
**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): November 17, 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)).
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Item 7.01 **Regulation FD Disclosure**

On November 17, 2016, ZIOPHARM Oncology, Inc., or the Company, will conduct an investor webcast summarizing clinical and nonclinical data from its multi-center Phase 1 study for its Ad-RTS-hIL-12 + orally-administered vedolimex product candidate in patients with recurrent or progressive glioblastoma, or GBM, or Grade III malignant glioma, a form of brain cancer, presented at the 21st Annual Scientific Meeting and Education Day of the Society for Neuro-Oncology (SNO), being held November 17 – 20, 2016 in Scottsdale, Arizona. A copy of the presentation is furnished as Exhibit 99.2 to this Current Report on Form 8-K.

The information in Item 7.01 of this Current Report on Form 8-K, including the information contained in the presentation furnished as Exhibit 99.2, is intended to be furnished and 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 8.01 **Other Events**

On November 17, 2016, the Company issued a press release announcing its upcoming presentation of clinical and nonclinical data from its multi-center Phase 1 study for its Ad-RTS-hIL-12 + orally-administered vedolimex product candidate in patients with recurrent or progressive GBM, or Grade III malignant glioma, a form of brain cancer, at the 21st Annual Scientific Meeting and Education Day of the Society for Neuro-Oncology (SNO), being held November 17 – 20, 2016 in Scottsdale, Arizona. The full text of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 **Financial Statements and Exhibits**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of the Company dated November 17, 2016
99.2	Presentation of the Company dated November 17, 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

Date: November 17, 2016

INDEX OF EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of the Company dated November 17, 2016
99.2	Presentation of the Company dated November 17, 2016



ZIOPHARM Oncology, Inc.

ZIOPHARM Announces Clinical Data on Ad-RTS-hIL-12 Demonstrates Survival Benefits in Patients with Recurrent Brain Cancer

– Data to Be Presented at the 21st Society for Neuro-Oncology Annual Meeting –

– Non-clinical Study Supports Initiation of New Clinical Trial of Ad-RTS-hIL-12 in Pediatric Brain Tumors –

– Company to Host Conference Call Today at 8:00a.m. ET –

BOSTON, MA – November 17, 2016 – ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP), a biopharmaceutical company focused on new immunotherapies, today announced the presentation of both clinical and nonclinical data for Ad-RTS-hIL-12 + orally-administered veledimex for recurrent brain cancer at the 21st Annual Scientific Meeting of the Society for Neuro-Oncology (SNO) held November 17-20, 2016 in Scottsdale, Arizona. Ad-RTS-hIL-12 + veledimex is a novel viral gene therapy candidate utilizing the proprietary RheoSwitch Therapeutic System[®] (RTS[®]) technology for the controlled expression of interleukin 12 (IL-12), a critical protein for stimulating a vigorous immune response against cancers.

In a poster presentation titled “Phase 1 study of intra-tumoral viral delivery of Ad-RTS-hIL-12 + oral veledimex is well tolerated and suggests survival benefit in recurrent high-grade glioma,” the Company will report interim results from patients with recurrent high-grade gliomas enrolled in three veledimex dosing cohorts (20mg, n=7; 30mg, n=6; and 40mg, n=6). Subjects with relapsed high-grade gliomas, either glioblastoma (GBM) or anaplastic astrocytoma (AA), undergoing re-resection were intra-tumorally injected once with Ad-RTS-hIL-12 along with oral doses of veledimex to activate and control production of IL-12.

As of October 14, 2016, the date of data collection for the SNO presentation, median overall survival (mOS) was 12.8 months (mos), with 11 of 17 subjects alive. Survival rates at 6, 9, and 12 months for patients with multiple recurrences prior to administration of Ad-RTS-hIL-12 are described in the table:

Treatment	N	Relapsed Brain Tumor	Medium # Recurrences	mOS (months)	Survival Rate (%)		
					6 months	9 months	12 months
Ad + V (Overall)	17	16 GBM, 1 AA	3	12.8	87	65	54
Ad+ V (20 mg)	7	6 GBM, 1 AA	3	12.8	100	86	71

