UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

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

Date of report (Date of earliest event reported): February 24, 2016

ZIOPHARM Oncology, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) 001-33038 (Commission File Number) 84-1475642 (IRS Employer Identification No.)

One First Avenue, Parris Building 34, Navy Yard Plaza Boston, Massachusetts (Address of Principal Executive Offices)

02129 (Zip Code)

(617) 259-1970 (Registrant's telephone number, including area code)

Not applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).

Item 2.02 Results of Operations and Financial Condition

On February 24, 2016, ZIOPHARM Oncology, Inc., or the Company, issued a press release announcing its financial condition and results of operations for the three months and year ended December 31, 2015. A copy of the press release is furnished as Exhibit 99.1 and is incorporated herein by reference.

This information, including the information contained in the press release furnished as Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not incorporated by reference into any of the Company's filings, whether made before or after the date hereof, regardless of any general incorporation language in any such filing.

Item 9.01 <u>Financial Statements and Exhibits</u>

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of ZIOPHARM Oncology, Inc. dated February 24, 2016

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZIOPHARM Oncology, Inc.

By: /s/ Kevin G. Lafond Name: Kevin G. Lafond Title: Vice President Finance, Chief Accounting Officer and Treasurer

3

Date: February 24, 2016

INDEX OF EXHIBITS

Exhibit No.Description99.1Press Release of ZIOPHARM Oncology, Inc. dated February 24, 2016



ZIOPHARM Oncology, Inc.

ZIOPHARM Reports Fourth-Quarter 2015 Financial Results and Provides Update on Recent Activities

BOSTON, MA – February 24, 2016 – ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP) today announced financial results for the fourth quarter ended December 31, 2015, and provided an update on the company's recent activities.

"We look forward to a number of important milestones throughout 2016 across our gene and cell therapy platforms," said Laurence Cooper, M.D., Ph.D., Chief Executive Officer of ZIOPHARM. "For our lead gene therapy, Ad-RTS-IL-12 + veledimex, this includes data presentations in the first half of the year from our Phase 1 brain cancer trial, our Phase 1/2 breast cancer trial and from a translational, preclinical study demonstrating powerful antitumor effects when combining with checkpoint inhibitors. Through the balance of 2016, we expect to initiate or continue prosecuting up to six proof-of-concept generating studies across multiple platforms, including viral and non-viral delivery of DNA, CAR-T and NK-cell therapies based upon autologous and allogeneic, or offthe-shelf, strategies. These studies will help inform potential registration pathways and validate technologies that will enable us to achieve our game-changing goals, including delivering therapies for urgent unmet needs, such as progressive brain cancer, and developing personalized TCR-based cell therapies for solid tumors."

"To accelerate the success of our exciting clinical program, we are building out our clinical and regulatory infrastructure by hiring additional personnel in these important areas of our company," said Caesar J. Belbel, Executive Vice President, Chief Operating Officer and Chief Legal Officer of ZIOPHARM. "Through the highly efficient management of our cash, the addition of these resources in support of our aggressive clinical strategy has had a minimal impact on the projection of our financial resources, which we anticipate will be sufficient to fund our currently planned operations into the fourth quarter of 2017."

Program Updates

Ad-RTS-IL-12 + veledimex

Ad-RTS-hIL-12 + veledimex is a gene therapy candidate for the controlled expression of interleukin 12 (IL-12), a critical protein for stimulating an anticancer T-cell immune response, using the RheoSwitch Therapeutic System[®] (RTS[®]) gene switch. ZIOPHARM is currently enrolling patients in two studies of Ad-RTS-hIL-12 + veledimex: a Phase 1b/2 study for the treatment of patients with locally advanced or metastatic breast cancer following standard chemotherapy and a multi-center Phase 1 study in patients with recurrent or progressive glioblastoma multiforme (GBM), an aggressive form of brain cancer.

- Encouraging data from Phase 1 brain tumor study reported at SNO; first patient treated in second dose cohort. In November 2015, the Company reported biologic data from the multicenter, Phase 1 gene therapy study of GBM at the Society for Neuro-Oncology (SNO) 20th Annual Scientific Meeting. Following reporting of encouraging data from the first cohort of the study at the initial dosing of Ad-RTS-IL-12 + veledimex, the Company announced this week that the first patient has been enrolled in the study's second dose cohort. The Company plans to report updated results from the study at the American Society of Clinical Oncology (ASCO) Annual Meeting in June 2016.
- Encouraging data from Phase 1b/2 breast cancer study reported. In December 2015, the Company reported encouraging data, including achievement of the 12 week progression free survival endpoint by the first patient, from a Phase 1b/2 study of Ad-RTS-hIL-12 + veledimex following standard chemotherapy for the treatment of patients with locally advanced or metastatic breast cancer. The study is being conducted at the Memorial Sloan Kettering Cancer Center in New York. A trial in progress poster describing the study was presented at the San Antonio Breast Cancer Symposium in December 2015. The Company expects to present updated data from the study in 2016.
- **Preclinical studies combining Ad-RTS-IL-12 + veledimex and checkpoint inhibitors in brain tumor models.** ZIOPHARM anticipates presenting data from preclinical studies of Ad-RTS-IL-12 + veledimex combined with checkpoint inhibitors in glioblastoma mouse models at the 2016 Meeting of the American Society of Gene and Cell Therapy (ASGCT) in Washington D.C., May 4-7, 2016.

