survival, objective response rate, and CA125 response rate. The phase 2 portion is expected to begin enrolling patients in the second quarter of 2016.

Neuroendocrine Tumors

Approximately 14,000 patients in the U.S. are diagnosed with neuroendocrine tumors, or NETs, each year. Since patients with NETs can have prolonged survival rates of over 5 years, it is estimated that the overall prevalence is much higher, approximating 100,000 patients in the U.S. These tumors can produce increased amounts of vasoactive substances including hormones, many of which are biologically active and can result in debilitating symptoms including flushing, diarrhea, weight loss and, less frequently, bronchoconstriction and heart failure. It is our belief, based on the available preclinical data, that by reducing blood flow to these highly vascular tumors using CA4P, we may be able to reduce the production of tumor-derived substances, including the biologically active hormones. We are completing a phase 2 monotherapy clinical trial of CA4P in 18 patients with gastrointestinal or pancreatic NETs and elevated biomarkers. The primary endpoint of the trial is a reduction in biomarkers, and secondary endpoints include symptom control and changes in quality of life as assessed by validated measures. We estimate that initial data from the trial will be available by the third quarter of 2016.

We have been granted orphan drug designation for CA4P for the treatment of neuroendocrine tumors in the United States and the European Union.

Glioblastoma Multiforme

We are exploring recurrent glioblastoma multiforme, or GBM, as an additional indication for CA4P because:

- we have strong preclinical data that demonstrate a positive treatment effect in GBM tumor models,
- similar to ovarian cancer tumors, GBM tumors are highly vascular and thus we believe will be quite susceptible to CA4P's mechanism of action,
- there are currently no adequate therapies for most GBM patients, and accordingly the indication has a high unmet medical need,
- bevacizumab is approved for patients that do not respond to first line chemotherapy, and
- rapid enrollment would be expected in clinical trials for this indication.

If funds become available for us to initiate and complete a clinical trial in GBM, we expect that we would pursue such a trial, with a similar two-stage phase 2/3 design in combination with bevacizumab as we are pursuing in platinum-resistant ovarian cancer. However, we currently do not plan to initiate a GBM clinical trial in the near term in order to conserve current resources.

Anaplastic Thyroid Cancer, or ATC

We have previously conducted a randomized, controlled clinical trial in ATC. ATC is one of the most aggressive tumors known and has very few treatment options. Results of the FACT Study, which combined CA4P with chemotherapy and which, in 2010, we terminated early (after 75 patients were enrolled) due to slow enrollment, showed a numerical improvement in overall survival for the CA4P group (5.2 months) compared to the control group (4.0 months), although the results were not statistically significant. Results also showed an

improvement in overall response rate for the CA4P group (20.0%) compared to the control group (16.0%), although these results were not statistically significant either. We believe the numerical improvements shown for the CA4P group compared to the control group provide supportive evidence for the potential benefit of CA4P against this tumor type, and for the overall potential of CA4P against other highly vascular solid tumors.

Non-Small Cell Lung Carcinoma, or NSCLC

We have previously conducted a randomized, controlled clinical trial in NSCLC. NSCLC accounts for most cases of lung cancer, and generally does not respond well to chemotherapy. Results of the FALCON Study, completed in 2011, which enrolled 63 patients and combined CA4P with both bevacizumab and chemotherapy, showed a numerical improvement in overall response rate for the CA4P group (56.3%) compared to the control group (35.5%), although the results were not statistically significant. This clinical trial enrolled chemotherapy-naïve patients, which are patients who have not yet received chemotherapy, which we believe contributed to the high dropout rate among both treatment groups (46.8% and 38.7% for CA4P and control, respectively), making evaluation of progression free survival, the primary endpoint, difficult. However, we believe the numerical improvements in response rates shown for the CA4P group compared to the control group provide supportive evidence for the potential benefit of CA4P against this tumor type, and for the overall potential of CA4P against other highly vascular solid tumors.

OXi4503 Development Program

In addition to pursuing development of CA4P, we are also pursuing the development of a second product candidate, OXi4503, a novel, dual-mechanism VDA, which not only has been shown to reduce tumor blood flow but which also forms a potentially anti-proliferative metabolite. We believe that this dual mechanism of OXi4503 may result in enhanced anti-tumor activity in certain tumor types. Based on preclinical data, we believe that OXi4503 may be particularly active in hepatocellular carcinoma, melanoma, and leukemias of the myeloid lineage, all of which have relatively high levels of the enzymes that facilitate the conversion of OXi4503 into a metabolite that directly kills tumor cells. Similar to CA4P, OXi4503 has shown potent anti-tumor activity in preclinical studies of solid tumors and AML, and in two clinical studies in advanced solid tumors and liver tumors, both as a single agent and in combination with other anti-proliferative agents.

Acute Myeloid Leukemia

AML is a relatively rare cancer of the myeloid blood cells, with approximately 10,500 new cases each year in the United States and accounting for approximately 1.2% of cancer deaths. AML is characterized by the rapid growth of abnormal white blood cells that pollute bone marrow and interfere with the production of normal blood cells. Due to an unmet need in the treatment of AML and the small size of the indication, we have been granted orphan drug designation in the United States and European Union for the use of OXi4503 for the treatment of AML.

Prior to October 2015, OXi4503 had been in development in an investigator-sponsored phase 1 clinical trial of patients with AML or MDS, a disorder of the normal blood formation process, being conducted at the University of Florida and with support by The Leukemia & Lymphoma Society's Therapy Acceleration Program. This open-label, dose-escalating clinical trial was intended to treat up to 36 patients and evaluate the safety profile, maximum tolerated dose and biologic activity of OXi4503 in these patients. Through October 2015, 18 patients had been enrolled into this clinical trial and a maximum tolerated dose had not been observed. In October 2015, the investigator-sponsored clinical trial was closed, and we brought the clinical trial under our direct management and expanded the number of sites to four, with the goal of enrolling patients faster than had occurred at a single site. In December 2015, we moved this clinical trial into its second stage, whereby OXi4503 is being used in combination with cytarabine, an FDA-approved drug for the treatment of AML.

Data from the investigator-sponsored trial was presented at the December 2013 annual meeting of the American Society of Hematology, or ASH, in New Orleans, Louisiana. Among the first 13 patients treated at the two lowest dose levels, two patients showed stable disease, one patient had a partial remission and one patient achieved a complete bone marrow response. Side effects included increases in D-dimer (a substance in the blood

that is released when a blood clot breaks up), bone pain, fever, chills and flu-like symptoms. Accordingly, OXi4503 appears to be reasonably well-tolerated based on these results to date in patients with relapsed and refractory AML and MDS. Biological activity associated with OXi4503 includes temporary increases in D-dimer which may be related to anti-leukemic activity of the drug.

Vascular Disrupting Agents: Background

According to Cancer Research UK, a non-profit cancer research organization in the United Kingdom, nearly 90% of all cancers are solid tumors that are dependent upon a continually evolving vascular supply for their growth and survival. VTTs, which include AAs and VDAs, are designed to interfere with a tumor's vascular supply.

AAs are drugs that interfere with tumor blood vessel growth, as described further in the table below, and since 2004, a number have been approved for a variety of cancer indications. Development of AAs for new indications continues, and physician adoption of AAs has been rapid. VDAs are drugs that interfere with existing tumor blood vessels. Although a number of VDAs have been in clinical development, to date none have been approved. We believe that the historical focus on development of VDAs as a single agent, rather than as an agent for use in combination with an AA, is the primary reason that VDA development to date has generally not been successful.

While VDAs such as CA4P deprive tumors of blood supply, as do AAs, the mechanism of action of VDAs is quite different than that of AAs. VDAs such as CA4P have a direct effect on existing tumor blood vessels, and act by rapidly obstructing the blood supply to cancer tumors. AAs, on the other hand, act by preventing the formation of new blood vessels to cancer tumors. We believe that our VDA drug candidates and approved AAs are complementary to each other in that one agent destroys existing tumor vasculature and the other prevents new tumor vasculature from forming. We intend for substantially all of our future CA4P development to be focused on this combination, rather than pursuing CA4P approval as a single therapy. We believe our VDAs are a second generation of VTTs that have the potential to improve upon the efficacy of AAs, the first generation of VTTs. Our belief in the synergy of CA4P and AAs is supported by the data we have gathered showing an improvement in certain patient outcomes when both agents are used in combination. Several preclinical studies, as well as the results of the phase 2 GOG-0186I clinical trial, have confirmed the potential of this approach.

As illustrated in the table below, VDA and anti-angiogenic drugs act via different mechanisms to produce complementary biological and anti-vascular effects with mostly non-overlapping side effects. In preclinical studies, VDA plus anti-angiogenic drug combinations demonstrate robust and additive anti-tumor effects. Results from initial human clinical trials conducted by us with combinations of CA4P and bevacizumab provide support and initial clinical validation for combining these agents to significantly increase clinical activity without significantly increasing side-effects. Additionally, positive study results from the phase 2 GOG-0186I clinical trial indicated a statistically significant increase in PFS in patients with platinum-resistant recurrent ovarian cancer with the combination of CA4P and bevacizumab.

	Anti-Angiogenic Drugs	CA4P	OXi4503
Molecule Characteristics	Bevacizumab, ranibizumab are monoclonal antibodies (MABs) Sorafenib, sunitinib, pegaptanib, pazopanib, cediranib, axitinib, etc. are small molecule tyrosine kinase inhibitors (TKIs)	Small molecule reversible inhibitor of tubulin polymerization	Small molecule reversible inhibitor of tubulin polymerization Also forms cytotoxic metabolite (orthoquinone) via oxidation

	Anti-Angiogenic Drugs	CA4P	OXi4503
Target	Tumor rim	Tumor core	Tumor core Metabolite targets malignant cells of myeloid lineage
Mechanism	MABs bind to VEGF, thereby rendering it inactive TKIs inhibit the VEGF receptor, thereby inhibiting its activation	Rapid and selective binding to tubulin, which destabilizes microtubules, changes the shape of endothelial cells and disrupts the cell junctional protein VE-cadherin	Similar to CA4P OXi4503 also produces an orthoquinone metabolite that has an anti-proliferative effect on leukemic cells
Biological Effect	Continuously inhibit pro-angiogenic growth factor signaling (e.g., VEGF) to prevent formation and growth of new blood vessels throughout the tumor rim	Occludes and collapses pre-existing abnormal tumor blood vessels that feed tumors	Similar to CA4P OXi4503 also temporarily mobilizes hematopoietic and leukemic cells from the bone marrow
Rapidity of Effect	Weeks	Hours	Hours
Target tissue	All angiogenesis	Selective for abnormal vasculature characteristically seen in tumor blood vessels	Similar to CA4P OXi4503 also makes leukemic cells mobilized from the bone marrow vulnerable to the effects of its orthoquinone metabolite
Plasma Half-life	MABs remain in circulation for days or weeks TKI half-lives vary, average range is 4-12 hours	Approximately 4 hours	Approximately 2 hours OXi4503 metabolite half-life is approximately 20 hours
Side Effects	Chronic hypertension with long-term use; Acute-impairment in wound healing; Hemorrhage, hemoptysis, gastrointestinal perforation, proteinuria, nephrotic syndrome, thromboembolic events, etc.	Transient blood pressure increases; Tumor pain, nausea, hematological adverse events; Overlapping with anti-angiogenics: no cumulative toxicities observed	Transient acute blood pressure increases; Tumor pain, nausea, vomiting, headache, fatigue; Effects on hematopoiesis and white blood cell counts; In AML — similar to solid tumors with more pronounced effects on coagulation and hematopoiesis

We believe our VDA drug candidates act on tumor blood vessels via two complementary mechanisms, tubulin depolymerization and disengagement of the junctional protein VE-cadherin, which cause a change in the shape of tumor vascular endothelial cells, tumor vessel occlusion and collapse, and the subsequent blockage of blood-flow to the tumor, which deprives the tumor of oxygen and nutrients essential for survival.

In vitro studies have demonstrated that our VDA drug candidates act in a reversible fashion on a protein called tubulin inside newly-formed and growing endothelial cells, such as the vascular endothelial cells

comprising tumor vasculature. By binding to the tubulin, CA4P is able to collapse the structural framework that normally maintains the cells' flat shape. When this occurs, the shape of the cells changes from flat to round, initiating a cascade of events resulting in physical blockage of the blood vessels. The resulting shutdown in blood-flow then deprives tumor cells of the oxygen and nutrients necessary for maintenance and growth and also prevents tumor cells from being able to excrete toxic metabolic waste products. The consequence of the blockage is extensive tumor cell death, as demonstrated in animal studies and suggested in imaging studies of human patients treated with CA4P and OXi4503.

Preclinical research, published in the November 2005 issue of the Journal of Clinical Investigation, showed that CA4P also disrupts the molecular engagement of VE-cadherin, a junctional protein important for endothelial cell survival and function. The authors of the research article conclude that this effect only occurs in endothelial cells which lack contact with smooth muscle cells, a known feature of abnormal vasculature associated with tumors and other disease processes. The disengagement of VE-cadherin leads to endothelial cell detachment, which in turn, can cause permanent physical blockage of vessels.

Preclinical and clinical study results indicate that CA4P exerts anti-vascular effects rapidly, within hours of administration, and the half-life of the active form of CA4P in humans is approximately four hours. In part because the half-life of the active form of CA4P is relatively short, the effects of CA4P on tubulin are reversible, and CA4P is typically administered no more frequently than once per week. The side-effects of CA4P are typically transient in nature, limited to the period of time following administration when the active form of CA4P is in the body in significant concentrations. This contrasts with AAs, which are typically administered on a chronic basis so as to constantly maintain levels of drug in the body. Currently approved AAs generally exert their tumor blood-vessel growth inhibiting effects over days to weeks to months, and as a result can cause a variety of chronic side-effects that are not limited to the immediate period following administration.

Side-effects associated with CA4P are generally transient and manageable. The most frequent CA4P side-effects include acute blood pressure increases, infusion-related side effects such as nausea, vomiting, headache and fatigue, and tumor pain, which is consistent with the drug's mechanism-of-action. Approximately 10-20% of patients treated with CA4P experience clinically-significant acute blood pressure increases, which are often manageable by controlling underlying hypertension or treating with short-acting anti-hypertensives prior to CA4P infusion. The incidence of serious cardiovascular side-effects such as angina and myocardial ischemia observed across all studies to date (including early studies in which hypertension management and prevention was not employed) was less than 3%, a frequency comparable to that reported with approved anti-angiogenic agents such as bevacizumab, sunitinib and sorafenib.

Collaborative Research and Development Arrangements

Our strategy is to develop innovative therapeutics for oncology, with a larger goal of ultimately transforming vascular targeted therapies to include VDAs in order to improve patient outcomes. Our principal focus is to advance the clinical development of our drug candidates, CA4P and OXi4503, and to identify new preclinical candidates that are complementary to our VDAs. To help advance our strategy, we have established relationships with universities, research organizations and other institutions in these fields.