GBM is an aggressive brain tumor affecting approximately 74,000 people worldwide each year.^{i,ii} For patients who have experienced recurrences the prognosis is particularly poor, with a mOS of 6-7 months, while mOS in patients that have failed temozolomide and bevacizumab, or equivalent salvage chemotherapy, is approximately 3-5 months.^{iii, iv}

In the study, IL-12 leading to the production of interferon-gamma in the bloodstream was measured and found to be proportional to the three doses of veledimex, demonstrating that this orally-delivered activator crossed the blood brain barrier to engage the RTS® gene switch and express IL-12 in a dose-dependent manner. Toxicities in all three dose cohorts were consistent with those previously reported, with a higher incidence of grade 3 or greater adverse events in the 40 mg dose group. Importantly, all related side effects were reversed upon cessation of veledimex. Based on the tolerability and survival benefit seen, the 20 mg dose of veledimex has been selected for an ongoing expansion cohort.

“These translational data confirm the activity of Ad-RTS-hIL-12 + veledimex in the clinic, demonstrating that veledimex crosses the blood brain barrier to activate the RheoSwitch® gene switch and produce IL-12, resulting in an immune response to the tumor and now, impressively, overall survival outcomes,” said Francois Lebel, M.D., Executive Vice President, Research and Development, Chief Medical Officer at ZIOPHARM. “With median overall survival beyond 12 months in these patients who have experienced multiple recurrences, the therapeutic potential of Ad-RTS-hIL-12 + veledimex is very promising. We look forward to enrolling additional patients in the expanded 20 mg dose cohort and to discussing the results of the Phase I multi-center study with the FDA, with the goal of determining a registration pathway for this therapeutic in a disease with far too few treatment options.”

The Company will also present results from a pre-clinical study of Ad-RTS-mIL-12 + veledimex as an investigational therapy for pediatric glioma in a poster titled “Local regulated IL-12 expression as an immunotherapy for the treatment of pontine glioma”. Glioma in the pontine region of the brain accounts for approximately 15% of all cases of pediatric brain tumors, with a median survival time of less than one year. In an orthotopic pons model, veledimex was shown to cross the blood brain barrier to control mouse IL-12 production from the tumor, which stimulated the immune system and resulted in a profound increase in overall survival. Based on these results, the Company plans to initiate a Phase 1 clinical trial in pediatric brain tumors, including diffuse intrinsic pontine glioma (DIPG) in 2017.

“DIPG is an aggressive disease, and because of its location in the brain, it is virtually untreatable,” added Laurence Cooper, M.D., Ph.D., Chief Executive Officer of ZIOPHARM. “Ad-RTS-hIL-12 + veledimex has unique potential in this indication especially given our ability to not only turn IL-12 on and off, but also to titrate IL-12 levels thanks to the RTS® technology. Our Ad-RTS-IL-12 + veledimex program continues to gain momentum, with the potential for a registration pathway in recurrent high-grade glioma in adults and expected study initiations as monotherapy in pediatric patients, as well as, in combination with checkpoint inhibitors in adult patients with brain cancer.”

All poster presentations are available online at www.ziopharm.com.

Conference Call and Slide Webcast

ZIOPHARM will host a conference call and webcast slide presentation today, Thursday, November 17, 2016, at 8:00 am ET to discuss updated data from the Company’s Phase 1 study of Ad-RTS-hIL-12 + veledimex in high-grade glioma. The call can be accessed by dialing (844) 309-0618 (U.S. and Canada) or (661) 378-9465 (international). The passcode for the

conference call is 11110235. To access the slides and live audio webcast, or the subsequent archived recording, visit the “Investors & Media” section of the ZIOPHARM website at www.ziopharm.com. The webcast will be recorded and available for replay on the Company’s website for two (2) weeks.

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- and viral-based therapies for the treatment of cancer and graft-versus-host-disease. The Company’s 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 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 Company’s plans and expectations regarding its securities offerings, fundraising activities and financial strategy, 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: our ability to finance our operations and business initiatives and obtain funding for such activities, whether chimeric antigen receptor T cell (CAR T) approaches, Ad-RTS-hIL-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 chimeric antigen receptor T cell (CAR T) approaches, Ad-RTS-hIL-12, TCR and NK cell-based therapies, 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, and our Quarterly Report for the quarter ended September 30, 2016. 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® and RTS® are registered trademarks of Intrexon Corporation.

