Plus Therapeutics Reports ReSPECT-GBM Clinical Trial Update at the 2024 Congress of Neurological Surgeons Annual Meeting

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Rhenium (^{186}Re) Obisbemeda delivered by convection enhanced delivery (CED) continues to show safety, response, and potential efficacy

Mean Phase 2 absorbed dose was 300 Gy and 89% of patients exceeded the minimal dose threshold of 100 Gy

ReSPECT-GBM Phase 1/2 trial has expanded to two new sites at leading U.S. academic medical centers in New York and Upper Midwest

AUSTIN, Texas, Oct. 01, 2024 (GLOBE NEWSWIRE) -- Plus Therapeutics, Inc. (Nasdaq: PSTV) ("Plus" or the "Company"), a clinical-stage pharmaceutical company developing targeted radiotherapeutics with advanced platform technologies for central nervous system (CNS) cancers presented an update on the ongoing ReSPECT-GBM Phase 1/2 clinical trial, evaluating the Company's lead asset Rhenium (^{186}Re) Obisbemeda for the treatment of recurrent glioblastoma. The data were presented at the 2024 Congress of Neurological Surgeons (CNS) Annual Meeting on September 30, 2024, in Houston, Texas.

The presentation, titled "Treatment of Recurrent Glioblastoma (rGBM) via Convection Enhanced Delivery (CED) with Rhenium (^{186}Re) Obisbemeda (Rhenium-186 Nanoliposome, ^{186}RNL): ReSPECT-GBM Phase 1/2 Trial Update" was delivered by lead investigator and neurosurgeon John Floyd, M.D., Associate Professor and Chair of the Department of Neurosurgery at the University of Texas Health Science Center San Antonio. The data highlights the continued favorable safety profile and encouraging efficacy results of Rhenium (^{186}Re) Obisbemeda in a patient population with historically poor prognosis.

"The ReSPECT-GBM Phase 1/2 trial continues to reinforce the safety signal and potential efficacy of Rhenium (^{186}Re) Obisbemeda in patients with recurrent glioblastoma," said John Floyd, M.D. "These updated results, particularly the encouraging safety profile and overall survival rates, support the advancement of Rhenium (^{186}Re) Obisbemeda as a promising therapeutic option for this aggressive cancer, and we are currently open and enrolling in our Phase 2 study."

ReSPECT-GBM is a first-in-human, open-label, Phase 1/2 study investigating feasibility, dose escalation, and critical convection enhanced delivery (CED) parameters to determine the maximum tolerated dose (MTD), maximum feasible dose (MFD), safety, and potential efficacy of Rhenium (^{186}Re) Obisbemeda in recurrent adult glioma (IND 116117).

Key Highlights from the ReSPECT-GBM Phase 1/2 Trial Update:

- 42 total patients have enrolled thus far at 3 sites and with 19/42 patients having been treated to date at the recommended Phase 2 dose (22.3 mCi in 8.8 mL) in tumors of approximately 20 cm^3 or less
- All Phase 2 patients have recurrent, histologically confirmed glioblastoma; 1 recurrence, bevacizumab naïve, single tumor of approximately 20 cm^3 or less (small-to-medium sized tumors)
- Average tumor size in Phase 2 was 7.5 mL (range 0.9-22.8 mL)
- Increases in absorbed dose correlated with specific drug delivery parameters such as infused dose and volume, maximal convection flow rate, and number of catheters
- Rhenium (^{186}Re) Obisbemeda continues to show a favorable safety profile in the 42 enrolled patients; one dose-limiting toxicity (hemiplegia) has been reported, which was observed in Cohort 8 (41.5 mCi and 16.3 mL)
- In Phase 2, most adverse events (AEs) were mild (73.5%) or moderate (18.8%), and largely unrelated (37.7%), or unlikely related (27.1%) to the drug. Of the 9 severe adverse events (SAEs), only 2 were related to the study drug
- Average absorbed radiation dose to the tumor in Phase 2 was 300 Gy (n=18, 1 patient still under analysis)
- To date, 88.9% of Phase 2 patients met key CED drug delivery parameters shown to correlate with overall survival, achieving a tumor absorbed dose >100 Gy and radiation coverage of >70%
- 29/42 patients treated thus far participated in the Phase 1 dose escalation phase of the trial (Note: as per protocol, 6/42 patients were included in both the Phase 1 and Phase 2 trial arms and related analyses)
- Phase 1 dose-escalation increased administered doses from 1.0 mCi to 41.5 mCi and volumes from 0.66 mL to 16.3 mL
- In terms of objective tumor response based on quantitative image analysis, a statistically significant reduction in tumor volume rate change was seen in tumors receiving > 100 Gy absorbed dose (n=11 patients analyzed to date, $p<0.005$). Sufficient tumor coverage correlated with tumor control, while regrowth occurred outside treated areas