Adoptive Cell Therapies

ZIOPHARM is developing various immuno-oncology programs, including chimeric antigen receptor T-cell (CAR-T), T-cell receptor (TCR) and natural killer (NK) adoptive cell-based therapies. These programs are being advanced in collaboration with Intrexon and the MD Anderson Cancer Center and the biopharmaceutical business of Merck KGaA, Darmstadt, Germany (CAR-T only).

- Favorable overall survival (OS) and progression free survival (PFS) data from non-viral CAR-modified T cells targeting CD19 presented at ASH. In December 2015, ZIOPHARM announced results from its non-viral CD19-specific CAR T-cell therapy programs were presented at the 57th American Society of Hematology (ASH) Annual Meeting. Two investigational therapies infused T cells genetically modified to express a CD19-specific CAR into patients with advanced CD19⁺ malignancies after hematopoietic stem-cell transplantation (HSCT). This was based on non-viral gene transfer using the *Sleeping Beauty* platform to express the CAR. Long-term follow up data were used to distinguish the benefit of the CAR-T therapies over HSCT. The results demonstrated favorable PFS and OS trends compared to historical controls, with a near doubling of 3-year PFS rates for patients with Diffuse Large B-cell Lymphoma enrolled in the autologous cohort, and a doubling to tripling of 1-year OS rates results for patients with Acute Lymphoblastic Leukemia enrolled in the allogeneic cohort. The non-viral *Sleeping Beauty*-modified T cells also demonstrated *in vivo* survival that compared favorably to published results of virally-modified cells.
- First patient enrolled in Phase 1 study of second generation non-viral CD19-specific CAR T-cell therapy for advanced lymphoid malignancies. In February 2016, ZIOPHARM announced that the first patient was enrolled in a new Phase 1 clinical study of its second generation non-viral CD19-specific CAR modified T-cell therapy in patients with advance lymphoid malignancies. The CD19-specific T cells were modified using the

Sleeping Beauty system to stably express the CAR in T cells. This second-generation study employs a revised CAR construct designed to improve persistence and anti-tumor response over the first generation therapy. Additionally, this investigational treatment is independent of HSCT. The trial, which is being conducted at MD Anderson, will provide further proof-of-concept for the *Sleeping Beauty* system in a disease setting well studied using virally modified CD19-specific T cells, allowing the system to be applied to areas where viral therapy is more challenging to implement, such as the targeting of neoantigens in solid tumors.

• Sleeping Beauty non-viral gene transfer technology featured in Nature Medicine. In January 2016, the *Sleeping Beauty* non-viral gene transfer technology was featured in a perspectives article in the journal *Nature Medicine* (Volume 22, Number 1, 26-36), titled "Prospects for gene-engineered T cell immunotherapy for solid cancers." The article describes how adoptive transfer of TCR-engineered T cells for solid tumors may come from the "arduous task of targeting the unique set of mutations that cause each patient's cancer." Because of the challenges of achieving this goal, the authors note that non-viral integration systems will likely be considerably cheaper to manufacture and easier to implement for single-use applications compared with viral vectors and that, among non-viral platforms, *Sleeping Beauty* has advanced furthest in clinical development.

The *Sleeping Beauty* transposon-transposase is a unique non-viral system for introducing genes encoding CARs and TCRs into lymphocytes and is exclusively licensed by Intrexon through MD Anderson and accessed as part of ZIOPHARM's collaboration with Intrexon. This non-viral approach has several potential advantages over viral delivery systems, including a lower cost of generating genetically modified T cells as well as the ability to generate T cells with minimal *ex vivo* processing and can serve as a conduit to targeting solid tumor neoantigens using TCRs.

Upcoming Studies

As previously announced, ZIOPHARM anticipates launching clinical studies in three new programs in 2016:

- A Phase 1 clinical trial in patients with glioblastoma using the combination of Ad-RTS-IL-12 + veledimex and a selected checkpoint inhibitor.
- A Phase 1 study of a viral-based CAR T-cell therapy for myeloid malignancies. Details of the study and antigen target will be provided as the Company initiates the study.
- A Phase 1 clinical trial using off-the-shelf primary NK cells for investigational therapy of acute myeloid leukemia, building on promising proofof-principle trials such as ongoing at MDACC infusing autologous and allogeneic NK cells.

Fourth-Quarter 2015 Financial Results

• Net loss for the fourth quarter of 2015 was \$9.5 million, or \$(0.07) per share, compared to a net loss of \$10.4 million, or \$(0.09) per share, for the fourth quarter of 2014.