We intend to continue to rely on these relationships, rather than expand our in-house research and development staff. In general, these programs are created, developed and controlled by our internal management. Currently, we have collaborative agreements and arrangements with a number of institutions in the United States and abroad, which we utilize to perform the day-to-day activities associated with drug discovery and/or development. In 2015, collaborations and agreements were ongoing with a variety of universities and research institutions, including the following:

- Arizona State University
- Baylor University
- UT Southwestern, Texas
- University of Oxford

- Gynecologic Oncology Group, and the Cancer Therapy Evaluation Program of the National Cancer Institute
- Institute for Cancer Research UK
- University of Florida
- Lonza, Ltd.
- Albert Einstein College of Medicine of Yeshiva University
- Angiogene Pharmaceuticals, Ltd.

For rights to CA4P, we have secured a technology license from Arizona State University, or ASU. The ASU license is an exclusive, world-wide, royalty-bearing license for commercial development, use and sale of products or services covered by certain patent rights to particular combretastatins, including among others, CA4P and OXi4503. Combretastatins were originally isolated from the bark of the South African Bush Willow tree by researchers from Arizona State University but are now created by synthetic means and have tubulin-dependent anti-vascular and anti-proliferative properties. Under the ASU license, we have the right to grant sublicenses. ASU is entitled to single-digit royalty and milestone payments under the license agreement. We bear the costs of preparing, filing, prosecuting and maintaining all patent applications under the ASU license. Under the license agreement, we have agreed to diligently proceed with the development, manufacture and sale of products using the licensed technology. ASU has the first responsibility of enforcing patents under the license agreement. Either party may terminate the license agreement upon material default or bankruptcy of the other party. In addition, we may terminate the agreement by either (i) determining that filing for regulatory approval is not warranted by the clinical testing date or (ii) by providing two months' written notice of our intent to terminate the agreement. Payments made to ASU to date have amounted to $2,700,000. The agreement remains in force until the expiration of the last to expire patent subject to the ASU license. Either party may terminate the ASU license agreement upon material default or bankruptcy of the other party. In addition, we may terminate the agreement by either (i) determining that filing for regulatory approval is not warranted or economically feasible by the clinical testing date or (ii) by providing two months' written notice of our intent to terminate the agreement.

Under a sponsored research agreement with Baylor University, we are pursuing discovery and development of additional novel, small-molecule therapeutics for the treatment of cancer, including small-molecule cathepsin-L inhibitors and hypoxia-activated VDAs. Cathepsin-L is an enzyme involved in protein degradation and has been shown to be closely involved in the processes of angiogenesis and metastasis. Small molecule inhibitors may have the potential to slow tumor growth and metastasis in a manner we believe could be complementary with our VDA therapeutics. We believe that our hypoxia-activated VDAs could serve as line-extension products to fosbretabulin and/or OXi4503. We also have an exclusive license from Baylor University to all novel compositions developed for the treatment of vascular disorders, inflammation, parasitic diseases and infections, fungal diseases and infections and/or cancer. We have the right to grant sublicenses under the Baylor license. The agreement with Baylor stipulates that low-single-digit royalties will be paid by us should sales be generated through use of Baylor's compounds. Further, commencing in the first year that we provide no research funding to Baylor University we must pay a minimum annual royalty payment of $40,000. We are not required to pay Baylor for use of Baylor's compounds other than pursuant to this royalty arrangement. We are entitled to file, prosecute and maintain patent applications on products for which we have a license under this agreement. We have made a one-time payment of $50,000 for the licensing fee that was used as a credit against research expenses generated by Baylor. Either party may terminate the license agreement upon material default of the other party. The term of the license shall end upon the expiration of the licensed patents. The latest U.S. patent licensed under this agreement is scheduled to expire in November 2030.

We also have an exclusive, world-wide, royalty-bearing license from Bristol-Myers Squibb, or BMS, for commercial development, use and sale of products or services covered by certain patent rights to particular combretastatins, including among others, CA4P. Under the BMS license, we have the right to grant sublicenses, and BMS is entitled to low single-digit royalty payments for all commercial sales plus any remuneration we receive for sale of CA4P under named patient or compassionate use programs. All licensing fees and milestone payments under the BMS license, in the aggregate amount of $1,080,000, have been paid. We bear the costs of

preparing, filing, prosecuting and maintaining all patent applications under the BMS license and have a right, but not a duty, of enforcing patents covered by the license. Either party may terminate the BMS license upon material default of the other party. The term of the BMS license shall end upon the expiration of the licensed patents. The latest United States patent licensed under the BMS license is scheduled to expire in December 2021, excluding a patent term extension available under the Hatch-Waxman Act.

In June 2012, we secured a royalty-bearing, transferable, worldwide, exclusive license from Angiogene Pharmaceuticals Ltd., or Angiogene, to make, have made, use, import, offer for sale, and sell a vascular disrupting agent, such as CA4P, for treating neuroendocrine tumors and associated symptoms and syndromes. Under the Angiogene license, we have the right to grant sublicenses. Angiogene is entitled to low single-digit royalty payments and milestone payments under the agreement. Milestone payments are due upon initiation of the first clinical trial for a product using Angiogene intellectual property and initiation of the first registration clinical trial for a product using Angiogene intellectual property. We have the sole right to and bear the costs of preparing, filing, prosecuting and maintaining all patent applications under the Angiogene license. Payments to Angiogene under this license to date have amounted to $375,000. The term of the royalty payable under the license will expire on the sooner of (i) ten years from the regulatory approval of a product subject to the license or (ii) launch by a third party of a generic version of the vascular disrupting agent. After the expiry of the royalty term, the license will become fully paid, irrevocable and perpetual. Either party may terminate the license upon material default of the other party, and we may terminate the agreement at will upon sixty days prior notice to Angiogene.

Company Background

We are a Delaware corporation, originally incorporated in 1988 in the state of New York and reincorporated in 1992 in the state of Delaware, with our principal corporate office in the United States at 701 Gateway Boulevard, Suite 210, South San Francisco, California 94080 (telephone: (650) 635-7000, fax: (650) 635-7001). Our Internet address is www.OXiGENE.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the “Investors & Media” section of our web site as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission. Information contained on, or that can be accessed through, our web site is not and shall not be deemed to be a part of this Annual Report on Form 10-K.

REGULATORY MATTERS

Government Regulation and Product Approval

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

U.S. Drug Development Process

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

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices (GLP) or other applicable regulations;
- submission to the FDA of an Investigational New Drug Application, or IND, which must be first approved by the FDA before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to Good Clinical Practices (GCP) to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- satisfactory completion of FDA inspections of clinical sites and GLP toxicology studies; and
- FDA review and approval of the NDA.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all.

Once a pharmaceutical candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. The sponsor will also include a protocol detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. Preclinical testing continues even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or non-compliance.

All clinical trials must be conducted under the supervision of qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an institutional review board, or IRB, must review and approve the plan for any clinical trial before it commences at any institution. An IRB considers, among other things, whether the risks to individuals participating in the trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the trial and the consent form that must be provided to each trial subject or his or her legal representative and must monitor the clinical trial until completed.

Each new clinical protocol must be submitted to the IND for FDA review, and to the IRBs for approval. Protocols detail, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety and efficacy in Phase 2 and 3 clinical trials.

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

- Phase 1: The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- Phase 2: Involves clinical trials in a limited patient population to identify possible adverse effects and safety risks, to evaluate preliminary efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- Phase 3: Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

During the development of a new drug, sponsors may, under certain circumstances request a special protocol assessment, or SPA, from the FDA. For example, a sponsor may request an SPA of a protocol for a clinical trial that will form the primary basis of an efficacy claim in an NDA. The request, which must be made prior to commencing the trial, must include the proposed protocol and protocol-specific questions that the sponsor would like the FDA to answer regarding the protocol design, clinical trial goals and data analysis for the proposed investigation. After receiving the request, the FDA will consider whether the submission is appropriate for an SPA. If an SPA is appropriate, the FDA will base its assessment on the questions posed by the sponsor. Comments from the FDA review team are supposed to be sent to the sponsor within 45 calendar days of receipt of the request. The sponsor may request a meeting to discuss the comments and any remaining issues and uncertainties regarding the protocol. If the sponsor and the FDA reach agreement regarding the protocol, the agreement will be documented and made part of the administrative record. This agreement may not be changed by the sponsor or the FDA after the trial begins, except (1) with the written agreement of the sponsor and the FDA or (2) if the FDA determines that a substantial scientific issue essential to determining the safety or effectiveness of the drug was identified after the testing began.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA. IND Safety Reports must be submitted to the FDA, IRBs and the investigators for (a) any suspected adverse reaction that is both serious and unexpected; (b) any findings from epidemiological studies, pooled analysis of multiple trials, or clinical trials(other than those already reported in (a)); (c) any findings from animal or *in vitro* testing, whether or not conducted by the sponsor, that suggest a significant risk in humans exposed to the drug, such as reports of mutagenicity, teratogenicity, or carcinogenicity or reports of significant organ toxicity at or near the expected human exposure; and (d) any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, phase 2, and phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

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

U.S. Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling, and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of user fees; a waiver of such fees may be obtained under certain limited circumstances, which may include orphan drug status and the first NDA application for a company.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The FDA reviews all NDAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive, and the FDA may interpret data differently than we interpret the same data. The FDA may issue a complete response letter, which may require additional clinical or other data or impose other conditions that must be met in order to secure final approval of the NDA. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured. The FDA will also inspect selected clinical sites that participated in the clinical studies and may inspect the testing facilities that performed the GLP toxicology studies cited in the NDA.

NDAs receive either standard or priority review. A drug representing a significant improvement in treatment, prevention or diagnosis of disease may receive priority review. In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. Priority review and accelerated approval do not change the standards for approval, but may expedite the approval process.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. In addition, the FDA may require us to conduct phase 4 testing, which involves clinical trials designed to further assess a drug's safety and effectiveness after NDA approval, and may require testing and surveillance programs to monitor the safety of approved products which have been commercialized.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. Orphan drug exclusivity, however, could also block the approval of one of our products for seven years if a competitor obtains approval of the same drug as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease.

In the European Union and Japan, orphan drug exclusivity regulations provide for 10 years of marketing exclusivity for orphan drugs that are approved for the treatment of rare diseases or conditions.

CA4P has been awarded orphan drug status by the FDA for the treatment of anaplastic, medullary, Stage IV papillary and Stage IV follicular thyroid cancers, ovarian cancer and neuroendocrine tumors. OXi4503 has been awarded orphan drug status by the FDA for the treatment of acute myelogenous leukemia.

CA4P has also been awarded orphan drug status by the European Commission in the European Union for the treatment of anaplastic thyroid cancer, ovarian cancer and gastro-entero-pancreatic neuroendocrine tumors. OXi4503 has been awarded orphan drug status by the European Commission in the European Union for the treatment of acute myelogenous leukemia.

Expedited Review and Approval

The FDA has various programs, including Fast Track, priority review, accelerated approval and breakthrough therapy, which are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis of surrogate endpoints. Even if a drug qualifies for one or more of these programs, the FDA may subsequently decide the drug no longer meets the conditions for qualification or the FDA may not shorten the review or approval time period. Generally, drugs that may be eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that offer meaningful benefits over existing treatments. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Drugs that receive an accelerated approval may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect of a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of any product candidate in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, a company may submit marketing authorization applications, or MAAs, either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology or those medicines intended to treat AIDS, cancer, neurodegenerative disorders or diabetes and optional for those medicines which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report, each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

As in the United States, the European Medicines Agency, or EMA, may grant orphan drug status for specific indications if the request is made before an MAA is made. The EMA considers an orphan medicinal product to be one that affects less than five of every 10,000 people in the European Union. A company whose application for orphan drug designation in the European Union is approved is eligible to receive, among other benefits, regulatory assistance in preparing the marketing application, protocol assistance and reduced application fees. Orphan drugs in the European Union also enjoy economic and marketing benefits, including up to ten years of market exclusivity for the approved indication, unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan designated product.

Reimbursement

Sales of any of our product candidates, if approved, will depend, in part, on the extent to which the costs of the products will be covered by third-party payors, including government health programs such as Medicare and Medicaid, commercial health insurers and managed care organizations. These third-party payors are increasingly challenging the prices charged for health care products and services. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposes requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D (the Medicare prescription drug benefit), Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs not covered under Medicare Part B. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs. Each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. Federal regulations require Part D prescription drug formularies to include drugs within each therapeutic category and class of covered Part D drugs, although not necessarily all the drugs in each category or class.

In general, government payment for some of the costs of prescription drugs may increase demand for products for which we receive marketing approval. However, any negotiated prices for our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA or other Medicare regulations may result in a similar reduction in payments from non-governmental payors.

The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010 (collectively, the Affordable Care Act or ACA,) was enacted in March 2010 and has had a significant impact on the health care industry. The ACA mandated prescription drug coverage as one of ten essential health benefits that most health plans must offer, requiring coverage of at least one drug in every category and class. The ACA also expanded coverage for the uninsured through the new health insurance exchanges and a significant increase in the number of individuals eligible for Medicaid coverage. The ACA also prevents health insurers from charging more, denying, or limiting coverage for individuals with pre-existing conditions (i.e. individuals whose health care costs are typically higher).

Because of the significant increase in the number of individuals covered and the expansion of the coverage that must be provided to them, commercial insurers and government programs have increased their emphasis on cost controls to reduce overall spending. For example, the ACA expanded and increased mandatory industry rebates for drugs covered under Medicaid. Pharmaceutical manufacturers are required to provide drug rebates to the federal government and most state governments in order to have the product eligible for Medicaid coverage. In addition, commercial insurers offering Medicaid managed care products seek to negotiate additional rebates. The ACA also made changes to the drug coverage requirements under the Medicare Part D program. Although the changes have not yet been enacted, the Center for Medicine Services, or CMS, has proposed decreasing the number of categories and classes of drugs Part D plan sponsors must cover. Because of these cost controls, it is hard to determine what impact the ACA's expansion in coverage might have on pharmaceutical companies.

We expect that there will continue to be a number of federal and state proposals to implement governmental pricing controls and limit the growth of health care costs, including the cost of prescription drugs, while at the same time increasing access to health care services. At the present time, Medicare is prohibited from negotiating directly with pharmaceutical companies for drugs. There have been legislative proposals seeking to allow such direct negotiation. It is possible that the adoption of other legislative or regulatory proposals could have a material adverse effect on our business, financial condition and results of operations.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally tend to be significantly lower.

PATENTS AND PROPRIETARY RIGHTS

We actively seek to protect the proprietary technology that we consider important to our business, including chemical species, compositions and forms, their methods of use and processes for their manufacture, as well as modified forms of naturally-expressed receptors, in the United States and other jurisdictions internationally that we consider key pharmaceutical markets. We also rely upon trade secrets and contracts to protect our proprietary information.