"As presented at CNS by Dr. Floyd, who has helped pioneer this therapy, the ReSPECT-GBM trial continues to show promising feasibility, safety, response, and potential efficacy," said Marc H. Hedrick, M.D., Plus Therapeutics President and Chief Executive Officer. "Furthermore, the addition of new clinical trial sites, including North Shore University in New York and Ohio State University in the Upper Midwest, should help us complete both the Phase 1 and Phase 2 arms in the near term."

Full details of the presentation can be found here.

The ReSPECT-GBM trial is actively enrolling patients; additional information about the ReSPECT-GBM trial can be found here.

About Glioblastoma (GBM)

GBM affects approximately 15,000 patients annually in the U.S. and is the most common and lethal form of brain cancer. The average life expectancy with GBM is less than 24 months, with a one-year survival rate of 40% and a five-year survival rate of around 5%. There is no clear standard of care for recurrent GBM, and the few currently approved treatments provide only marginal survival benefit and are associated with significant side effects, which limit dosing and prolonged use. Approximately 90% of patients experience GBM tumor recurrence at or near the original tumor location, yet there are no FDA-approved treatments in the recurrent or progressive setting that can significantly extend a patient's life.

About Rhenium (^{186}Re) Obisbemeda

Rhenium (^{186}Re) Obisbemeda is a novel injectable radiotherapy specifically formulated to deliver direct targeted high dose radiation in CNS tumors in a safe, effective, and convenient manner to optimize patient outcomes. Rhenium (^{186}Re) Obisbemeda has the potential to reduce off target 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 real-time imaging. Rhenium (^{186}Re) 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 Convection Enhanced Delivery

Convection Enhanced Delivery (CED) is a therapeutic strategy that was developed to facilitate targeted delivery of pharmaceuticals to the brain. The CED procedure involves a minimally invasive surgical exposure of the brain, followed by placement of small diameter catheters directly into the brain tumor.

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 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 presentation contains statements that may be deemed "forward-looking statements" within the meaning of U.S. securities laws, including statements regarding clinical trials, expected operations and upcoming developments. 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 "potential," "anticipating," "planning" 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 Rhenium (^{186}Re) Obisbemeda including the ability of Rhenium (^{186}Re) Obisbemeda 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, ReSPECT-LM and ReSPECT-PBC, clinical trials; possible negative effects of Rhenium (^{186}Re) Obisbemeda; the continued evaluation of Rhenium (^{186}Re) Obisbemeda 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 could differ materially from those expressed or implied by these forward-looking statements because of risks, uncertainties, and other factors that include, but are 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, ability to develop and protect proprietary intellectual property or obtain licenses to intellectual property developed by others on commercially reasonable and competitive terms, and material security breach or cybersecurity attack affecting the Company's operations or property. This list of risks, uncertainties, and other factors is not complete. Plus Therapeutics discusses some of these matters more fully, as well as certain risk factors that could affect Plus Therapeutics' business, financial condition, results of operations, and prospects, in its reports filed with the SEC, including Plus Therapeutics' annual report on Form 10-K for the fiscal year ended December 31, 2023, quarterly reports on Form 10-Q, and current reports on Form 8-K. These filings are available for review through the SEC's website at www.sec.gov. Any or all forward-looking statements Plus Therapeutics makes may turn out to be wrong and can be affected by inaccurate assumptions Plus Therapeutics might make or by known or unknown risks, uncertainties, and other factors, including those identified in this press release. Accordingly, you should not place undue reliance on the forward-looking statements made in this press release, which speak only as of its date. 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.

Investor Contact

Charles Y. Huang, MBA
Director of Capital Markets and Investor Relations
Office: (202)-209-5751 | Direct (301)-728-7222
chuang@plustherapeutics.com