

Plus Therapeutics Reports Positive Interim Updates from Two ReSPECT™ Clinical Trials at SNMMI Annual Meeting

June 29, 2023

ReSPECT-GBM Phase 1 recurrent glioblastoma trial demonstrates safety and overall survival correlation with absorbed radiation dose

ReSPECT-LM Phase 1/Part A leptomeningeal metastases trial demonstrates safety and high absorbed radiation doses to the cerebrospinal fluid and leptomeninges

AUSTIN, Texas, June 29, 2023 (GLOBE NEWSWIRE) -- Plus Therapeutics, Inc. (Nasdaq: PSTV) (the "Company"), a clinical-stage pharmaceutical company developing targeted radiotherapeutics with advanced platform technologies for central nervous system cancers, today reported positive interim updates from the ReSPECT-GBM and ReSPECT-LM clinical studies evaluating the Company's lead radiotherapeutic, rhenium (¹⁸⁶Re) obisbemeda, for the treatment of recurrent glioblastoma (rGBM) and leptomeningeal metastases (LM) at the Society of Nuclear Medicine & Molecular Imaging (SNMMI) Annual Meeting, which took place June 24-27, 2023 in Chicago, Illinois.

An oral presentation titled, Safety and Feasibility Results from a Phase 1/2 Clinical Trial of 186RNL (Rhenium-186 Nanoliposome) (186Re) Obisbemeda in Recurrent Glioma: The ReSPECT-GBM Trial [P988], brief highlights include:

- Data from 21 patients in the Phase 1 trial used to support the recommended Phase 2 trial dose for patients with tumor volumes ≤20 mL was presented.
- A single dose of rhenium (¹⁸⁶Re) obisbemeda was generally safe and well-tolerated, with no dose-limiting toxicities and minimal systemic radiation exposure.
- The data demonstrates efficacy signals in a prognostically unfavorable patient population.
- The median overall survival (OS) in all 21 patients (including those receiving small radiation doses in early cohorts and five patients previously treated with Bevucizamab) was 11 months or a 38% increase in OS versus a median OS of approximately 8 months for standard of care in rGBM.
- Median OS in patients receiving >100 Gy of absorbed radiation dose was 76 weeks (17 months) versus 22 weeks (6 months) for those receiving <100 Gy (p=0.0002).
- Increased absorbed radiation dose and percent tumor volume treated correlates with improvement in overall survival, specifically:
 - For each 100 Gy increase of Total Dose in Distribution Volume, the risk of death decreases by 45.6% (p=0.003).
 - For each 10% increase in the Ratio of Treated to Total Tumor Volume, the risk of death decreases by 66.9% (p=0.002).

A poster presentation titled, Preliminary Clinical Data in The Phase 1/2a Dose Escalation Trial of 186RNL (Rhenium-186 Nanoliposome) (186Re) Obisbemeda in Leptomeningeal Metastases (LM): The ReSPECT-LM Trial [P978], includes data that showed:

- Interim results from 10 patients in the Phase 1 trial show a single treatment with rhenium (186Re) obisbemeda decreased cerebrospinal fluid (CSF) tumor cell count and was well-tolerated in patients with LM.
- Rhenium (¹⁸⁶Re) obisbemeda doses administered through an intraventricular catheter (Ommaya reservoir) showed prompt, complete and durable distribution throughout the CSF through Day 7.
- A single rhenium (¹⁸⁶Re) obisbemeda administered dose between 6.6 mCi and 26.4 mCi achieved absorbed doses of up to 88.98 Gy to the ventricles and cranial subarachnoid space.
- No dose limiting toxicities were observed and safety observations were generally minor and resolved.
- Phase 1/Part B, for continued dose escalation (Cohorts 4-7), will open following review by the U.S. Food and Drug Administration, and repeated dosing will be explored. An expansion in Cohort 3 is currently enrolling eligible patients.
- A full update will be provided at the SNO/ASCO CNS Cancer Conference in August 10-12, 2023.

"Our Phase 1 ReSPECT-GBM trial has shown feasibility, safety and a strong correlation between both absorbed tumor radiation dose and tumor coverage," said Norman LaFrance, M.D., Chief Medical Officer of Plus Therapeutics. "As Phase 1 trials are designed for safety, statistically significant correlations between dose and overall survival are unusual. We are currently on track to complete the Phase 2 trial in late 2024 while we continue to extend the open Phase 1 dose escalation trial, which is now enrolling patients at approximately twice the radiation dose of the current Phase 2, without

dose limiting toxicities observed thus far."