As of March 23, 2016, we were the exclusive licensee, sole assignee or co-assignee of thirty (30) granted U.S. patents, two (2) pending U.S. patent applications, and granted patents and/or pending applications in several other major markets, including the European Union, Canada and Japan. Our policy is to file U.S. and foreign patent applications to protect technology, inventions and improvements to inventions that are commercially important to the development of our business. There can be no assurance that any of these patent applications will result in the grant of a patent either in the United States or elsewhere, or that any patents granted will be valid and enforceable, or will provide a competitive advantage or will afford protection against competitors with similar technologies. We also intend to rely upon trade secret rights to protect other technologies that may be used to discover and validate targets and that may be used to identify and develop novel drugs. We seek protection, in part, through confidentiality and proprietary information agreements.

We consider the following U.S. patents and applications owned by or exclusively licensed to us to be particularly important to the protection of our most advanced product candidates.

Product Candidate	Patent Scope	Patent Expiration
CA4P	Lyophilized or crystalline combretastatin A4-phosphate tromethamine*	September 2021
	Methods of modulating tumor growth or metastasis by administration of combretastatin A4-phosphate and paclitaxel*	December 2021
	Method of treating NET including carcinoid tumor symptoms by administering fosbretabulin***	June 2033
OXi4503**	Composition of matter for OXi4503 (combretastatin A1-disodium-phosphate (OXi4503) pro-drug)**	October 2021
	Method of treating myeloid neoplasm by administering OXi4503	November 2028

* In-licensed from Bristol-Myers Squibb

** In-licensed from Arizona State University

*** In-licensed from Angiogene Pharmaceuticals Ltd.; patent filed, awaiting grant

In addition to these patents, for some of our product candidates, we have patents and/or applications that cover a particular form or composition, use for a particular indication, use as part of combination therapy or method of preparation or use, as well as other pending patent applications. These issued patents, including any patents that issue from pending applications, could provide additional or a longer period of protection. We also have patent applications pending that seek equivalent or substantially comparable protection for our product candidates in jurisdictions internationally that we consider key pharmaceutical markets.

The patent expiration dates referenced above do not reflect any potential patent term extension that we may receive under the federal Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act. The Hatch-Waxman Act generally permits a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years. The patent term restoration period is generally one-half of the time between the effective date of an investigational new drug application, or IND, and the submission date of a new drug application, or NDA, plus the time between the submission date and approval date of an NDA. Only one patent applicable to an approved drug is eligible for the extension, and the extension must be applied for prior to expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves applications for patent term extension.

COMPETITION

The industry in which we are engaged is characterized by rapidly evolving technology and intense competition. Our competitors include, among others, major pharmaceutical, biopharmaceutical and biotechnology companies, many of which have financial, technical and marketing resources significantly greater than ours. In addition, many of the small companies that compete with us have also formed collaborative relationships with large, established companies to support research, development, clinical trials and commercialization of products that may be competitive with ours. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint ventures or other collaborations.

We are aware of a limited number of companies currently or previously involved in the development of VDAs. Such companies include Bionomics, Angiogene, Immune Pharmaceuticals, and MediciNova, all of which have VDAs that we believe are at an earlier stage of clinical development than our lead drug candidate, CA4P.

We expect that, if any of our products gain regulatory approval for sale, they will compete primarily on the basis of product efficacy, safety, patient convenience, reliability, price and patent protection. Our competitive position will also depend on our ability to attract and retain qualified scientific and other personnel, develop effective proprietary products and implement joint ventures or other alliances with large pharmaceutical companies in order to jointly market and manufacture our products.

EMPLOYEES

We expect to continue to maintain a relatively small number of executives and other employees. We rely on outsourcing for much of our research, development, preclinical testing and clinical trial activity, although we maintain managerial and quality control over our clinical trials. As of March 23, 2016, we had a total of 15 full-time employees.

ITEM 1A. *RISK FACTORS*

Statements in this Annual Report under the captions "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as oral statements that may be made by us or by officers, directors or employees acting on our behalf, that are not historical fact constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause our actual results to be materially different from the historical results or from any results expressed or implied by such forward-looking statements. Such factors include, but are not limited to, the risk factors set forth below.

We do not intend to update any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

We will be required to raise additional funds to finance our operations and continue the development of our product candidates; we may not be able to do so when necessary, and/or the terms of any financings may not be advantageous to us.

Our operations to date have consumed substantial amounts of cash. Negative cash flows from our operations are expected to continue over at least the next several years. Our cash utilization amount is highly dependent on product development programs we choose to pursue, the progress of these product development programs, the results of our preclinical studies and clinical trials, the cost, timing and outcomes of regulatory decisions regarding potential approval for our product candidates, the terms and conditions of our contracts with service providers for these programs, and the rate of recruitment of patients in our human clinical trials. In addition, the further development of our ongoing clinical trials will depend on upcoming analysis and results of those studies and our financial resources at that time.

We are pursuing forms of capital infusion including public or private financing, strategic partnerships or other arrangements with organizations that have capabilities, products and/or resources that are complementary to or could further extend our own capabilities, products or resources, in order to continue the development of our product candidates. However, there can be no assurances that we will complete any financings, strategic alliances or collaborative development agreements, and the terms of such arrangements may not be advantageous to us.

Based on our current operating plans, we expect our existing cash to support our operations into approximately the third quarter of 2017. We expect that our planned level of cash utilization will allow us to advance our ongoing programs, including completion of a Phase 2 clinical trial of CA4P in patients with recurrent gastrointestinal neuroendocrine tumors with elevated biomarkers; the completion of the dose escalation portion of an open-label Phase 1b/2 clinical trial of OXi4503 in combination with cytarabine in patients with AML; supporting a Phase 1b/2 trial of CA4P in relapsed ovarian cancer in combination with pazopanib, which is being sponsored by two UK-based nonprofit organizations; and initiation and continuation of a phase 2/3 clinical trial of CA4P in combination with bevacizumab and chemotherapy in platinum-resistant ovarian cancer. Any significant further clinical development of CA4P, including the completion of the planned Phase 2/3 clinical trial of CA4P in ovarian cancer, and of OXi4503 would be contingent upon our ability to raise additional capital through public or private financings or from one or more new collaborative research or license agreements with a third-party, as to which we can give you no assurance.

Our ongoing capital requirements will depend on numerous factors, including the progress and results of preclinical testing and clinical trials of our product candidates under development; the costs of complying with U.S. Food and Drug Administration, or FDA, and other regulatory agency requirements; the progress of our research and development programs; the time and costs expended and required to obtain any necessary or desired regulatory approvals; our ability to enter into licensing arrangements, including any unanticipated licensing arrangements that may be necessary to enable us to continue our development and clinical trial programs; the costs and expenses of filing, prosecuting and, if necessary, enforcing our patent claims, or defending against possible claims of infringement by third-party patent or other technology rights; the cost of commercialization activities and arrangements, if any, undertaken by us; and, if and when approved, the demand for our products, which demand depends in turn on circumstances and uncertainties that cannot be fully known, understood or quantified unless and until the time of approval, including the range of indications for which any product is granted approval.

If we are unable to raise additional funds when needed, we will not be able to continue development of our product candidates or we will be required to delay, scale back or eliminate some or all of our development programs or cease operations. We may seek to raise funds through public or private financing, strategic partnerships or other arrangements. Any additional equity or convertible debt financing may be dilutive to our current stockholders and debt financing, if available, may involve restrictive covenants. If we raise funds through collaborative or licensing arrangements, we may be required to relinquish, on terms that are not favorable to us, rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize. Our failure to raise capital when needed will materially harm our business, financial condition and results of operations. Our ability to raise additional capital could also be further impaired if our common shares lose their status on The NASDAQ Capital Market.

We currently do not meet the continued listing standards of The NASDAQ Capital Market, which requires a minimum closing bid price of $1.00 per share, which could result in our delisting and negatively impact the price of our common stock and our ability to access the capital markets.

Our common stock is listed on The NASDAQ Capital Market. NASDAQ provides various continued listing requirements that a company must meet in order for its stock to continue trading on The NASDAQ Capital Market. Among these requirements is the requirement that the Company's stock trades at a minimum bid price of $1.00 per share. Our stock has recently traded below $1.00 per share, including closing bid prices below $1.00 per share. On December 1, 2015 we received a deficiency letter from The NASDAQ Stock Market which provided us a grace period of 180 calendar days, or until May 31, 2016, to regain compliance with the minimum bid price requirement, which would require a closing bid price of at least $1.00 per share for a minimum of ten consecutive business days. The NASDAQ letter also stated that we may be provided an additional 180 day compliance period if we demonstrate that we meet the applicable market value of publicly held shares requirement for continued listing and all other applicable standards for initial listing on The NASDAQ Capital Market (except the bid price requirement), and provide written notice of our intention to cure the minimum bid price deficiency during the second grace period, including by implementation of a reverse stock split, if necessary. If we fail to qualify for the second grace period or fail to regain compliance during the second grace period, our stock will be subject to delisting by NASDAQ. Additionally, if we fail to comply with any other continued listing standards of NASDAQ, our common stock will also be subject to delisting. If that were to occur, our common stock would be subject to rules that impose additional sales practice requirements on broker-dealers who sell our securities. The additional burdens imposed upon broker-dealers by these requirements could discourage broker-dealers from effecting transactions in our common stock. This would significantly negatively affect the ability of investors to trade our securities and would significantly negatively affect the value and liquidity of our common stock. These factors could contribute to lower prices and larger spreads in the bid and ask prices for our common stock. Also, if we seek to implement a reverse stock split in order to remain listed on The NASDAQ Capital Market, the announcement and/or implementation of a reverse stock split could significantly negatively affect the price of our common stock.

Due in part to our limited financial resources, we may fail to select or capitalize on the most scientifically, clinically or commercially promising or profitable indications or therapeutic areas for our product candidates or those that are in-licensed, and/or we may be unable to pursue and complete the clinical trials that we would like to pursue and complete.

We have limited technical, managerial and financial resources to determine the indications on which we should focus the development efforts related to our product candidates. Due to our limited available financial resources, we have curtailed clinical development programs and activities that might otherwise have led to more rapid progress of our product candidates through the regulatory and development processes. Further, our planned clinical trial in platinum-resistant ovarian cancer is expected to be larger than any other clinical trial that we have conducted previously. We cannot assure you that we will have sufficient financial resources to complete the trial, even if we are able to initiate it.

We may make incorrect determinations with regard to the indications and clinical trials on which to focus the available resources that we do have. Furthermore, we cannot assure you that we will be able to retain adequate staffing levels to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish. We or our partners currently are pursuing clinical trials in various indications, but we are required by our financial resources to engage only in limited clinical activities. The decisions to allocate our research, management and financial resources toward particular indications or therapeutic areas for our product candidates may not lead to the development of viable commercial products and may divert resources from better opportunities. Similarly, our decisions to delay or terminate drug development programs may also cause us to miss valuable opportunities. In addition, from time to time, we may in-license or otherwise acquire product candidates to supplement our internal development activities. Those activities may use resources that otherwise would have been devoted to our internal programs. We cannot assure you that any resources that we devote to acquired or in-licensed programs will result in any products that are superior to our internally developed products.

If we are unable to obtain required regulatory approvals, we will be unable to market and sell our product candidates.

Our product candidates are subject to extensive governmental regulations relating to development, clinical trials, manufacturing, oversight of clinical investigators, recordkeeping and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory review and approval process are required to be successfully completed in the United States, in the European Union and in many other foreign jurisdictions before a new drug can be sold. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain, and subject to unanticipated delays. The time required to obtain approval by the FDA or the European Medicines Agency, or EMA, is unpredictable and often exceeds five years following the commencement of clinical trials, depending upon the complexity of the product candidate.

In connection with the clinical development of our product candidates, we face risks that:

- the product candidate may not prove to be safe and efficacious;
- patients may die or suffer serious adverse effects for reasons that may or may not be related to the product candidate being tested;
- we fail to maintain adequate records of observations and data from our clinical trials, to establish and maintain sufficient procedures to oversee, collect data from, and manage clinical trials, or to monitor clinical trial sites and investigators to the satisfaction of the FDA, EMA or other regulatory agencies;
- we may not have sufficient financial resources to complete the clinical trials that would be necessary to obtain regulatory approvals;
- the results of later-phase clinical trials may not confirm the results of earlier clinical trials; and
- the results from clinical trials may not meet the level of statistical significance or clinical benefit-to-risk ratio required by the FDA, EMA or other regulatory agencies for marketing approval.

Only a small percentage of product candidates for which clinical trials are initiated are the subject of NDAs and even fewer receive approval for commercialization. Furthermore, even if we do receive regulatory approval to market a product candidate, any such approval may be subject to limitations such as those on the indicated uses for which we may market the product.

We may seek orphan drug exclusivity for our product candidates in additional indications, and we may be unsuccessful.

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a disease with a patient population of fewer than 200,000 individuals in the United States. To date, we have been granted orphan drug designation for CA4P for the treatment of ovarian cancer and for OXi4503 for the treatment of acute myelogenous leukemia, or AML, in the United States and the European Union.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug for the same indication during the period of exclusivity. The applicable period is seven years in the United States and ten years in the European Union. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective, if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve a different drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

If we or the third parties on which we rely for the conduct of our clinical trials and results do not perform our clinical trial activities in accordance with good clinical practices and related regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We currently use independent clinical investigators in all of our clinical trials and, in many cases, also utilize contract research organizations, or CROs, and other third-party service providers to conduct and/or oversee the clinical trials of our product candidates and expect to continue to do so for the foreseeable future. We rely heavily on these parties for successful execution of our clinical trials. Nonetheless, we are responsible for confirming that each of our clinical trials is conducted in accordance with the FDA's requirements and our general investigational plan and protocol. Currently, we have clinical trial activities involving CA4P and OXi4503 being conducted by clinical investigators who are independent of us, but with whom we have agreements for them to provide the results of their clinical trials to us. In order for us to rely on data from these ongoing clinical trials in support of a New Drug Application, or NDA, for approval of any of our product candidates by the FDA or similar types of marketing applications that are required by other regulatory authorities, the independent investigators are required to comply with applicable good clinical practice requirements.

The FDA and corresponding foreign regulatory authorities require us and our clinical investigators to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, 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 trial participants are adequately protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory requirements or the respective trial plans and protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates or result in enforcement action against us.

In February 2012, we were inspected by the FDA, and in March 2012, we received a Form FDA 483 containing observations from that inspection. The Form FDA 483 noted observations of certain GCP deficiencies in the conduct of our FACT Study in ATC, which was conducted from July 2007 to February 2010. These observations included the failure to ensure proper monitoring of third-party clinical investigators who were participants in our FACT Study, the failure to promptly bring non-compliant clinical investigators into compliance. The FDA also found that some of the clinical trial monitors selected by our CROs outside the United States were not sufficiently qualified by experience and training to monitor clinical trials. The Form FDA 483 also included observations related to the failure to address the improper storage of a drug that was being used in the trial, and the failure to maintain records and case histories in compliance with FDA regulations. The issues noted in the Form FDA 483 had previously been identified and addressed by our management as part of an internal review of our systems, practices and procedures governing the areas of vendor oversight, quality, and regulatory compliance. Our response to the Form FDA 483 described the corrective actions that we had taken and will continue to take in response to this matter. On February 10, 2014, we received correspondence from the FDA informing us that we appeared to have taken corrective action to prevent the recurrence of the conditions that led to the issuance of the Form FDA 483 and that the related inspection was closed.

