

## Ziopharm Oncology to Present Update on Controlled IL-12 Brain Cancer Trial at Annual Meeting of the Society for Neuro-Oncology on Nov. 16

## November 5, 2018

BOSTON, Nov. 05, 2018 (GLOBE NEWSWIRE) -- Ziopharm Oncology, Inc. (Nasdaq:ZIOP), a biotechnology company focused on development of next generation immunotherapies utilizing gene- and cell-based therapies to treat patients with cancer, today announced it will update data from its Phase 1 trial of Ad-RTS-hIL-12 plus veledimex, a gene therapy designed to control the expression of interleukin 12 (IL-12), a powerful cytokine that has demonstrated a targeted, anti-tumor immune response for the treatment of recurrent glioblastoma (rGBM), at the 23<sup>rd</sup> Annual Meeting and Education Day of the Society for Neuro-Oncology (SNO) in New Orleans.

A poster entitled, "A Phase 1 study of Ad-RTS-hIL-12 + veledimex in adults with recurrent glioblastoma: Dose determination with updated overall survival," will be presented Friday, Nov. 16, at 7:30 p.m. CT. The abstract for this poster today was made available online here: <a href="https://academic.oup.com/neuro-oncology">https://academic.oup.com/neuro-oncology</a>.

Ziopharm's presentation at SNO 2018 will include updated survival data for a group of 15 patients who received Ad-RTS-hIL-12 during surgical resection and the 20mg dose of veledimex, as well as the group of patients who received stereotactic administration of Ad-RTS-hIL-12. Additionally, the Company will present further analysis of the effect of dexamethasone, as data suggests that lower versus higher dose of steroids improves overall survival.

Ziopharm's Ad-RTS-hIL-12 plus veledimex construct is designed to express human interleukin 12 (hIL-12) under the control of an orally administered activator ligand, veledimex through a proprietary RheoSwitch Therapeutic System<sup>®</sup> (RTS<sup>®</sup>) gene switch. Data from this Phase 1 trial previously revealed a median overall survival (mOS) of 12.7 months for patients treated with Ad-RTS-hIL-12 plus 20mg of veledimex (n=15) at a mean follow-up time of 12.9 months as of May 4, 2018. The mOS of 12.7 months compares favorably to the 5 to 8 months survival established in historical controls for patients with rGBM. At SNO 2017, biopsy data from this study showed consistent, dose-dependent production of recombinant IL-12 leading to production of interferon gamma, an influx of CD3<sup>+</sup> CD8<sup>+</sup> cytotoxic T cells, and upregulation of PD-1 and PD-L1.

The evaluation of Ad-RTS-hIL-12 plus veledimex as a monotherapy to treat patients with rGBM continues as the Company is expanding the number of adult patients treated with 20mg of veledimex from 15 patients to up to 40, and a trial evaluating this treatment for pediatric patients with brain cancer is ongoing. Ziopharm also is conducting a Phase 1 trial to evaluate Ad-RTS-hIL-12 plus veledimex in combination with OPDIVO<sup>®</sup> (nivolumab), an immune checkpoint, or PD-1, inhibitor, in adult patients with rGBM.

## About Ziopharm Oncology, Inc.

Ziopharm Oncology is a Boston-based biotechnology company focused on the development of next-generation immunotherapies utilizing gene- and cell-based therapies to treat patients with cancer. Ziopharm is focused on the development of two platform technologies designed to deliver safe, effective, and scalable immunotherapies for the treatment of multiple cancer types: Controlled IL-12 and *Sleeping Beauty* for genetically modifying T cells. The Company's lead asset, Ad-RTS-hIL-12 plus veledimex, has demonstrated in clinical trials the potential to control interleukin-12, leading to an infiltration of T cells that fight solid tumors. Ad-RTS-hIL-12 plus veledimex is being evaluated as a monotherapy and in combination with immune checkpoint inhibitor to treat brain cancer. The Company also is advancing therapies using *Sleeping Beauty*, a non-viral approach to genetically modifying T cells to express chimeric antigen receptors (CAR) and T-cell receptors (TCR), which target specific cantigens in blood cancers and neoantigens such as in solid tumors. *Sleeping Beauty* is currently in clinical trial to generate CD19-specific CAR<sup>+</sup> T cells and supports the Company's so-called "point-of-care" technology, a very-short T-cell manufacturing process which potentially can be developed as a decentralized manufacturing process based in hospitals. These platforms are being advanced in collaboration with MD Anderson Cancer Center and the National Cancer Institute.

## Forward-Looking Statements Disclaimer

This press release contains certain forward-looking statements within the meaning of 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." All 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: the Company's ability to advance certain activities; whether chimeric antigen receptor T cell (CAR-T) approaches, Ad-RTS-hIL-12, TCR and NK cell-based therapies, or any of other product candidates will advance further in the preclinical research or clinical trial 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, competition from other pharmaceutical and biotechnology companies; as well as other risk factors contained in the Company's periodic and interim reports filed from time to time with the Securities and Exchange Commission, including but not limited to, the risks and uncertainties set forth in the "Risk Factors" section of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and subsequent reports that the Company may file with the Securities and

Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and the Company does 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.

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