- i. Mrugala MM. Advances and challenges in the treatment of glioblastoma: a clinician's perspective. *Discov Med.* 2013;15:221-230. <http://www.discoverymedicine.com/Maciej-M-Mrugala/2013/04/25/advances-and-challenges-in-the-treatment-of-glioblastoma-a-clinicians-perspective/>. Accessed March 24, 2015.
- ii. McCubrey JA, LaHair MM, Franklin RA. OSU—0312 in the treatment of glioblastoma. *Mol Pharmacol.* 2006;70:437-439.
- iii. Omuro, A. Glioblastoma and Other Malignant Gliomas. A Clinical Review *JAMA.* 2013 Nov 6;310(17):1842-50.
- iv. Iwamoto et al. Patterns of relapse and prognosis after bevacizumab failure in recurrent glioblastoma. *Neurology* 2009; 73(15):1200-1206

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ZIOPHARM Oncology

Investor Update Call
November 17, 2016

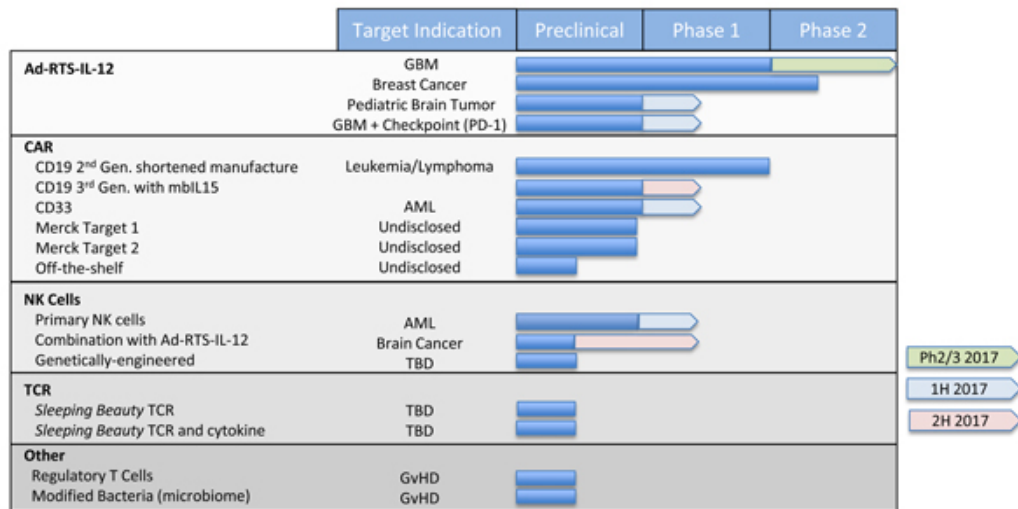
21st Annual Scientific Meeting of the Society for Neuro-Oncology



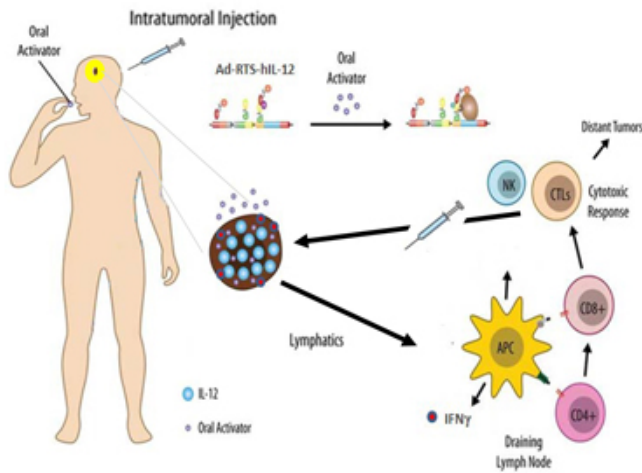
ZIOPHARM Oncology

*This presentation 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 chimeric antigen receptor T cell (CAR T) approaches, Ad-RTS-IL-12, TCR and NK cell-based therapies, 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, and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2016. 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.*