While we have taken and continue to take steps to strengthen our procedures in order to ensure that these and similar issues will not recur in any future clinical trials sponsored by us for any of our product candidates, we cannot assure you that the FDA will be satisfied with our procedures, and that the FDA will not issue additional 483 observations or warning letters or take other enforcement action against us in the future. The steps we take to strengthen our procedures and conduct future clinical trials necessary for approval will be time-consuming and expensive.

We may encounter difficulties in expanding our operations successfully if and when we evolve from a company that is primarily involved in clinical development to a company that is also involved in commercialization.

As we advance our product candidates through later stages of clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with such third parties, as well as additional collaborators, distributors, marketers and suppliers.

Maintaining third party relationships for these purposes will impose significant added responsibilities on members of our management and other personnel. We must be able to manage our development efforts effectively, manage our participation in the clinical trials in which our product candidates are involved effectively, and improve our managerial, development, operational and finance systems, all of which may impose a strain on our administrative and operational infrastructure.

If, following any approval of our product candidates, we enter into arrangements with third parties to perform sales, marketing or distribution services, any product revenues that we receive, or the profitability of these product revenues to us, are likely to be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our products or in doing so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our products.

If we were to submit an NDA for our drug candidates in the United States or a marketing application in the EU, we would need to undertake commercial scale manufacturing activities at significant expense to us in order to proceed with the application for approval for commercialization. We or our external vendors may encounter technical difficulties that preclude us from successfully manufacturing the required registration and validation batches of active pharmaceutical ingredient, or API, and/or drug product and we may be unable to recover any financial losses associated with the manufacturing activities. Further, our research or product development efforts may not be successfully completed, any compounds currently under development by us may not be successfully developed into drugs, any potential products may not receive regulatory approval on a timely basis, if at all, and competitors may develop and bring to market products or technologies that render our potential products obsolete. If any of these problems occur, our business would be materially and adversely affected.

We have no manufacturing capacity and have relied on, and expect to continue to rely on, third-party manufacturers to produce our product candidates.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates or any of the compounds that we are testing in our preclinical programs, and we lack the resources and the capabilities to do so. As a result, we currently rely, and we expect to rely for the foreseeable future, on third-party manufacturers to supply our product candidates. Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured our product candidates or products ourselves, including:

- reliance on third-parties for manufacturing process development, regulatory compliance and quality assurance;
- limitations on supply availability resulting from capacity and scheduling constraints of third-parties;
- the possible breach of manufacturing agreements by third-parties because of factors beyond our control; and
- the possible termination or non-renewal of the manufacturing agreements by the third-party, at a time that is costly or inconvenient to us.

If we do not maintain our developed important manufacturing relationships, we may fail to find replacement manufacturers or develop our own manufacturing capabilities, which could delay or impair our ability to obtain

regulatory approval for our products and substantially increase our costs or deplete profit margins, if any. If we do find replacement manufacturers, we may not be able to enter into agreements with them on terms and conditions favorable to us, and there could be a substantial delay before new facilities could be qualified and registered with the FDA, EMA and other foreign regulatory authorities.

The FDA, EMA and other foreign regulatory authorities require manufacturers to register manufacturing facilities. The FDA and corresponding foreign regulators also inspect these facilities to confirm compliance with current good manufacturing practices, or cGMPs. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop our product candidates and market our products after approval.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our ability to develop our product candidates, our ability to commercialize any products that receive regulatory approval and our potential future profit margins on these products.

Our product candidates have not completed clinical trials, and may never demonstrate sufficient safety and efficacy in order to do so.

Our product candidates are in the clinical stage of development. In order to achieve profitable operations, we alone or in collaboration with others, must successfully develop, manufacture, introduce and market our products. The time frame necessary to achieve market success for any individual product is long and uncertain. The products currently under development by us may require significant additional research and development and additional preclinical and clinical testing prior to application for commercial use. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in clinical trials, even after showing promising results in early or later-stage studies or clinical trials. Although we have obtained some favorable results to date in preclinical studies and clinical trials of certain of our potential products, such results may not be indicative of results that will ultimately be obtained in or throughout such clinical trials, and clinical trials may not show any of our products to be safe or capable of producing a desired result. Additionally, we may encounter problems in our clinical trials that may cause us to delay, suspend or terminate those clinical trials.

Our product candidates have been tested in over 450 patients to date, and adverse events associated with CA4P and OXi4503 have been found to be mainly low grade, reversible, transient and manageable. However, we will be required to continue to test and evaluate the safety of our product candidates in additional clinical trials, and to demonstrate their safety to the satisfaction of appropriate regulatory agencies, as a condition to receipt of any regulatory approvals. In clinical trials to date, transient mild to moderate hypertension believed to be associated with CA4P and OXi4503 has been effectively managed through pre-treatment with anti-hypertensive medication. We cannot assure you, however, that we will be able to make the necessary demonstrations of safety to allow us to receive regulatory approval for our product candidates in any indication.

We only have a limited number of employees to manage and operate our business.

As of March 23, 2016, we had a total of 15 full-time employees. Our focus on reducing cash utilization requires us to manage and operate our business in a highly efficient manner. We cannot assure you that we will be able to retain adequate staffing levels to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish.

We have a history of losses, and we anticipate that we will continue to incur losses in the future.

We have experienced net losses every year since our inception and, as of December 31, 2015, had an accumulated deficit of over $264 million. We anticipate continuing to incur substantial additional losses over at least the next several years due to, among other factors, our continuing clinical trials and development activities with respect to our VDA drug candidates, technologies, and anticipated research and development activities and the general and administrative expenses associated with those activities. We have not yet commercialized any

product candidates. Our ability to attain profitability will depend upon our ability to develop and commercialize products that are effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our products and to license or otherwise market our products successfully. We may never achieve profitability.

We depend on our executive officers and principal consultants and the loss of their services could materially harm our business.

We believe that our success depends, and will likely continue to depend, upon our ability to retain the services of our current executive officers, principal consultants and others. The loss of the services of any of these individuals could have a material adverse effect on our business. In addition, we have established relationships with universities, hospitals and research institutions, which have historically provided, and continue to provide, us with access to research laboratories, clinical trials, facilities and patients. Additionally, we believe that we may, at any time and from time to time, materially depend on the services of consultants and other unaffiliated third parties. We cannot assure you that consultants and other unaffiliated third parties will provide the level of service to us that we require in order to achieve our business objectives.

Our industry is highly competitive, and our product candidates may become obsolete.

We are engaged in a rapidly evolving field. Competition from other pharmaceutical companies, biotechnology companies and research and academic institutions is intense and likely to increase. Many of those companies and institutions have substantially greater financial, technical and human resources than we do. Many of those companies and institutions also have substantially greater experience in developing products, conducting clinical trials, obtaining regulatory approval and in manufacturing and marketing pharmaceutical products. Our competitors may succeed in obtaining regulatory approval for their products more rapidly than we do. Competitors have developed or are in the process of developing technologies that are, or in the future may be, the basis for competitive products. We are aware of at least four other companies that currently have a clinical-stage VDA for use in an oncology indication. Some of these competitive products may have an entirely different approach or means of accomplishing the desired therapeutic effect than products being developed by us. Our competitors may succeed in developing products that are more effective and/or cost competitive than those we are developing, or that would render our product candidates less competitive or even obsolete. In addition, one or more of our competitors may achieve product commercialization or patent protection earlier than we do, which could materially adversely affect us.

We depend extensively on the patents and proprietary technology we license from others, and we must maintain these licenses in order to preserve our business.

We have licensed in rights to CA4P, OXi4503 and other programs from third parties. If our license agreements terminate or expire, we may lose the licensed rights to our product candidates, including CA4P and OXi4503, and we may not be able to continue to develop them or, if they are approved, we may not be able to market or commercialize them.

We depend on license agreements with third-parties for certain intellectual property rights relating to our product candidates, including patent rights. Currently, we have licensed in certain patent rights from Arizona State University, or ASU, and the Bristol-Myers Squibb Company for CA4P and OXi4503, with Angiogene Pharmaceuticals Ltd. for certain uses of CA4P and OXi4503, and from Baylor University for other programs. In general, our license agreements require us to make payments and satisfy performance obligations in order to keep these agreements in effect and retain our rights under them. These payment obligations can include upfront fees, maintenance fees, milestones, royalties, patent prosecution expenses, and other fees. These performance obligations typically include diligence obligations. If we fail to pay, be diligent or otherwise perform as required under our license agreements, we could lose the rights under the patents and other intellectual property rights covered by the agreements. While we are not currently aware of any dispute with any licensors under our material agreements with them, if disputes arise under any of our in-licenses, including our in-licenses from ASU, the Bristol-Myers Squibb Company, Baylor University and Angiogene Pharmaceuticals Ltd., we could lose our rights under these agreements. Any such dispute may not be resolvable on favorable terms, or at all. Whether or not any disputes of this kind are favorably resolved, our management's time and attention and our other resources could be consumed by the need to attend to and seek to resolve these disputes and our business could be harmed by the emergence of such a dispute.

If we lose our rights under these agreements, we may not be able to conduct any further activities with the product candidate or program that the license covered. If this were to happen, we might not be able to develop our product candidates further, or following regulatory approval, if any, we might be prohibited from marketing or commercializing them. In particular, patents previously licensed to us might after termination be used to stop us from conducting these activities.

We depend extensively on our patents and proprietary technology and patents and proprietary technology we license from others, and we must protect those assets in order to preserve our business.

Although we expect to seek patent protection for any compounds we discover and/or for any specific use we discover for new or previously known compounds, any or all of them may not be subject to effective patent protection. Further, the development of regimens for the administration of pharmaceuticals, which generally involve specifications for the frequency, timing and amount of dosages, has been, and we believe, may continue to be, important to our effort, although those processes, as such, may not be patentable. In addition, the issued patents may be declared invalid or our competitors may find ways to avoid the claims in the patents.

Our success will depend, in part, on our ability to obtain patents, protect our trade secrets and operate without infringing on the proprietary rights of others. We are the exclusive licensee, sole assignee or co-assignee on a number of granted United States patents, pending United States patent applications, and granted patents and/or pending applications in several other major markets, including the European Union, Canada and Japan. The patent position of pharmaceutical and biotechnology firms like us is generally highly uncertain and involves complex legal and factual questions, resulting in both an apparent inconsistency regarding the breadth of claims allowed in United States patents and general uncertainty as to their legal interpretation and enforceability. Accordingly, patent applications assigned or exclusively licensed to us may not result in patents being issued, any issued patents assigned or exclusively licensed to us may not provide us with competitive protection or may be challenged by others, and the current or future granted patents of others may have an adverse effect on our ability to do business and achieve profitability. Moreover, because some of the basic research relating to one or more of our patent applications and/or patents were performed at various universities and/or funded by grants, one or more of these universities, employees of such universities and/or grantors could assert that they have certain rights in such research and any resulting products. Further, others may independently develop similar products, may duplicate our products, or may design around our patent rights. In addition, as a result of the assertion of rights by a third-party or otherwise, we may be required to obtain licenses to patents or other proprietary rights of others in or outside of the United States. Any licenses required under any such patents or proprietary rights may not be made available on terms acceptable to us, if at all. If we do not obtain such licenses, we could encounter delays in product market introductions while our attempts to design around such patents or could find that the development, manufacture or sale of products requiring such licenses is foreclosed. In addition, we could incur substantial costs in defending ourselves in suits brought against us or in connection with patents to which we hold licenses or in bringing suit to protect our own patents against infringement.

We require employees and the institutions that perform our preclinical and clinical trials to enter into confidentiality agreements with us. Those agreements provide that all confidential information developed or made known to a party to any such agreement during the course of the relationship with us be kept confidential and not be disclosed to third-parties, except in specific circumstances. Any such agreement may not provide meaningful protection for our trade secrets or other confidential information in the event of unauthorized use or disclosure of such information.

The use of our products may result in product liability exposure, and it is uncertain whether our insurance coverage will be sufficient to cover all claims.

The use of our product candidates in clinical trials may expose us to liability claims in the event such product candidates cause death, injury or disease, or result in adverse effects. We may be exposed to liability claims even if our product did not cause death, injury or diseases, but is merely presumed or alleged to have caused any of these. If our product candidates are ever commercially approved, the commercial use of these products may also expose us to similar liability claims. Any of these claims could be made by health care institutions, contract laboratories, patients or others using such products. Although we have obtained liability

insurance coverage for our ongoing clinical trials, this coverage may not be in amounts sufficient to protect us from any product liability claims or product recalls which could have a material adverse effect on our financial condition and prospects. Further, adverse product and similar liability claims could negatively impact our ability to obtain or maintain regulatory approvals for our technology and product candidates under development.

If clinical trials or regulatory approval processes for our product candidates are prolonged, delayed or suspended, we may be unable to commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any revenue from potential product sales.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or any regulatory authority to delay or suspend those clinical trials or delay the analysis of data derived from them. A number of events, including any of the following, could delay the completion of our other ongoing and planned clinical trials and negatively impact our ability to obtain regulatory approval for, and to market and sell, a particular product candidate:

- conditions imposed on us by the FDA, EMA or another foreign regulatory authority regarding the scope or design of our clinical trials;
- delays in obtaining, or our inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;
- insufficient supply of our product candidates or other materials necessary to conduct and complete our clinical trials;
- slow enrollment and retention rate of subjects in clinical trials;
- any compliance audits and pre-approval inspections by the FDA, EMA or other regulatory authorities;
- negative or inconclusive results from clinical trials, or results that are inconsistent with earlier results;
- serious and unexpected drug-related side effects; and
- failure of our third-party contractors to comply with regulatory requirements or otherwise meet their contractual obligations to us.

Commercialization of our product candidates may be delayed by the imposition of additional conditions on our clinical trials by the FDA, EMA or another foreign regulatory authority or the requirement of additional supportive clinical trials by the FDA, EMA or another foreign regulatory authority. In addition, clinical trials require sufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, the conduct of other clinical trials that compete for the same patients as our clinical trials, and the eligibility criteria for our clinical trials. Our failure to enroll patients in our clinical trials could delay the completion of the clinical trial beyond our expectations. In addition, the FDA and EMA could require us to conduct clinical trials with a larger number of subjects than we have projected for any of our product candidates. We may not be able to enroll a sufficient number of patients in a timely or cost-effective manner. Furthermore, enrolled patients may drop out of our clinical trials, which could impair the validity or statistical significance of the clinical trials.

We do not know whether our clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, if at all. Delays in our clinical trials will result in increased development costs for our product candidates, and our financial resources may be insufficient to fund any incremental costs. In addition, if our clinical trials are delayed, our competitors may be able to bring products to market before we do and the commercial viability of our product candidates could be limited.

Our product candidates will remain subject to ongoing regulatory review even if they receive marketing approval, and if we fail to comply with continuing regulations, we could lose these approvals and the sale of any approved commercial products could be suspended.