- Research and development expenses were \$8.1 million for the fourth quarter of 2015 which is consistent with \$8.1 million for the fourth quarter of 2014. In 2015, research and development costs include \$4.5 million related to CAR-T programs \$1.6 million related to gene therapy programs, \$1.3 million in employee related expenses and \$0.7 million in other R&D activities.
- General and administrative expenses were \$3.3 million for the fourth quarter of 2015 compared to \$2.9 million for the fourth quarter of 2014. The
 increase of \$0.4 million in general and administrative expenses is primarily attributable to non-cash equity compensation and other employee
 related expenses.
- The Company ended the quarter with cash and cash equivalents of approximately \$140.7 million. Given current development plans, the Company anticipates that current cash resources will be sufficient to fund our planned operations into the fourth quarter of 2017.

About ZIOPHARM Oncology, Inc.:

ZIOPHARM Oncology is a Boston, Massachusetts-based biotechnology company employing novel gene expression, control and cell technologies to deliver safe, effective and scalable cell-based therapies for the treatment of cancer. The Company's synthetic immuno-oncology programs, in collaboration with Intrexon Corporation (NYSE: XON) and the MD Anderson Cancer Center, include chimeric antigen receptor T cell (CAR-T) and other adoptive cell based approaches that use non-viral gene transfer methods for broad scalability. The Company is advancing programs in multiple stages of development together with Intrexon Corporation's kill switch and RheoSwitch Therapeutic System[®] technology, a switch to turn on and off, and precisely modulate, gene expression in order to improve therapeutic index. The Company's pipeline includes a number of cell-based therapeutics in both clinical and preclinical testing which are focused on hematologic and solid tumor malignancies.

Forward-Looking Safe-Harbor Statement:

This press release contains certain forward-looking information about ZIOPHARM Oncology, Inc. that is intended to be covered by the safe harbor for "forward-looking statements" provided by the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts, and in some cases can be identified by terms such as "may," "will," "could," "expects," "plans," "anticipates," and "believes." These statements include, but are not limited to, statements regarding the progress, timing and results of preclinical and clinical trials involving the Company's drug candidates, and the progress of the Company's research and development programs. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied by, the forward-looking statements. These risks and uncertainties include, but are not limited to: whether chimeric antigen receptor T cell (CAR-T) approaches, Ad-RTS-IL-12, TCR and NK-cell-based therapies, or any of our other therapeutic candidates will advance further in the pre-clinical or clinical trials process and whether and when, if at all, they will receive final approval from the U.S. Food and Drug Administration or equivalent foreign regulatory agencies and for which indications; whether CAR-T approaches, Ad-RTS-IL-12, TCR and NK cell-based therapies, Ad-RTS-IL-12, TCR and our other therapeutic products will be successfully marketed if approved; the strength and enforceability of our intellectual property rights; competition from other pharmaceutical and biotechnology companies; and the other risk factors contained in our

periodic and interim SEC reports filed from time to time with the Securities and Exchange Commission, including but not limited to, our Annual Report on Form 10-K for the fiscal year ended December 31, 2015. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

Trademarks

RheoSwitch Therapeutic System® (RTS®) technology is a registered trademark of Intrexon Corporation.

ZIOPHARM Oncology, Inc. Condensed Statements of Operations (in thousands except share and per share data) (unaudited)

	Three Months Ended December 31,				Year Ended December 31,				
		2015		2014		2015		2014	
Revenue	\$	1,919	\$	340	\$	4,332	\$	1,373	
Operating expenses:									
Research and development		8,142		8,085		106,785		32,706	
General and administrative		3,259		2,851		17,647		12,166	
Total operating expenses		11,401		10,936		124,432		44,872	
Loss from operations		(9,482)		(10,596)		(120,100)		(43,499)	
Other income (expense), net		6		1		12		(5)	
Change in fair value of warrants		—		194		—		11,723	
Net loss	\$	(9,476)	\$	(10,401)	\$	(120,088)	\$	(31,781)	
Basic and diluted net loss per share	\$	(0.07)	\$	(0.09)	\$	(0.96)	\$	(0.31)	
Weighted average common shares outstanding used to compute basic									
and diluted net loss per share	12	9,879,897	10	02,878,774	12	25,416,084	10	1,130,710	

ZIOPHARM Oncology, Inc. Balance Sheet Data (in thousands) (unaudited)

	December 31, 2015	December 31, 2014
Cash and cash equivalents	140,717	42,803
Working capital	134,398	33,261
Total assets	153,724	45,237
Total stockholders' equity	87,371	33,841

Contact: Lori Ann Occhiogrosso ZIOPHARM Oncology, Inc. 617-259-1987 locchiogrosso@ziopharm.com

David Pitts Argot Partners 212-600-1902 <u>david@argotpartners.com</u>