Addressing unmet medical needs: pipeline



Controlled intra-tumor delivery of IL-12 Ad-RTS-hIL-12 + veledimex

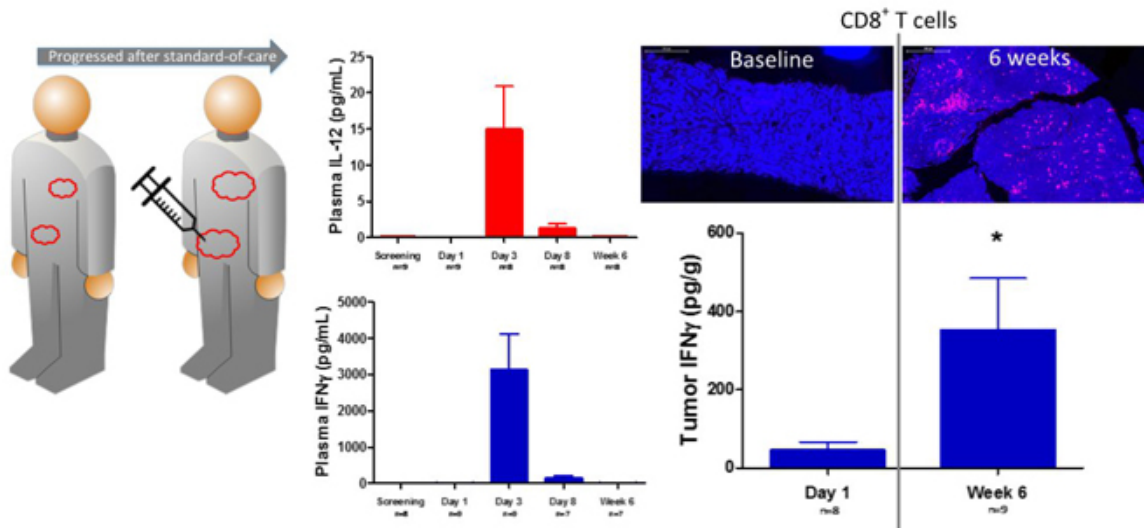


IL-12

- Pro-inflammatory cytokine can reverse immune escape mechanisms and improve the function of tumor-fighting T cells
- Ad-RTS-hIL-12 + veledimex (V, oral ligand) explores local treatment strategy under the control of the RheoSwitch Therapeutic System® (RTS®) gene switch to modulate the IL-12 therapeutic window
- Expression of functional IL-12 in human subjects by direct intratumoral injection of Ad-RTS-hIL-12 + veledimex generates downstream IFN- γ
- We have previously demonstrated that intratumoral administration of Ad-RTS-hIL-12 results in targeted tumor cytotoxicity and the likely induction of systemic T-cell memory
- As of October 14, 2016, 64 patients have been treated with Ad-RTS-IL-12 + veledimex in clinical trials

Ad-RTS-hIL-12 results in long-term remodeling of the tumor microenvironment

Phase 1b/2 study of Ad-RTS-hIL-12 + veledimex following standard chemotherapy in locally advanced or metastatic breast cancer

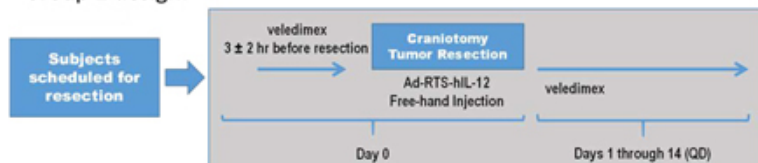


A study of Ad-RTS-hIL-12 with veledimex in subjects with glioblastoma or malignant glioma

- GBM affects approximately 74,000 people worldwide each year
- For multiple recurrence, median overall survival (OS) is 6 to 7 months
- OS in patients that have failed temozolomide and bevacizumab, or equivalent salvage chemotherapy, is approximately 3-5 months



Group 1 design:



Cohort 1:
20mg V + Ad 2x10¹¹ vp

Cohort 2:
40mg V + Ad 2x10¹¹ vp

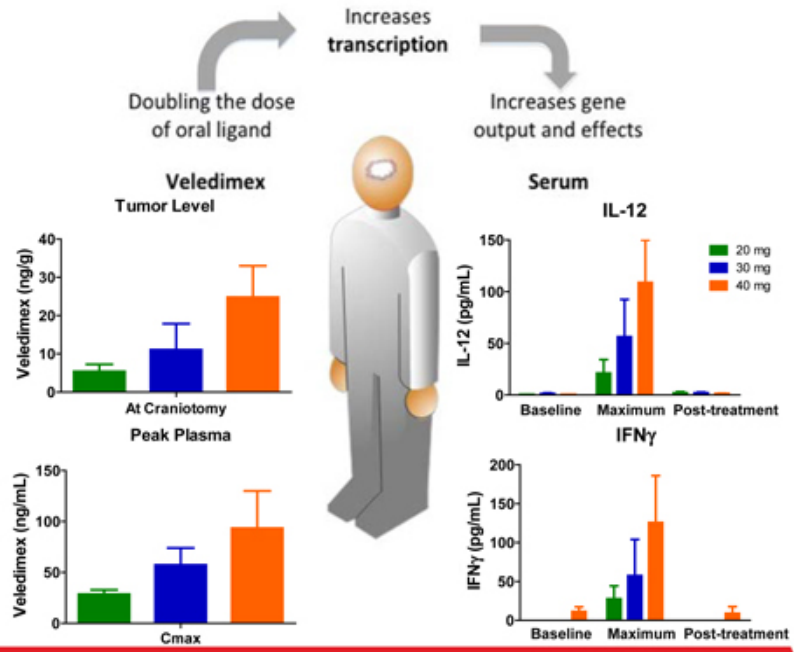
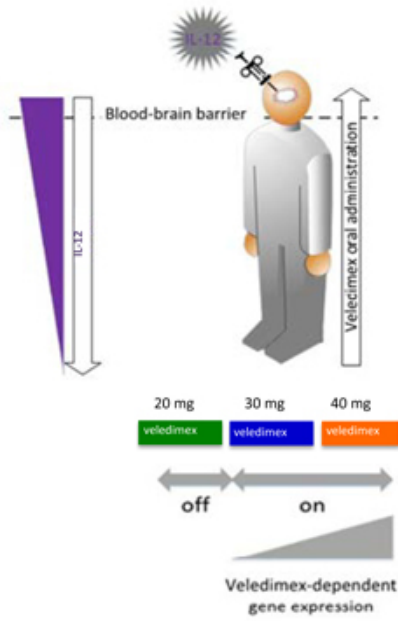
Cohort 3:
30mg V + Ad 2x10¹¹ vp

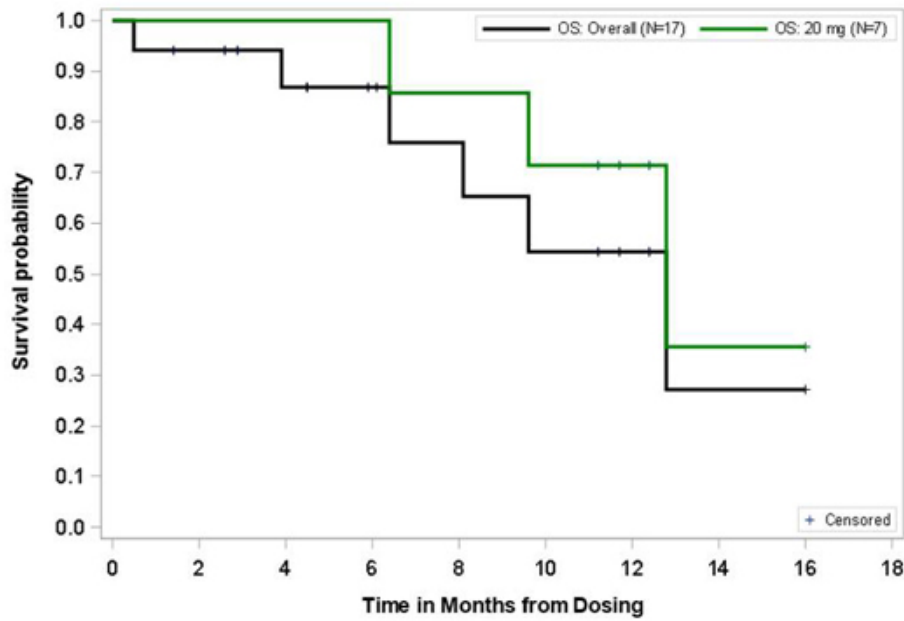
Study population

As of October 14, 2016, 17 subjects enrolled. Follow-up is ongoing.