Even if we receive regulatory approval to market a particular product candidate, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion, and record keeping related to the product will remain subject to extensive regulatory requirements. If we fail to comply with the regulatory requirements of the FDA, EMA and other applicable domestic and foreign regulatory authorities or previously unknown problems with any approved product, manufacturer, or manufacturing process are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers, or manufacturing processes;
- warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- pressure to initiate voluntary product recalls;
- suspension or withdrawal of regulatory approvals; and
- refusal to approve pending applications for marketing approval of new products or supplements to approved applications.

If physicians and patients do not accept our future products or if the market for indications for which any product candidate is approved is smaller than expected, we may be unable to generate significant revenue, if any.

Even if any of our product candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients, and third-party payers. Physicians may decide not to recommend our drugs for a variety of reasons including:

- timing of market introduction of competitive products;
- demonstration of clinical safety and efficacy compared to other products;
- cost-effectiveness;
- limited or no coverage by third-party payers;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- restrictions in the label of the drug;
- other potential advantages of alternative treatment methods; and
- ineffective marketing and distribution support of our products.

If any of our product candidates is approved, but fails to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

The uncertainty associated with pharmaceutical reimbursement and related matters may adversely affect our business.

Market acceptance and sales of any one or more of our product candidates that we develop will depend on reimbursement policies and may be affected by future healthcare reform measures in the United States and in foreign jurisdictions. Government authorities and third-party payers, such as private health insurers and health maintenance organizations, decide which drugs they will cover and establish payment levels. We cannot be certain that reimbursement will be available for any product candidates that we develop. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products. If reimbursement is not available or is available on a limited basis, we may not be able to successfully commercialize any product candidates that we develop.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, also called the Medicare Modernization Act, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation established Medicare Part D, which expanded Medicare coverage for outpatient prescription drug purchases by the elderly but provided authority for limiting the number of drugs that will be covered in any therapeutic class. The MMA also introduced a new reimbursement methodology based on average sales prices for physician-administered drugs.

The United States and several foreign jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. We expect to experience pricing pressures in connection with the sale of any products that we develop due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative proposals.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, ACA, became law in the U.S. The goal of ACA is to reduce the cost of health care and substantially change the way health care is financed by both government and private insurers. While we cannot predict what impact on federal reimbursement policies this legislation will have in general or on our business specifically, the ACA may result in downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of, and the price we may charge for, any products we develop that receive regulatory approval. We also cannot predict the impact of ACA on us as many of the ACA reforms require the promulgation of detailed regulations implementing the statutory provisions, which have not yet been fully implemented.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. Global financial concerns have caused, and may continue to cause, extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. We cannot currently anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

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

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Furthermore, we have little or no control over the security measures and computer systems of our third-party CROs and other contractors and consultants. While we have not experienced any material system failure, accident, or security

breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of clinical trial data for our product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology or product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our product candidates could be delayed.

Our employees, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation.

We have a code of conduct applicable to all of our employees, but it is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We, or the third parties upon whom we depend, may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Earthquakes or other natural disasters could severely disrupt our operations and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business.

The price of our common stock is volatile, and is likely to continue to fluctuate due to reasons beyond our control.

The market price of our common stock has been, and likely will continue to be, highly volatile. Factors, including our financial results or our competitors' financial results, clinical trial and research development announcements and government regulatory action affecting our potential products in both the United States and foreign countries, have had, and may continue to have, a significant effect on our results of operations and on the

market price of our common stock. We cannot assure you that an investment in our common stock will not fluctuate significantly. One or more of these factors could significantly harm our business and cause a decline in the price of our common stock in the public market. Substantially all of the shares of our common stock issuable upon exercise of outstanding options and warrants have been registered for resale or are available for sale pursuant to Rule 144 under the Securities Act, and may be sold from time to time. Such sales, as well as future sales of our common stock by existing stockholders, or the perception that sales may occur at any time, could adversely affect the market price of our common stock.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results. As a result, current and potential stockholders could lose confidence in our financial reporting, which could harm our business and the trading price of our stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports. If we cannot maintain effective controls and reliable financial reports, our business and operating results could be harmed. For example, during the third quarter of 2013, our management determined that we had a material weakness related to the operation of our controls over financial reporting associated with a complex non-routine financing transaction in the second quarter of 2013. We conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2015 based on the criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2015. We continue to work on improvements to our internal controls over financial reporting; however, there can be no assurance that another material weakness will not occur in the future. Any failure to implement and maintain controls over our financial reporting or difficulties encountered in the implementation of improvements in our controls, could cause us to fail to meet our reporting obligations. Any failure to improve our internal controls over financial reporting or to address identified weaknesses in the future, if they were to occur, could also cause investors to lose confidence in our reported financial information, which could have a negative impact on the trading price of our stock.

Issuance of additional equity securities may adversely affect the market price of our common stock.

We are currently authorized to issue up to 70,000,000 shares of our common stock and 15,000,000 shares of preferred stock. As of December 31, 2015, we had approximately 26,545,000 shares of common stock issued and outstanding, and we had no shares of preferred stock outstanding. As of December 31, 2015, we also had approximately 9,842,000 warrants and 2,031,000 options outstanding.

To the extent that shares of common stock are issued or options and warrants are exercised, holders of our common stock will experience dilution. In addition, in the event of any future issuances of equity securities or securities convertible into or exchangeable for common stock, holders of our common stock may experience dilution.

Moreover, our board of directors is authorized to issue preferred stock without any action on the part of our stockholders. Our board of directors also has the power, without stockholder approval, to set the terms of any such preferred stock that may be issued, including voting rights, conversion rights, dividend rights, preferences over our common stock with respect to dividends or if we liquidate, dissolve or wind up our business and other terms. If we issue preferred stock in the future that has preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution or winding up, or if we issue preferred stock with voting rights that dilute the voting power of our common stock, the market price of our common stock could decrease. Any provision permitting the conversion of any such preferred stock into our common stock could result in significant dilution to the holders of our common stock.

We also consider from time to time various strategic alternatives that could involve issuances of additional common stock, including but not limited to acquisitions and business combinations, but do not currently have any definitive plans to enter into any of these transactions.

We have no plans to pay dividends on our common stock, and you may not receive funds without selling your common stock.

We have not declared or paid any cash dividends on our common stock, nor do we expect to pay any cash dividends on our common stock for the foreseeable future. We currently intend to retain any future earnings, if any, to finance our operations and growth and, potentially, for future stock repurchases and, therefore, we have no plans to pay cash dividends on our common stock. Any future determination to pay cash dividends on our common stock will be at the discretion of our board of directors and will be dependent on our earnings, financial condition, operating results, capital requirements, any contractual restrictions, and other factors that our board of directors deems relevant.

Accordingly, you may have to sell some or all of your common stock in order to generate cash from your investment in OXiGENE, Inc. You may not receive a gain on your investment when you sell our common stock and may lose the entire amount of your investment.

ITEM 1B. *UNRESOLVED STAFF COMMENTS*

None.

I TEM 2. *PROPERTIES*

OXiGENE's corporate headquarters is located in South San Francisco, California where we lease 5,275 square feet of general office space. The lease for this space, as amended, expires on June 30, 2019. We believe that these facilities will meet our needs for the foreseeable future.

I TEM 3. *LEGAL PROCEEDINGS*

Not applicable.

I TEM 4. *MINE SAFETY DISCLOSURES*

Not applicable.

PART II

ITEM 5. *MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES*

The Company's common stock is traded on The NASDAQ Capital Market under the symbol "OXGN". The following table sets forth, for the periods indicated, the high and low sales prices of our common stock (rounded to the nearest penny) on The NASDAQ Capital Market, as applicable, as reported by NASDAQ, for each quarterly period during the two most recent fiscal years.

	2015		2014	
	High	Low	High	Low
First Quarter	$1.97	$1.34	$5.40	$1.96
Second Quarter	$1.68	$1.31	$3.92	$2.41
Third Quarter	$1.47	$0.87	$2.70	$2.06
Fourth Quarter	$1.09	$0.65	$2.53	$1.48

As of March 15, 2016, there were approximately 42 stockholders of record of the 26,544,934 outstanding shares of the Company's common stock.

The Company has not declared or paid any cash dividends on its common stock since its inception in 1988, and does not intend to pay cash dividends in the foreseeable future. The Company presently intends to retain future earnings, if any, to finance the growth and development of its business.

Information relating to compensation plans under which our equity securities are authorized for issuance is presented in Part III, Item 12 of this Form 10-K.

Unregistered Sales of Securities

None.

ITEM 6. *SELECTED FINANCIAL DATA*

Not applicable.

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

Our management's discussion and analysis of financial condition and results of operations contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks and uncertainties that may cause our actual results or outcomes to be materially different from those anticipated and discussed herein. Important factors that we believe may cause such differences are discussed in the "Risk Factors" section of this Annual Report and in the "Safe Harbor for Forward-Looking Statements Under the Private Securities Litigation Reform Act of 1995" section of this Annual Report. In assessing forward-looking statements contained herein, readers are urged to read carefully all Risk Factors and cautionary statements contained in this Annual Report. Further, we operate in an industry sector where securities prices are volatile and may be influenced by regulatory and other factors beyond our control.

We are a biopharmaceutical company focused on the development of vascular disrupting agents, or VDAs, for the treatment of cancer. VDAs selectively target the vasculature of cancer tumors and obstruct a tumor's blood supply without disrupting the blood supply to normal tissues. Treatment with VDAs has been shown to lead to significant central tumor necrosis, which refers to the death of cancer cells.

VDAs are in a class of drugs called vascular targeted therapies, or VTTs, which also includes anti-angiogenic agents, or AAs. Bevacizumab and other currently approved AA drugs work by preventing the growth of new blood vessels which can supply nutrients to tumor cells. We are seeking to realize the full potential of VTTs in oncology by using the combination of VDAs and AAs to treat cancer tumors. The aim of using a VDA and an AA in combination, is for the VDA to directly cut-off the blood supply to the interior of the tumor, while the AA indirectly inhibits angiogenesis, which is the process by which new blood vessels form and re-vascularize the tumor. Our current VDA development plans are focused on this combination so that the mechanism of action of each drug would complement that of the other — disrupting tumor blood supply in two different ways instead of just one.

We have two clinical stage investigational drugs, both VDAs, that we are currently developing — CA4P and OXi4503. Our lead compound is CA4P. The largest clinical trial of CA4P conducted to date was a recent phase 2 clinical trial in recurrent ovarian cancer sponsored by the Gynecologic Oncology Group, or GOG, which was completed in 2014 and met its primary endpoint by demonstrating an improvement in progression-free survival for the patients who received CA4P. This trial, referred to as GOG-0186I, compared treatment with CA4P plus bevacizumab to treatment with bevacizumab alone. Based on the positive results of this clinical trial, we are initiating a phase 2/3 clinical trial in platinum-resistant ovarian cancer, which will compare treatment with CA4P, bevacizumab and chemotherapy to treatment with bevacizumab and chemotherapy. CA4P is also being studied in combination with pazopanib in an on-going phase 1b/2 clinical trial in recurrent ovarian cancer that is sponsored by The Christie Hospital NHS Foundation Trust in the United Kingdom. Our second compound, OXi4503, is being studied in combination with cytarabine in a phase 1/2 clinical trial in the United States in patients with relapsed or refractory acute myelogenous leukemia (AML) or myelodysplastic syndromes (MDS).

During 2015, our resources were focused primarily on evaluating the potential clinical pathway for CA4P in ovarian cancer after receiving in late 2014 the positive results from a phase 2 clinical trial in ovarian cancer conducted by the GOG, evaluating other potential indications for CA4P and the approval pathways for these indications, planning a registration grade phase 2/3 clinical trial in platinum-resistant ovarian cancer, continuation of our phase 2 clinical trial testing of CA4P in neuroendocrine tumors, or NETs, and supporting the phase 1b/2 clinical trial of CA4P in combination with pazopanib in advanced recurrent ovarian cancer that is being conducted in the

U.K. We also brought in-house an on-going clinical trial of OXi4503 in AML that was previously being conducted by an investigator at a single site, and moved this trial into its combination treatment phase.

In 2014 and earlier years, we focused our capital resources on completing clinical trials of CA4P for various indications and other work related to the development of this investigational drug candidate. These activities included supporting the CA4P ovarian cancer phase 2 clinical trial conducted by the GOG, the investigator-sponsored OXi4503 phase 1 clinical trial in AML, our distribution agreement for the compassionate use of CA4P in anaplastic thyroid cancer, or ATC, in Europe, and the manufacture of CA4P for subsequent clinical trials. We have also focused capital resources on completing our ATC trial, or the FACT Study, completing our non-small cell lung cancer, or NSCLC, trial, or the FALCON Study, as well as completing other clinical trials, mostly using CA4P as a single agent, in solid tumors, NSCLC, head and neck cancer, prostate cancer, ovarian cancer, cervical cancer, advanced gastrointestinal carcinoma and certain ocular indications.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of our financial statements in accordance with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time we make such estimates. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the financial statements prospectively from the date of the change in estimate. Our significant accounting policies are more fully described in Note 2 to our financial statements included elsewhere in this report.

We define our critical accounting policies as those accounting principles that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations, as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our financial statements that require significant estimates and judgments are the following:

Research and development expenses

Research and development expenses consist of costs we incur for the development of our investigational drugs and for preclinical research activities. Research and development costs are expensed as incurred. Research and development expenses include salaries and benefits of employees, including associated stock-based compensation, payments to clinical investigators, drug manufacturing costs, laboratory supplies and facility costs. Clinical trial costs can be a significant component of our research and development expenses, and these can be difficult to accurately estimate. Included in clinical trial costs are fees paid to other entities that conduct certain research and development activities on our behalf, such as clinical research organizations, or CROs. We estimate clinical trial expenses based on the services performed pursuant to contracts with research institutions such as CROs and the actual clinical investigators. These estimates are based on actual time and expenses incurred by the CRO and the clinical investigators. Also included in clinical trial expenses are costs based on the level of patient enrollment into the clinical trial and the actual services performed under the related clinical trial agreement. Changes in clinical trial assumptions, such as the length of time estimated to enroll all patients, rate of screening failures, patient drop-out rates, number and nature of adverse event reports and the total number of patients enrolled can impact the average and expected cost per patient and the overall cost of the clinical trial. Based on patient enrollment reports and services provided, we may periodically adjust estimates for the clinical trial costs. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed, the length of time for these services or the costs of these services, our actual expenses could differ from our estimates. Although we have not experienced significant changes in our estimates of clinical trial accruals to date, investors should be aware that our planned clinical trial in platinum-resistant ovarian cancer is expected to be larger than any other clinical trial that we have conducted previously.