Copies of the presentations will be made available under the Presentations tab of the Investors section of the Company's website following the meeting at https://ir.plustherapeutics.com.

About Rhenium (¹⁸⁶Re) obisbemeda

Rhenium (¹⁸⁶Re) obisbemeda is a novel injectable radiotherapy specifically formulated to deliver highly targeted high dose radiation in CNS tumors in a safe, effective and convenient manner to optimize patient outcomes. Rhenium (¹⁸⁶Re) obisbemeda has the potential to reduce risks and improve outcomes for CNS cancer patients, versus currently approved therapies, with a more targeted and potent radiation dose. Rhenium-186 is an ideal radioisotope for CNS therapeutic applications due to its short half-life, beta energy for destroying cancerous tissue and gamma energy for live imaging. Rhenium (¹⁸⁶Re) obisbemeda is being evaluated for the treatment of recurrent glioblastoma and leptomeningeal metastases in the ReSPECT-GBM and ReSPECT-LM clinical trials. ReSPECT-GBM is supported by an award from the National Cancer Institute (NCI), part of the U.S. National Institutes of Health (NIH), and ReSPECT-LM is funded by a three-year \$17.6M grant by the Cancer Prevention & Research Institute of Texas (CPRIT).

About Plus Therapeutics

Plus Therapeutics, Inc. is a clinical-stage pharmaceutical company developing targeted radiotherapeutics for difficult-to-treat cancers of the central nervous system with the potential to enhance clinical outcomes for patients. Combining image-guided local beta radiation and targeted drug delivery approaches, the Company is advancing a pipeline of product candidates with lead programs in recurrent glioblastoma (GBM) and leptomeningeal metastases (LM). The Company has built a robust supply chain through strategic partnerships that enable the development, manufacturing and future potential commercialization of its products. Plus Therapeutics is led by an experienced and dedicated leadership team and has operations in key cancer clinical development hubs including Austin and San Antonio, Texas. For more information, visit https://plustherapeutics.com/.

Cautionary Statement Regarding Forward-Looking Statements

This press release contains statements that may be deemed "forward-looking statements" within the meaning of U.S. securities laws. All statements in this press release other than statements of historical fact are forward-looking statements. These forward-looking statements may be identified by future verbs, as well as terms such as "designed to," "will," "can," "potential," "focus," "preparing," "next steps," "possibly," and similar expressions or the negatives thereof. Such statements are based upon certain assumptions and assessments made by management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate. These statements include, without limitation, statements regarding the following: the potential promise of ¹⁸⁶Re including the ability of ¹⁸⁶Re to safely and effectively deliver radiation directly to the tumor at high doses; expectations as to the Company's future performance including the next steps in developing the Company's current assets; the Company's clinical trials including statements regarding the timing and characteristics of the ReSPECT-GBM and ReSPECT-LM clinical trials; possible negative effects of ¹⁸⁶Re; the continued evaluation of ¹⁸⁶Re including through evaluations in additional patient cohorts; and the intended functions of the Company's platform and expected benefits from such functions.

The forward-looking statements included in this press release are subject to a number of risks and uncertainties that may cause actual results to differ materially from those discussed in such forward-looking statements. These risks and uncertainties include, but are not limited to: the Company's actual results may differ, including materially, from those anticipated in these forward-looking statements as a result of various factors, including, but not limited to, the following: the early stage of the Company's product candidates and therapies, the results of the Company's research and development activities, including uncertainties relating to the clinical trials of its product candidates and therapies; the Company's liquidity and capital resources and its ability to raise additional cash, the outcome of the Company's partnering/licensing efforts, risks associated with laws or regulatory requirements applicable to it, market conditions, product performance, litigation or potential litigation, and competition within the cancer diagnostics and therapeutics field, among others; and additional risks described under the heading "Risk Factors" in the Company's Securities and Exchange Commission filings, including in the Company's annual and quarterly reports. There may be events in the future that the Company is unable to predict, or over which it has no control, and its business, financial condition, results of operations and prospects may change in the future. The Company assumes no responsibility to update or revise any forward-looking statements to reflect events, trends or circumstances after the date they are made unless the Company has an obligation under U.S. federal securities laws to do so.

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