	Ad-RTS-hIL-12 at 2×10^{11} viral particles			
	20 mg V Cohort (N=7)	30 mg Cohort (N=4)	40 mg Cohort (N=6)	Total (N=17)
Age in years Median	39.4	64.1	51.6	51.3
Gender Male : Female	4 : 3	2 : 2	4 : 2	10 : 7
Multiple Recurrences (n)	7	4	5	16
Prior Lines of Treatment (mean)	2.7	3.0	2.5	2.7
Grade at Study Entry	Grade III 1 Grade IV 6	Grade III 0 Grade IV 4	Grade III 0 Grade IV 6	Grade III 1 Grade IV 16
KPS at Screening				
≥ 90	5	3	2	10
≥ 70 and < 90	2	1	4	7
Mean V Dosing in days (15 expected)	13	9	9	11
Dose Holds due to Toxicity (% of subjects)	14%	75%	67%	47%
Total Steroid Use (Day 0-14) in mg Mean	80	87	60	75

RTS® switch responds to the presence/absence and dose of veledimex in GBM patients





- Based on Kaplan-Meier plot, estimated **median OS (mOS) is 12.8 months** for all subjects, with 11 of 17 subjects alive, as well as for the 20 mg cohort
- **Median PFS is 2.6 months**
 - All pseudo progression/progression/pseudo-responses are assumed to trigger PD for PFS analysis at this time (RANO). It is important to note that clinical benefit, including long term survival and tumor regression, can still occur after initial disease progression or after the appearance of new lesions in iRANO as reported by Okada et al, 2015

Median overall survival (mOS) relative to historical controls

Study & Design	Treatment	N	Disease	Median Age	Median # Recurrence	mOS (months)	Survival rate %		
							6 months	9 months	12 months
Ziopharm AT1001-102 Open-label Phase I	Ad+ V (Overall)	17	rGBM: 16 AA: 1	43	3	12.8	87	65	54
	Ad+ V (20 mg)	7	rGBM: 6 AA: 1	39	3	12.8	100	86	71
Randomized Phase II study, BELOB ^{i,&}	Bevacizumab	50	rGBM	58	1	8.0	63*	38	26
	Lomustine	46	rGBM	56	1	8.0	68*	43	30
Randomized Multi-Institutional Phase II study ⁱⁱ	Temozolomide	68	rGBM	53	1	9.0	71	N/A	35
Randomized Multi-Institutional Phase II study ⁱⁱⁱ	Carmustine wafer	110	rGBM: 72 Other: 38	48	N/A	7.2	56	40*	22*
	Polymer placebo	112	rGBM: 73 Other: 39	48	N/A	5.4	36	30*	20*
Novocure Randomized Phase III study, EF-11 ^{iv}	NovoTTF-100A	120	rGBM	54	2	6.6	51*	30*	22
	Physician's choice [^]	117		54		6.0	50*	30*	20

rGBM = recurrent or progressive glioblastoma; AA= anaplastic astrocytoma; *estimated from published data; ^Physician's choice included (as single agent or combination regimens) bevacizumab, irinotecan, carmustine (BCNU) / lomustine (CCNU), carboplatin, temozolomide or PCV (Procarbazine, CCNU, and Vincristine); & single agent arms selected for comparison purposes