Share-based compensation

We record the estimated fair value of all share-based payments issued to employees and other service providers. The valuation of stock options is an inherently subjective process, since market values are not available for long-term, non-transferable stock options in our equity securities. Accordingly, we use a Black-Scholes option pricing model to derive an estimated fair value of the stock options which we issue. The Black-Scholes option pricing model requires certain input assumptions, including the expected term of the options and the expected volatility of our common stock. Changes in these assumptions could have a material impact on the estimated fair value that we record for share-based payments that we issue. We determine the term of the options based on the simplified method, which averages the vesting period and the contractual life of the stock option. We determine the expected volatility based on the historical volatility of our common stock over a period commensurate with the option's expected term. The Black-Scholes option pricing model also requires assumptions for risk-free interest rates and the expected dividend yield of our common stock, but we feel that these values are more objective and note that changes in these values do not have a significant impact on the estimated value of the options when compared to the volatility and term assumptions.

We are also required to estimate the level of award forfeitures expected to occur and record compensation expense only for those awards that are ultimately expected to vest. Accordingly, we perform a historical analysis of option awards that are forfeited prior to vesting, and record total stock option expense that reflects this estimated forfeiture rate.

RESULTS OF OPERATIONS

Years ended December 31, 2015 and 2014

Research and Development expenses

The table below summarizes the most significant components of our research and development expenses for the periods indicated and provides the amount and percentage change in these components (in thousands):

	Years ended December 31,		Change	
	2015	2014	Amount	%
Clinical studies	$ 3,693	$ 1,539	$ 2,154	140%
Drug manufacturing	452	2,626	(2,174)	-83%
Consulting and professional services	1,450	1,052	398	38%
Employee compensation and related	2,520	1,405	1,115	79%
Employee stock-based compensation	513	194	319	164%
Other	458	592	(134)	-23%
Total research and development	**$ 9,086**	**$ 7,408**	**$ 1,678**	**23%**

In 2015 compared to 2014, total research and development expenses increased primarily due to higher external clinical trial costs related to the development of our VDAs as potential new treatments for cancer and higher employee-related costs resulting from additional personnel as we refocused the Company on clinical development. These increases were partially offset by lower drug manufacturing expenses since the drug product required for our 2015 clinical programs was manufactured in 2014.

The increase in clinical studies expense for 2015 compared to 2014 is primarily due to contract research organization costs related to our ongoing clinical trials. Clinical studies expenses include fees paid to contract research organizations who conduct clinical trials on our behalf, patient and clinical site costs, laboratory costs and other services directly related to clinical trials. The increase in 2015 is primarily due to planning and preparation for our upcoming phase 2/3 of CA4P in platinum-resistant ovarian cancer, fees paid to contract research organizations managing our CA4P NET phase 2 trial initiated in 2014, and to a lesser extent our OXi4503 AML phase 1b/2 trial that we brought in-house in 2015. Patient costs also contributed to the increase in clinical study costs as most of the CA4P NET phase 2 patient enrollment occurred in 2015.

Drug manufacturing expenses consist primarily of costs paid to third-party manufacturers for production of our investigational drugs. These manufacturing costs decreased for 2015 compared to 2014 due to our production of substantially less CA4P drug product in 2015, as we fulfilled 2015's CA4P drug supply requirements in 2014. Timing of drug manufacturing costs is variable and is impacted by the timing of when drug product is needed for clinical trials, product expiration or re-test requirements, potential regulatory filings and scheduling of production batches based on the drug manufacturer's generally long lead time requirements.

The increase in consulting and professional services for 2015 compared to 2014 is primarily due to a full evaluation that we undertook of our entire CA4P program in 2015, including evaluation of various potential indications.

Employee compensation and related expenses increased in 2015 compared to 2014 primarily due to our hiring of additional research and development personnel to support our current and planned clinical programs for CA4P and OXi4503. For the same reason, employee stock-based compensation increased in 2015 compared to 2014.

Other expenses include facility related expenses and licensing fees which decreased in 2015 compared to 2014 due to lower licensing fees paid for rights to our drug product candidates.

Because we plan to initiate a phase 2/3 clinical study of CA4P in platinum resistant ovarian cancer during the first half of 2016 and conduct additional clinical development of our investigational drugs, we expect research and development expenses to increase in 2016 as compared to 2015.

General and administrative expenses

The table below summarizes the most significant components of our general and administrative expenses for the periods indicated and the amount and percentage change in these components (in thousands):

	Years ended December 31,		Change	
	2015	2014	Amount	%
Employee compensation and related	$ 1,928	$ 2,041	$ (113)	-6%
Employee stock-based compensation	154	109	45	41%
Consulting and professional services	1,927	2,412	(485)	-20%
Other	587	680	(93)	-14%
Total general and administrative	**$ 4,596**	**$ 5,242**	**$ (646)**	**-12%**

For 2015 compared to 2014, total general and administrative expenses decreased primarily due to lower consulting and professional services, and, to a lesser extent, lower employee costs.

Employee compensation and related expenses decreased in 2015 compared to 2014 primarily due to greater severance expense recorded in 2014. During 2014, our severance costs were related to the departure of our former CEO, and although there were severance costs related to another employee in 2015, the amount of those costs was lower. The decrease in employee severance costs for 2015 compared to 2014 was partially offset by higher compensation costs and related expenses due to our making several positions full time during 2015 that were less than full time in 2014.

Changes in employee stock-based compensation were not significant between the periods presented.

Consulting and professional services expenses decreased in 2015 compared to 2014 primarily due to reduced marketing, research and legal costs.

Other expenses, which include facility related expenses and insurance expenses, decreased for 2015 compared to 2014 due to lower fees paid in several different areas, none of which were individually significant.

Although general and administrative expenses decreased in 2015 compared to 2014, we expect general and administrative expenses to increase in 2016 to support our planned increase in research and development, as well as for additional business development and investor relations efforts.

LIQUIDITY AND CAPITAL RESOURCES

We are developing two investigational drugs, both VDAs, for the treatment of cancer and currently have no sources of revenue. We measure liquidity by the cash and other capital we have available to fund our operations, which are primarily focused on the advancement of our VDAs. To date, we have financed our operations principally through net proceeds received from the sale of equity, including $9.2 million in 2015 and $35.2 million in 2014, and at one point through a strategic development arrangement which concluded in 2009. We have experienced net losses in each year since our inception, and negative cash flow from operations in nearly every year also. As of December 31, 2015, we had an accumulated deficit of over $264 million, including a net loss of approximately $13.7 million in 2015, and cash of approximately $27.3 million, which we expect to be sufficient to fund our operations into the third quarter of 2017. We expect to continue to incur expenses, resulting in losses and negative cash flows from operations, over at least the next several years as we continue to develop our candidate drugs for the treatment of cancer.

We expect to incur significant additional costs over at least the next several years as a result of our plans to develop VDAs for the treatment of cancer, including continuing our existing clinical trials as well as conducting new, additional clinical trials and anticipated research and development expenditures. We anticipate that our development will include continuing our current clinical trials as well as new clinical trials and additional research and development expenditures.

We will require additional capital before we can complete all planned clinical trials and development of CA4P and OXi4503. Additional funding may not be available to us on acceptable terms, or at all. If we are unable to access additional funds when needed, we may not be able to continue the development of our product candidates or we could be required to delay, scale back or eliminate some or all of our development programs and operations. Any additional equity financing, if available, may not be available on favorable terms, would most likely be dilutive to our current stockholders and debt financing, if available, may involve restrictive covenants. If we are able to access funds through collaborative or licensing arrangements, we may be required to relinquish rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize on our own, on terms that are not favorable to us.

We have filed a shelf registration statement on Form S-3 with the SEC, covering the sale from time to time of shares of our common stock and other securities, which may provide us the opportunity to raise funds when we consider it necessary or appropriate, at prices and on terms to be determined at the time of any such offering. However, pursuant to the instructions to Form S-3, we only have the ability to sell shares under the shelf registration statement, during any 12-month period, in an amount less than or equal to one-third of the aggregate market value of our common stock held by non-affiliates. Our ability to access capital when needed is not assured and, if not achieved on a timely basis, will materially harm our business, financial condition and results of operations. Our ability to raise additional capital could also be further impaired if we are unable to comply with the listing standards of The NASDAQ Capital Market and our stock trades elsewhere.

Contractual Obligations

The following table presents information regarding our non-cancelable contractual obligations, which consists of our facility lease, as of December 31, 2015:

	Amount (in thousands)
2016	209
2017	215
2018	221
2019	112
Total lease obligations	**$ 757**

Our primary drug development programs are based on a series of natural products called combretastatins. In August 1999, we entered into an exclusive license for the commercial development, use and sale of products or services covered by certain patent rights owned by Arizona State University, or ASU. This agreement was subsequently amended in June 2002. From the inception of the ASU license agreement through December 31, 2015, we have paid a total of $2,700,000 in connection with this license. The ASU license agreement provides for additional payments in connection with the license arrangement upon the initiation of certain clinical trials or the completion of certain regulatory approvals. The ASU license agreement also provides for additional payments upon our election to develop certain additional compounds, as defined in the ASU license agreement. We are also required to pay royalties on future net sales of products associated with these patent rights. Either party may terminate the ASU license agreement upon material default or bankruptcy of the other party. In addition, we may terminate the agreement by either (i) determining that filing for regulatory approval is not warranted or economically feasible by the clinical testing date or (ii) by providing two months written notice of our intent to terminate the agreement.

We also have an exclusive, world-wide, royalty-bearing license from Bristol-Myers Squibb, or BMS, for the commercial development, use and sale of products or services covered by certain patent rights to particular combretastatins, including CA4P. BMS granted this license to us in February of 2002 in connection with the termination of a prior research collaboration and license agreement by and between BMS and us. Under the BMS license, we have the right to grant sublicenses, and BMS is entitled to low-single-digit royalty payments for commercial sales of products related to these licensed patent rights plus any remuneration we receive for sale of CA4P under named patient or compassionate use programs. All licensing fees and milestone payments under the BMS license have been paid. We bear the costs of preparing, filing, prosecuting and maintaining all patent applications under the BMS license and have a right, but not a duty, of enforcing patents covered by the license. Either party may terminate the BMS license upon material default of the other party.

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

We have adopted an Investment Policy, the primary objectives of which are to preserve principal, maintain proper liquidity to meet operating needs and maximize yields while preserving principal. Although our investments are subject to credit risk, we follow procedures to limit the amount of credit exposure in any single issue, issuer or type of investment. Our investments are also subject to interest rate risk and will decrease in value if market interest rates increase. However, due to the generally conservative nature of our investments and relatively short duration, we believe that interest rate risk is mitigated. Our cash and cash equivalents are maintained in U.S. dollar accounts. Although we may from time to time manufacture drugs and conduct trials and studies outside of the United States, we believe our exposure to foreign currency risk to be immaterial.

ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

See Item 15 for a list of our Financial Statements and Schedules and any supplementary financial information filed as part of this Annual Report.

ITEM 9. *CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE*

Not applicable.

ITEM 9A. *CONTROLS AND PROCEDURES*

Evaluation of our Disclosure Controls and Procedures

The Securities and Exchange Commission requires that as of the end of the period covered by this Annual Report on Form 10-K, the Chief Executive Officer, or CEO, and the Chief Financial Officer, or CFO, evaluate the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e)) under the Exchange Act and report on the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective, as of December 31, 2015, to ensure that we record, process, summarize

and report the information we must disclose in reports that we file or submit under the Exchange Act, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such control that occurred during the fourth quarter of our fiscal year ended December 31, 2015, which have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2015 based on the criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2015.

This Annual Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the SEC.

Important Considerations

The effectiveness of our disclosure controls and procedures and our internal control over financial reporting is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of our systems, the possibility of human error, and the risk of fraud. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and the risk that the degree of compliance with policies or procedures may deteriorate over time. Because of these limitations, there can be no assurance that any system of disclosure controls and procedures or internal control over financial reporting will be successful in preventing all errors or fraud or in making all material information known in a timely manner to the appropriate levels of management. Because we are not an accelerated filer, as defined by Rule 12b-2 of the Exchange Act, Ernst & Young LLP was not required to issue an opinion on our internal control over financial reporting and, therefore, did not perform for the fiscal year ended December 31, 2015 an audit of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

ITEM 9B. *OTHER INFORMATION*

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Proposal 1 — Election of Directors," "Board and Committee Meetings," "Section 16(a) Beneficial Ownership Reporting Compliance," "Executive Officers of the Company" and "Code of Conduct and Ethics" to be included in the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders.

ITEM 11. ***EXECUTIVE COMPENSATION***

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Executive Compensation," to be included in the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders.

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

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" "Equity Compensation Plan Information," and "Proposal 2-Increase in Authorized Shares for Equity Compensation Plan" to be included in the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders.

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

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Certain Relationships and Related Transactions," "Board and Committee Meetings" and "Executive Compensation" to be included in the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders.

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

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Audit Fees" to be included in the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders.

PART IV

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

(a) The following documents are filed as part of this Annual Report on Form 10-K.

(1) *Financial Statements*

See financial statements listed in the accompanying "Index to Financial Statements" covered by the Report of Independent Registered Public Accounting Firm.

(2) *Financial Statement Schedule*

No schedules are submitted because they are not applicable, not required or because the information is included in the Financial Statements as Notes to Financial Statements.

(3) *Exhibits*

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
3.1	Restated Certificate of Incorporation of the Registrant, as amended by Certificates of Amendment dated June 22, 1995, November 15, 1996, July 14, 2005, June 2, 2009, February 8, 2010, August 5, 2010, February 22, 2011, May 29, 2012, December 27, 2012 and July 17, 2013.	10-Q	8/6/2015	3.1	
3.2	Amended and Restated By-Laws of the Registrant.	8-K	12/20/2007	3.1	
4.1	Specimen Common Stock Certificate.	S-1	8/23/1993	4.1	
4.2	Form of Series A/B Common Stock Purchase Warrant.	8-K	4/11/2013	4.1	

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
4.3	Form of Common Stock Purchase Warrant.	8-K	9/20/2013	4.1	
4.4	Form of Common Stock Purchase Warrant	S-1/A	1/31/2014	4.9	
4.5	Form of Placement Agent Purchase Warrant	S-1/A	1/31/2014	4.8	
4.6	Form of Common Stock Purchase Warrant.	8-K	2/14/2014	4.1	
4.7	Form of Placement Agent Purchase Warrant.	8-K	2/14/2014	4.2	
4.8	Form of Common Stock Purchase Warrant.	8-K	3/20/2015	4.1	
4.9	Form of Common Stock Purchase Warrant.	8-K	5/23/2014	4.1	
4.10	Form of Registration Rights Agreement, dated as of May 22, 2014, by and among the Registrant and the purchasers named therein.	8-K	5/23/2014	10.2	
10.1	OXiGENE 1996 Stock Incentive Plan, as amended. +	S-8	12/14/1999	4.2	
10.2	Technology Development Agreement, dated as of May 27, 1997, between the Registrant and the Arizona Board of Regents, acting for and on behalf of Arizona State University.	10-K	4/15/1998	10.9	
10.3	License Agreement No. 206-01.LIC by and between the Arizona Board of Regents, acting on behalf of and for Arizona State University, and OXiGENE Europe AB, dated August 2, 1999.	10-K/A	8/12/2003	10.27	
10.4	Amendment and Confirmation of License Agreement No. 206-01.LIC, dated as of June 10, 2002, between the Registrant and the Arizona Board of Regents, acting for and on behalf of Arizona State University.	10-Q	8/14/2002	10.29	
10.5	Research Collaboration and License Agreement, dated as of December 15, 1999, between OXiGENE Europe AB and Bristol-Myers Squibb Company. *	8-K	12/28/1999	99.1	
10.6	Termination Agreement by and between OXiGENE Europe AB and Bristol-Myers Squibb Company dated as of February 15, 2002.	10-Q	8/14/2002	10.14	
10.7	Research and License Agreement between the Registrant and Baylor University, dated June 1, 1999.	10-K/A	8/12/2003	10.28	
10.8	Agreement to Amend Research and License Agreement between the Registrant and Baylor University, dated April 23, 2002.	10-K/A	8/12/2003	10.29	
10.9	Addendum to Research and License Agreement between the Registrant and Baylor University, dated April 14, 2003.	10-K/A	8/12/2003	10.30	
10.10	License Agreement, dated as of June 14, 2012, by and between the Registrant and Angiogene Pharmaceuticals Ltd. *	10-K	3/20/2014	10.38	

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
10.11	Lease between Broadway 701 Gateway Fee LLC, A Delaware Limited Liability Company, as Landlord, and the Registrant, as Tenant, dated October 10, 2008.	10-K	3/30/2009	10.59	
10.12	Third Amendment to Lease, dated as of April 1, 2013, by and between the Registrant and DWF III GATEWAY, LLC, a Delaware limited liability company.	10-Q	5/9/2013	10.1	
10.13	Fourth Amendment to Lease, dated April 28, 2014, by and between the Registrant and DWF III Gateway, LLC.	10-Q	5/8/2014	10.1	
10.14	OXiGENE, Inc. 2005 Stock Plan (as amended and restated July 16, 2013). +	S-8	8/6/2013	10.1	
10.15	Form of Incentive Stock Option Agreement under OXiGENE 2005 Stock Plan. +	10-K	3/14/2006	10.29	
10.16	Form of Non-Qualified Stock Option Agreement under OXiGENE 2005 Stock Plan. +	10-K	3/14/2006	10.30	
10.17	Form of Restricted Stock Agreement under OXiGENE 2005 Stock Plan. +	10-K	3/14/2006	10.31	
10.18	OXiGENE, Inc. 2015 Equity Incentive Plan. +	S-8	5/28/2015	99.1	
10.19	Form of Option Agreement under OXiGENE 2015 Equity Incentive Plan. +	10-Q	8/6/2015	10.6	
10.20	Form of Indemnification Agreement. +	10-Q	8/13/2012	10.2	
10.21	OXiGENE, Inc. Amended and Restated Non-Employee Director Compensation Policy, effective July 2014 +	10-Q	8/8/2014	10.4	
10.22	Employment Agreement by and between the Registrant and William D. Schwieterman, dated as of May 12, 2015. +	10-Q	8/6/2015	10.1	
10.23	Amendment No. 1 to Employment Agreement by and between William D. Schwieterman, dated as of July 31, 2015. +	10-Q	8/6/2015	10.7	
10.24	Employment Agreement by and between the Registrant and David J. Chaplin, dated as of May 16, 2014 +	10-Q	8/8/2014	10.1	
10.25	Amended and Restated Employment Agreement by and between the Registrant and David J. Chaplin, dated as of May 12, 2015. +	10-Q	8/6/2015	10.3	
10.26	Employment Agreement by and between the Registrant and Matthew M. Loar, dated as of July 20, 2015. +	10-Q	8/6/2015	10.2	
10.27	Employment Agreement by and between the Registrant and Barbara D. Riching, dated as of February 2013. +	8-K	2/28/2013	10.1	
10.28	Separation Agreement by and between the Registrant and Barbara D. Riching, dated as of June 23, 2015. +	10-Q	8/6/2015	10.4	
10.29	At Market Issuance Sales Agreement, dated July 21, 2010, between OXiGENE, Inc. and McNicoll, Lewis & Vlak LLC.	8-K	7/21/2010	10.1	

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
10.30	Amendment No. 1 to At Market Issuance Agreement, dated as of May 31, 2012, by and between the Registrant and McNicoll, Lewis & Vlak LLC.	S-3	5/31/2012	1.2	
10.31	Letter agreement dated as of February 11, 2014, by and between OXiGENE, Inc. and H.C. Wainwright & Co., LLC.	8-K	2/14/2014	1.1	
10.32	Letter Agreement, dated as of May 22, 2014, by and between the Registrant and H.C. Wainwright & Co.	8-K	5/23/2014	1.1	
10.33	Form of Securities Purchase Agreement dated as of February 12, 2014, by and among OXiGENE, Inc. and the purchasers signatory thereto.	8-K	2/14/2014	10.1	
10.34	Securities Purchase Agreement, dated as of May 22, 2014, by and among the Registrant and the purchasers named therein.	8-K	5/23/2014	10.1	
10.35	Securities Purchase Agreement, dated as of March 20, 2015, by and among the Registrant and the purchasers named therein.	8-K	3/20/2015	10.1	
14.1	Corporate Code of Conduct and Ethics.	10-K	3/30/2015	14.1	
23.1	Consent of Independent Registered Public Accounting Firm.				x
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a).				x
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a).				x
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				x
	Interactive Data Files for the fiscal years ended December 31, 2015 and December 31, 2014				
101.INS	XBRL Instance Document				x
101.SCH	XBRL Taxonomy Extension Schema				x
101.CAL	XBRL Taxonomy Extension Calculation Linkbase				x
101.DEF	XBRL Taxonomy Extension Definition Linkbase				x
101.LAB	XBRL Taxonomy Extension Label Linkbase				x
101.PRE	XBRL Taxonomy Extension Presentation Linkbase				x
					x

* Confidential treatment has been granted for portions of this Exhibit. Redacted portions filed separately with the Securities and Exchange Commission.
\+ Management contract or compensatory plan or arrangement.

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.

OXiGENE, Inc.

By: /S/ WILLIAM D. SCHWIETERMAN
William D. Schwieterman
Chief Executive Officer

Date: March 25, 2016

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

Signature	Title	Date
/S/ WILLIAM D. SCHWIETERMAN William D. Schwieterman	President, Chief Executive Officer and Director (Principal executive officer)	March 25, 2016
/S/ MATTHEW M. LOAR Matthew M. Loar	Chief Financial Officer (Principal financial and accounting officer)	March 25, 2016
/S/ FREDERICK W. DRISCOLL Frederick W. Driscoll	Chairman of the Board and Director	March 25, 2016
/S/ DAVID J. CHAPLIN David J. Chaplin	Director	March 25, 2016
/S/ TAMAR D. HOWSON Tamar D. Howson	Director	March 25, 2016
/S/ GERALD MCMAHON Gerald McMahon	Director	March 25, 2016
/S/ SIMON C. PEDDER Simon C. Pedder	Director	March 25, 2016

OXiGENE, Inc.

Index to Financial Statements

The following financial statements of OXiGENE, Inc.:

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
OXiGENE, Inc.

We have audited the accompanying balance sheets of OXiGENE, Inc. as of December 31, 2015 and 2014, and the related statements of comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of OXiGENE, Inc. at December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Redwood City, California
March 25, 2016

OXiGENE, Inc.

Balance Sheets
(in thousands, except per share data)

	December 31, 2015	December 31, 2014
ASSETS		
Current assets:		
Cash	$ 27,285	$ 30,031
Prepaid expenses and other current assets	105	322
Total current assets	27,390	30,353
Property and equipment, net	30	37
Other assets	33	33
Total assets	$ 27,453	$ 30,423
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 287	$ 335
Accrued compensation and employee benefits	636	841
Accrued clinical trial expenses	918	20
Other accrued liabilities	262	223
Total current liabilities	2,103	1,419
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value, 15,000 shares authorized; No shares issued and outstanding	—	—
Common stock, $0.01 par value, 70,000 shares authorized; 26,545 and 20,705 shares issued and outstanding at December 31, 2015 and December 31, 2014, respectively	265	207
Additional paid-in capital	289,894	279,952
Accumulated deficit	(264,809)	(251,155)
Total stockholders' equity	25,350	29,004
Total liabilities and stockholders' equity	$ 27,453	$ 30,423

See accompanying notes.

OXiGENE, Inc.

Statements of Comprehensive Loss
(in thousands, except per share data)

	2015	2014
Operating expenses:		
Research and development	$ 9,086	$ 7,408
General and administrative	4,596	5,242
Total operating expenses	13,682	12,650
Loss from operations	(13,682)	(12,650)
Interest income	27	6
Other income (expense), net	1	(3)
Net loss and comprehensive loss	$(13,654)	$(12,647)
Basic and diluted net loss per share attributable to common stock	$ (0.54)	$ (0.75)
Weighted-average number of common shares outstanding	25,201	16,973

See accompanying notes.

OXiGENE, Inc.

Statements of Stockholders' Equity
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance December 31, 2013	5,586	$ 56	$244,495	$ (238,508)	$ 6,043
Net loss and comprehensive loss	—	—	—	(12,647)	(12,647)
Issuance of common stock in a public offering, net of issuance costs of $1,140	5,854	59	10,801	—	— 10,860
Issuance of common stock in a private placement, net of issuance costs of $1,178	5,401	54	14,768	—	— 14,822
Proceeds from exercise of warrants to purchase common stock, net of issuance costs of $71	3,857	38	9,474	—	9,512
Stock based compensation expense	7	—	414	—	414
Balance December 31, 2014	20,705	207	279,952	(251,155)	29,004
Net loss and comprehensive loss	—	—	—	(13,654)	(13,654)
Issuance of common stock in a private placement, net of issuance costs of $805	5,840	58	9,136	—	9,194
Stock based compensation expense	—	—	806	—	806
Balance December 31, 2015	26,545	$ 265	$289,894	$ (264,809)	$ 25,350

See accompanying notes.

OXiGENE, Inc.

Statements of Cash Flows
(in thousands)

	2015	2014
Operating activities:		
Net loss	$(13,654)	$(12,647)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	20	16
Amortization of license agreement	—	93
Stock-based compensation	806	414
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	217	(195)
Accounts payable and accrued expenses	684	168
Net cash used in operating activities	(11,927)	(12,151)
Investing activities:		
Purchase of property and equipment	(13)	(17)
Net cash used in investing activities	(13)	(17)
Financing activities:		
Proceeds from issuance of common stock, net of issuance costs	9,194	25,682
Proceeds from exercise of warrants to purchase common stock, net of issuance costs	—	9,512
Net cash provided by financing activities	9,194	35,194
(Decrease) increase in cash	(2,746)	23,026
Cash at beginning of year	30,031	7,005
Cash at end of year	$ 27,285	$ 30,031

See accompanying notes.

OXiGENE, INC.

Notes to Financial Statements
December 31, 2015

1. Description of Business

OXiGENE, Inc. ("OXiGENE" or the "Company") is incorporated in the state of Delaware, and is a clinical-stage, biopharmaceutical company developing vascular disrupting agents ("VDAs") to treat cancer. VDAs selectively target the vasculature of cancer tumors and obstruct a tumor's blood supply without disrupting the blood supply to normal tissues. We have two VDA drug candidates currently being tested in clinical trials, CA4P (combrestatin A4-phosphate, fosbretabulin tromethamine, fosbretabulin or ZYBRESTAT ®) and OXi4503. OXiGENE is dedicated to leveraging its intellectual property and therapeutic development expertise to bring life-extending and life-enhancing medicines to patients.

2. Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Concentration of Credit Risk

The Company has no significant off balance sheet concentrations of credit risk. Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash. The Company holds its cash at one financial institution.

Fair Value

The Company discloses information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. A fair value hierarchy is established that prioritizes valuation inputs based on the observable nature of those inputs.

As of December 31, 2015 and 2014, the Company did not hold any assets or liabilities subject to fair value measurement on a recurring basis.

Property and Equipment

Property and equipment, including leasehold improvements are recorded and stated at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which range from three to five years, or the applicable lease term, whichever is less.

Accrued Clinical Trial Expenses

The Company utilizes contract research organizations (CROs), independent clinical investigators, and other third-party service providers to assist with the execution of its clinical trials. The Company records costs for clinical trial activities based upon the estimated amount of services provided but not yet invoiced for each clinical trial, and includes these costs in accrued liabilities on its Balance Sheets and within research and development expenses on its Statements of Comprehensive Loss. Contracts for clinical trials vary significantly in length and are usually composed of a fixed management fee, variable indirect reimbursable costs, monthly costs and amounts owed on a per patient basis. The Company monitors both the activity and patient enrollment levels of each clinical trial to the extent possible through communication with each service provider, detailed invoice and task completion review, analysis of actual expenses against budget, pre-approval of any changes in scope, and review of contractual terms. As a result, accrued clinical trial expenses represent the Company's reasonably estimated contractual liability to outside service providers at any particular point in time. These estimates may or may not match the actual services performed by the service providers as determined by actual patient enrollment levels and other variable activity costs.

OXiGENE, INC.

Notes to Financial Statements — (Continued)

Research and Development Expenses

The Company charges all research and development costs, both internal and external, to expense when incurred. The Company's research and development expenses consist primarily of personnel costs, including salaries, benefits and stock-based compensation, clinical studies performed by contract research organizations (CROs), costs associated with manufacturing the Company's drug product for clinical use and required regulatory filings, licenses and fees, and overhead allocations consisting of various support and facility-related costs.

Clinical study and manufacturing costs are significant components of the Company's research and development expenses. A large portion of the costs for the Company's clinical trials are paid to or through third-party CROs. The Company monitors levels of services provided under each significant contract including the extent of patient enrollment and other activities through communications with its CROs. Costs are accrued for clinical studies performed by CROs over the service periods specified in the contracts and estimates are adjusted, if required, based upon ongoing review of the level of effort and costs actually incurred by the CROs. The manufacturing of the Company's drug product is outsourced to third-party manufacturers. The cost of the drug product is expensed as manufactured. All material CRO and manufacturing contracts are terminable by the Company upon written notice and amounts paid in advance related to uncompleted services will generally be refunded to the Company.

Comprehensive Net Loss

For the periods presented, there are no components of other comprehensive income or accumulated comprehensive income and net loss is equal to comprehensive loss.

Stock-based Compensation

The Company expenses the estimated fair value of all share-based payments issued to employees on a straight-line basis over the vesting period. The Company has an equity incentive plan that provides for the award of stock options, restricted stock and stock appreciation rights to employees, directors and consultants to the Company.

Patents and Patent Applications

The Company has filed applications for patents in connection with various product candidates and technologies being developed. Costs associated with patent applications and maintaining patents are expensed as general and administrative expense as incurred.

Income Taxes

The Company accounts for income taxes using the liability method whereby tax rates are applied to cumulative temporary differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes based on when and how they are expected to affect the tax return.

Subsequent Events

The Company reviews all activity subsequent to year end but prior to the issuance of the financial statements for events that could require disclosure or which could impact the carrying value of assets or liabilities as of the balance sheet date.