As of October 14, 2016

Safety summary

N=17, as of October 14, 2016

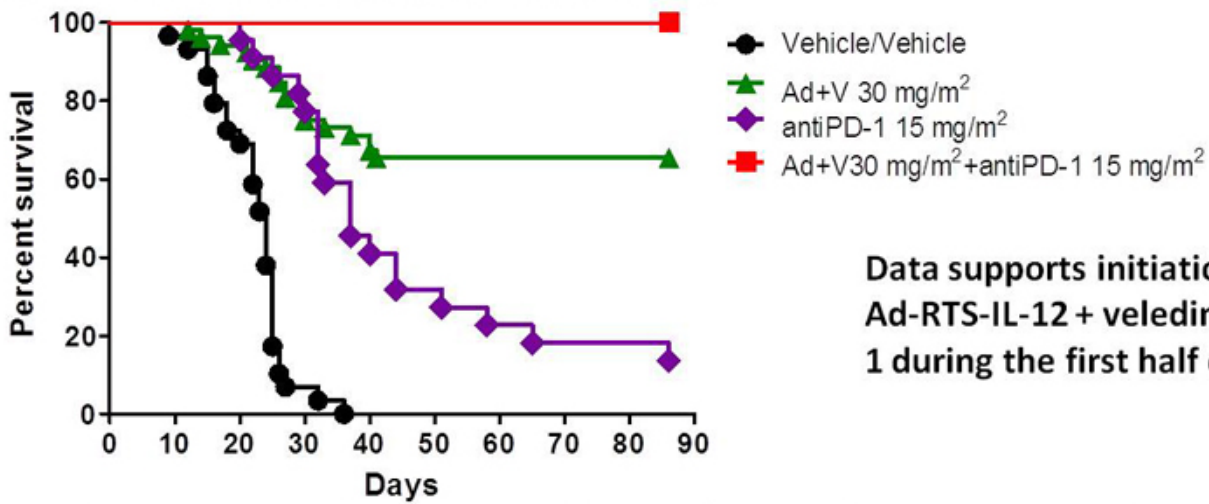
	20 mg, N=7	30 mg, N=4	40 mg, N=6
Related \geq Grade 3 TEAE	2 (29%)	2 (50%)	3 (50%)
Related SAE	2 (29%)	1 (25%)	3 (50%)
Dose discontinuation due to AE	1* (14%)	3 (75%)	4 (67%)
Cytokine release syndrome ¹ – Grade 3	1 (14%)	1 (25%)	3 (50%)

*CYP-3A4 substrate medication taken

- Frequency of drug-related toxicity correlated with veledimex dose levels
- The most common related AEs were outside of the CNS
- The most common related AEs included: pyrexia, lymphopenia, elevated ALT/AST and thrombocytopenia
- All related SAEs were rapidly reversible upon discontinuation of V:
 - Three with cytokine release syndrome (1 at 30 mg, 2 at 40 mg)
 - One with aseptic meningitis (predominantly lymphocytes)
 - One with headache, nausea, leukopenia, neutropenia, thrombocytopenia
 - One with platelet count decreased and ALT increased
- CNS toxicities were generally mild

Overall survival in mouse GL-261 orthotopic supratentorial glioma model

Ad-RTS-mIL-12 + veledimex & anti PD-1

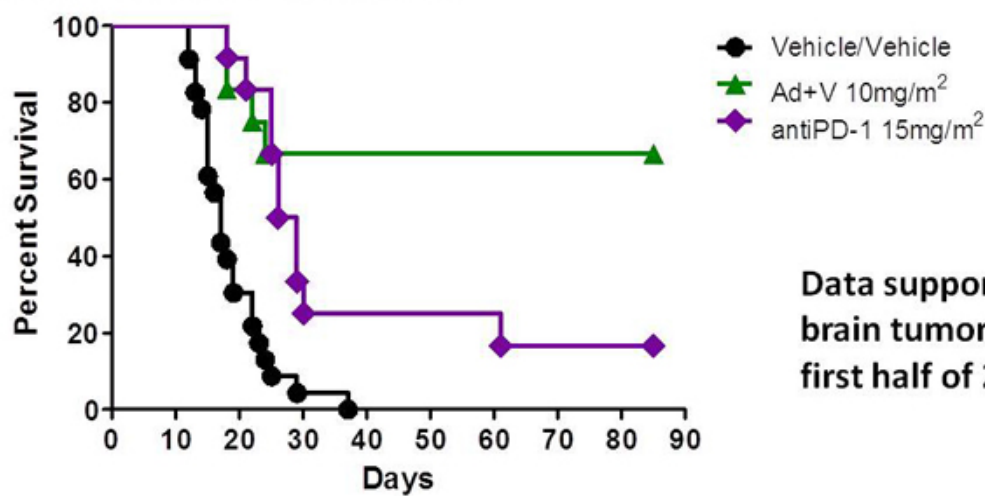


Data supports initiation of combining Ad-RTS-IL-12 + veledimex with an PD-1 during the first half of 2017

- Ad-RTS-mIL-12 + veledimex + anti PD-1 (RMP 1-14) increased survival over monotherapy
- Ad-RTS-mIL-12 + veledimex 30mg/m²/day + anti PD-1 15mg/m² 100% survival

Overall survival in mouse GL-261 pontine glioma model

Ad-RTS-mIL-12 + veledimex



Data supports initiation of a pediatric brain tumor clinical trial during the first half of 2017

- Ad-RTS-mIL-12 + veledimex superior survival over antiPD-1 therapy (67% vs. 17%)

- Ad-RTS-hIL-12 + 20 mg veledimex is well tolerated and suggests a survival benefit over historical control at 6, 9 and 12 months
- Based on tolerability and survival benefit, 20 mg has been selected for an (ongoing) expansion cohort
- Toxicities were tolerable, predictable and reversible upon discontinuing veledimex
- There is a positive correlation between veledimex dose, blood-brain barrier penetration, IL-12 levels
- These data demonstrate that the RTS® gene switch works in humans toggling not only as a switch to turn on and off the production of IL-12, but also as a rheostat to control the level of IL-12

Next Steps

- Continue study at 20 mg in an expansion cohort
- Discuss with FDA to determine appropriate next steps for a registration-enabling study
- Initiate an anti-PD1 combination study in the first half of 2017
- Initiate a pediatric brain tumor study in the first half of 2017

- **Amended Exclusive Channel Collaborations with Intrexon**
 - All unpartnered programs divided 80:20 in favor of ZIOPHARM
 - Provides greater reward for investing in development
 - Increases attractiveness to potential strategic partners
 - Sublicensed programs continue to be divided 50:50*
 - Consideration for new terms is dilutive only under certain developments

- **Well Capitalized**
 - Approximately \$94.7M in cash as of 3Q16
 - Cash runway through 4Q17
 - Shares outstanding as of November 3, 2016: 131.7M

- **Highly Efficient Operations with a Headcount of 33**
 - Partnerships support preclinical, clinical and commercial development

*Includes exclusive agreement with Intrexon for the development and commercialization of CAR-T products with Merck KGaA, Darmstadt, Germany

- **Intra-tumoral IL-12 RheoSwitch® programs**
 - Initiate Phase 2/3 clinical trial for GBM in 2017
 - Initiate combination study of Ad-RTS-hIL-12 + veledimex with immune checkpoint inhibitor therapy (PD-1) during the first half of 2017
 - Initiate Phase 1 study in the treatment of brain tumors in children during the first half of 2017
- **CAR⁺ T programs**
 - Continuation of CD19 CAR⁺ T clinical study
 - Initiate a CD33 specific CAR⁺ T clinical study for relapsed or refractory AML in the first half of 2017
 - Initiate CAR⁺ T-cell preclinical studies for other hematological malignancies and solid tumors in 2016
- **TCR-T programs**
 - Initiate TCR-modified T-cell preclinical studies in 2016
 - Preclinical data to be presented at ASH 2016
- **NK cell programs**
 - Initiate a Phase 1 study of off-the-shelf NK cells for AML in 2017
- **GvHD programs**
 - Initiate preclinical studies in 2016

- i:** Taal, W, et al. Single-agent bevacizumab or lomustine versus a combination of bevacizumab plus lomustine in patients with recurrent glioblastoma (BELOB trial): a randomised controlled phase 2 trial. *Lancet Oncology*, 2014, 15: 943–953.
- ii:** Balmaceda C, et al. Multi-institutional phase II study of temozolomide administered twice daily in the treatment of recurrent high-grade gliomas. *Cancer*. 2008;112(5): 1139–1146.
- iii:** Brem, H, et al. Placebo-controlled trial of safety and efficacy of intraoperative controlled delivery by biodegradable polymers of chemotherapy for recurrent gliomas. *The Lancet* 1995;345: 1008-1012.
- iv:** Stupp R, et al. NovoTTF-100A versus physician’s choice chemotherapy in recurrent glioblastoma: A randomized phase III trial of a novel treatment modality. *European J of Cancer*. 2012;48:2192-2202.

ZIOPHARM Oncology

Investor Update Call

November 17, 2016

21st Annual Scientific Meeting of the Society for Neuro-Oncology



ZIOPHARM Oncology