OXiGENE, INC.

Notes to Financial Statements — (Continued)

3. Property and equipment

Property and equipment consists of the following (in thousands):

	December 31, 2015	December 31, 2014
Equipment	$ 226	$ 237
Furniture and fixtures	36	36
Leasehold improvements	6	6
Total assets	268	279
Less accumulated depreciation	(238)	(242)
Total property and equipment, net	**$ 30**	**$ 37**

4. Stockholders' Equity

March 2015 Financing

On March 25, 2015, the Company completed a financing with institutional investors in which it raised $10.0 million, or approximately $9.2 million after deducting placement agent fees and other offering expenses. Investors purchased shares of the Company's common stock at a price of $1.7125 per share and received one warrant to purchase one half of a share of the Company's common stock at the same exercise price per share as each share of common stock purchased. A total of 5,839,420 shares of common stock and warrants for the purchase of 2,919,710 shares of common stock were issued. The warrants were exercisable immediately after issuance and expire 5 years from the date of issuance. Also, in connection with the financing, the Company issued to its placement agent and related persons warrants to purchase 233,577 shares of the Company's common stock, which were exercisable immediately after issuance, have an exercise price of $2.13 per share and expire on March 20, 2020.

May 2014 Financing

On May 28, 2014, the Company completed a financing in which it raised $16.0 million, or approximately $14.8 million after deducting placement agent fees and other offering expenses. Investors purchased shares of the Company's common stock at a price of $2.9625 per share and received one warrant to purchase one half of a share of the Company's common stock at $2.90 per share. A total of 5,400,847 shares of common stock and warrants for the purchase of 2,700,424 shares of common stock were issued. The warrants were exercisable immediately after issuance and expire 5 years and 3 months from the date of issuance. Also, in connection with the offering, the Company issued to its placement agent and related persons warrants to purchase 216,033 shares of the Company's common stock, which were exercisable immediately after issuance, have an exercise price of $3.70 per share and expire on June 14, 2017.

February 2014 Financing

On February 18, 2014, the Company completed a financing in which it raised $12.0 million, or approximately $10.9 million after deducting placement agent fees and other offering expenses. Investors purchased shares of the Company's common stock at a price of $2.05 per share and received one warrant to purchase one half of a share of the Company's common stock at $2.75 per share. A total of 5,853,657 shares of common stock and warrants for the purchase of 2,926,829 shares of common stock were issued. The warrants were exercisable immediately after issuance and expire 5 years from the date of issuance. Also, in connection with the offering, the Company issued to its placement agent and related persons warrants to purchase 292,682 shares of the Company's common stock, which were exercisable immediately after issuance, have an exercise price of $2.56 per share and expire on February 11, 2019.

OXiGENE, INC.

Notes to Financial Statements — (Continued)

Warrants

The following is a summary of the Company's outstanding common stock warrants:

Expiration Date	Exercise Price	December 31, (in thousands) 2015	2014
04/16/15	$ 3.40	—	757
06/14/17	3.70	216	216
04/16/18	3.40	1,460	1,460
09/23/18	2.80	147	147
02/11/19	2.56	293	293
02/18/19	2.75	1,872	1,872
08/28/19	2.90	2,700	2,700
03/20/20	2.13	234	—
03/25/20	1.71	2,920	—
		9,842	**7,445**

During the year ended December 31, 2014, investors exercised 3,857,000 warrants for the purchase of 3,857,000 shares of the Company's common stock for net proceeds of approximately $9.5 million. No warrants were exercised during the year ended December 31, 2015.

All warrants outstanding at December 31, 2015 and 2014 were recorded by the Company as equity at the time of issuance.

Options and restricted stock

On May 28, 2015, the Company's stockholders approved the 2015 Equity Incentive Plan (the "2015 Plan"). Under the 2015 Plan, up to 4,000,000 shares of the Company's common stock may be issued pursuant to awards granted in the form of incentive stock options, nonqualified stock options, restricted and unrestricted stock awards, and other stock-based awards to employees, consultants, and directors. The 2015 Plan also allows additional shares of the Company's common stock to be issued if awards outstanding under the Company's 2005 Stock Plan (the "2005 Plan") are cancelled, forfeited, surrendered, or terminated after the April 25, 2015 expiration of the 2005 Plan, provided that no more than 725,781 shares of the Company's common stock shall be added to the 2015 Plan from the 2005 Plan.

OXiGENE, INC.

Notes to Financial Statements — (Continued)

The following is a summary of the Company's stock option activity under its 2015 and 2005 Plans:

	Options Available for Grant	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
	(in thousands)			(years)	(in thousands)
Balance at December 31, 2013	534	192	$ 12.54	7.61	
Options granted	(521)	521	$ 2.67		
Options forfeited	41	(41)	$ 33.40		
Balance at December 31, 2014	54	672	$ 3.63	8.49	
Options granted	(1,842)	1,842	$ 1.40		
Options forfeited	483	(483)	$ 1.93		
Options authorized	4,000	—	$ —		
Balance at December 31, 2015	2,695	2,031	$ 2.01	8.44	$ —
Vested and exercisable at December 31, 2015		536	$ 3.25	7.70	$ —
Unvested at December 31, 2015		1,495	$ 1.57		
Expected to vest at December 31, 2015		1,009			

As of December 31, 2015 there was approximately $980,000 of unrecognized compensation cost related to stock option awards that is expected to be recognized as expense over a weighted average period of approximately 2.8 years.

The weighted average fair value of stock options issued in 2015 and 2014 was $1.05 and $1.87, respectively.

The fair values for the stock options granted were estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Years ended December 31,	
	2015	2014
Risk-free interest rate	1.71%	1.55%
Expected life (years)	6	4
Expected volatility	92%	99%
Dividend yield	0.00%	0.00%

In calculating the estimated fair value of its stock options, the Company used the Black-Scholes option pricing model which requires the consideration of the following six variables for purposes of estimating fair value:

- the stock option exercise price,
- the expected term of the option,
- the grant date price of the Company's common stock, which is issuable upon exercise of the option,
- the expected volatility of the Company's common stock,
- the expected dividends on the Company's common stock, and
- the risk-free interest rate for the expected option term.

OXiGENE, INC.

Notes to Financial Statements — (Continued)

Stock Option Exercise Price and Grant Date Price of the Company's common stock — The closing market price of the Company's common stock on the date of grant.

Expected Term — The expected term of options represents the period of time for which the options are expected to be outstanding, and is calculated based on the average of the vesting period and the option term.

Expected Volatility — The expected volatility is a measure of the amount by which the Company's stock price is expected to fluctuate during the term of the option granted. The Company determines the expected volatility based on the historical volatility of its common stock over a period commensurate with the option's expected term.

Expected Dividends — Because the Company has never declared or paid any cash dividends on any of its common stock and does not expect to do so in the foreseeable future, the Company uses an expected dividend yield of zero to calculate the grant date fair value of a stock option.

Risk-Free Interest Rate — The risk-free interest rate is the implied yield available on U.S. Treasury issues with a remaining life consistent with the option's expected term on the date of grant.

The Company estimates the level of award forfeitures expected to occur and records compensation expense only for those awards that are ultimately expected to vest.

The Company recorded expenses of $0 and $20,000 during the years ended December 31, 2015 and 2014, respectively, related to restricted stock awards granted from the Company's 2005 Stock Plan. The restricted stock awards were valued based on the closing price of the Company's common stock on the grant date and the shares were fully vested upon grant.

As of December 31, 2015, the Company did not have any unvested restricted common stock outstanding.

5. Net Loss Per Share

Basic and diluted net loss per share was calculated by dividing the net loss per share attributed to the Company's common shares by the weighted-average number of common shares outstanding. Diluted net loss per share includes the effect of all dilutive, potentially issuable common equivalent shares as defined using the treasury stock method. All of the Company's common stock equivalents are anti-dilutive due to the Company's net loss position for all periods presented. Accordingly, common stock equivalents of approximately 2,031,000 and 672,000 options to purchase common stock and 9,842,000 and 7,445,000 warrants to purchase common stock at December 31, 2015 and 2014, respectively, were excluded from the calculation of weighted average shares for diluted net loss per share.

6. Income Taxes

The components of the Company's deferred tax assets are as follows (in thousands):

	December 31,	
	2015	2014
Net operating loss carryforwards	$ 83,558	$ 79,194
Stock based compensation	333	667
Research and development credits	2,628	2,301
Accruals and reserves	240	297
Total Deferred tax assets	86,759	82,459
Valuation allowance	(86,759)	(82,459)
Net deferred tax asset	**$ —**	**$ —**

OXiGENE, INC.

Notes to Financial Statements — (Continued)

After consideration of the available evidence, both positive and negative, the Company has determined that a full valuation allowance at December 31, 2015 and 2014 is necessary to reduce the deferred tax assets to the amount that will more likely than not be realized. The valuation allowance increased by approximately $4,300,000 and $3,877,000 for the years ended December 31, 2015 and 2014, respectively. The increase for both 2015 and 2014 was due primarily to the increase in the federal net operating loss. As all of the Company's deferred tax assets have been reserved for in a valuation allowance, no provision for (benefit from) income taxes has been recorded in the accompanying financial statements.

At December 31, 2015, the Company had net operating loss carry-forwards of approximately $237,000,000 for U.S. income tax purposes, which will begin to expire in 2020 and state operating loss carry-forwards in California of $55,000,000 which will begin to expire in 2017. The Company had federal research and development tax credits of $2,830,000 which will begin to expire in 2021. The Company also had state research and development tax credits in California of $1,023,000 which have no expiration.

The future utilization of the net operating loss carry-forwards and credit carry-forwards is likely to be subject to an annual limitation due to ownership changes that have occurred in the past or that may occur in the future under the provisions of Section 382 or 383 of the Internal Revenue Code.

A reconciliation of the federal statutory rate to the Company's effective tax rate is as follows:

	Years ended December 31,	
	2015	2014
Federal statutory rate	34.00%	34.00%
State income taxes	(0.49)	(0.00)
Federal NOL adjustment	(0.43)	(0.00)
State NOL expired or adjusted	(0.07)	
Permanent items	(3.26)	(10.82)
Stock compensation	(0.11)	(0.05)
Federal research credits	1.86	0.71
State rate change	—	6.82
Miscellaneous	—	—
(Increase)/ Decrease in Valuation Allowance	(31.50)	(30.66)
Provision for income taxes	**0.00%**	**0.00%**

At December 31, 2015, the Company had $1,410,000 of unrecognized tax benefits of which $963,000 relates to research and development credits and $447,000 relates to California net operating losses.

The change in unrecognized tax benefits from December 31, 2013 is as follows (in thousands):

Unrecognized tax benefits as of 12/31/13	$ 748
Increase in prior year unrecognized tax benefits	295
Increase in current year unrecognized tax benefits	50
Unrecognized tax benefits as of 12/31/14	1,093
Increase in prior year unrecognized tax benefits	195
Increase in current year unrecognized tax benefits	122
Unrecognized tax benefits as of 12/31/15	**$1,410**

OXiGENE, INC.

Notes to Financial Statements — (Continued)

The Company does not expect its unrecognized tax benefits to change significantly over the next twelve months. As of December 31, 2015, due to a valuation allowance against the Company's deferred tax assets, none of the unrecognized tax benefits, if recognized, would affect the Company's effective tax rate.

There are currently no federal or state audits in progress. Tax years still subject to examination for Federal and the State authorities include all prior years due to the existence of net operating loss carry-forwards.

It is the Company's practice to recognize interest and penalties related to income tax matters in income tax expense. As of December 31, 2015 the Company has no accrued interest and penalties related to uncertain tax positions.

7. Commitments and Contingencies

The Company has a lease for its corporate headquarters which expires on June 30, 2019. The lease is for a total of 5,275 square feet of office space located in South San Francisco, California. Rental expense for the years ended December 31, 2015 and 2014 was $210,000 and $206,000, respectively. The future minimum lease payments required under the lease are as follows:

	Amount (in thousands)
2016	209
2017	215
2018	221
2019	112
Total lease obligations	**$ 757**

8. Retirement Savings Plan

The Company sponsors a savings plan available to all employees, which qualifies under Section 401(k) of the Internal Revenue Code. Employees may contribute from 1% to 20% of their pre-tax salary to the plan, subject to statutory limitations. The Company is able to match participant contributions, although to date the Company has not provided any matching payments to participants.

9. Related Party Transactions

A portion of the compensation paid to David Chaplin, Ph.D., our Chief Scientific Officer and former Chief Executive Officer, is paid to Aston Biopharma Ltd. for services Dr. Chaplin performs for the Company while in the United Kingdom. The amounts paid to Aston Biopharma Ltd. aggregated $190,000 and $167,000 in 2015 and 2014, respectively.

Dr. Chaplin and his spouse beneficially own 33% of Angiogene Pharmaceuticals Ltd. ("Angiogene"), a company from which OXiGENE, Inc. has licensed certain rights to patent applications. In accordance with the terms of the agreement, the Company paid Angiogene $75,000 and $150,000 for the years ended December 31, 2015 and 2014, respectively.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statements (Form S-3 Nos. 333-204333, 333-196589, 333-191531, 333-188114, 333-165826, 333-160976, 333-155372, 333-106307, 033-64968, 333-15241 and 333-12867) of OXiGENE, Inc.,
2. Registration Statement (Form S-8 Nos. 333-126636, 333-177628, 333-181810 and 333-190409) pertaining to the OXiGENE, Inc. 2005 Stock Plan, as amended,
3. Registration Statement (Form S-8 No. 333-159585) pertaining to the OXiGENE, Inc. 2005 Stock Plan and the OXiGENE, Inc. 2009 Employee Stock Purchase Plan, and
4. Registration Statement (Form S-8 No. 333-204500) pertaining to the OXiGENE, Inc. 2015 Equity Incentive Plan;

of our report dated March 25, 2016, with respect to the financial statements of OXiGENE, Inc., included in this Annual Report (Form 10-K) of OXiGENE, Inc. for the year ended December 31, 2015.

/s/ Ernst & Young LLP

Redwood City, California
March 25, 2016

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13A-14(A) AND 15D-14(A)

I, William D. Schwieterman, certify that:

1. I have reviewed this annual report on Form 10-K of OXiGENE, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 25, 2016

By: /s/ WILLIAM D. SCHWIETERMAN

William D. Schwieterman
President and
Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13A-14(A) AND 15D-14(A)

I, Matthew M. Loar, certify that:

1. I have reviewed this annual report on Form 10-K of OXiGENE, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 25, 2016

By: /s/ MATTHEW M. LOAR

Matthew M. Loar
Chief Financial Officer

Exhibit 32.1

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of OXiGENE, Inc., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report for the year ended December 31, 2015 (the "Form 10-K") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 25, 2016

/s/ WILLIAM D. SCHWIETERMAN

William D. Schwieterman, President and Chief Executive Officer

Date: March 25, 2016

/s/ MATTHEW M. LOAR

Matthew M. Loar, Chief Financial Officer