Plus Therapeutics Presents Positive Interim ReSPECT-LM Phase 1 Data for Leptomeningeal Metastases at 2024 SNO/ASCO CNS Metastases Conference

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Respect-LM dosing shows continued feasibility and safety of up to 44 mCi of intrathecal Rhenium (^{186}Re) Obisbemeda

High absorbed radiation doses, mean circulating tumor cell reductions, and median overall survival of 12 months continue to show clinical promise

AUSTIN, Texas, Aug. 12, 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 data in a podium presentation updating the progress of its ReSPECT-LM clinical trial of Rhenium (^{186}Re) Obisbemeda (Rhenium Nanoliposome, ^{186}RNL) in leptomeningeal disease (LM). The data were presented at the 2024 Society for NeuroOncology (SNO)/American Society for Clinical Oncology (ASCO) CNS Metastases Conference August 8-10, 2024 in Denver, Colorado.

The presentation, titled, "Phase 1 Dose Escalation of Rhenium (^{186}Re) Obisbemeda (Rhenium Nanoliposome, ^{186}RNL) for the Treatment of Leptomeningeal Metastases (LM): Ongoing Clinical Study Update for Initial Safety and Feasibility," provided a safety and efficacy update on the single dose trial for the first 4 cohorts (n = 16 patients). The trial is currently enrolling in Cohort 5. The study was presented by Andrew Brenner, M.D., Ph.D., Professor and Kolitz/Zachry Endowed Chair Neuro-Oncology Research; Co-Leader, Experimental and Developmental Therapeutics Program, University of Texas Health, San Antonio.

Key ReSPECT-LM highlights through Cohort 4:

- 16 patients were treated: 8 patients had a breast cancer primary diagnosis, 4 patients had a lung cancer primary diagnosis, and 4 patients had a mix of other primary cancers
- There were no dose limiting toxicities through cohort 4 and the maximum tolerated dose or maximum feasible dose was not reached
- We observed a linear increase in absorbed radiation dose to the spinal fluid and ventricles and cranial subarachnoid space over 4 cohorts
- In cohort 4, the mean average absorbed radiation dose to the ventricles and cranial subarachnoid space was 156 Gy vs. 1 Gy to the spleen
- The majority of adverse events (AEs) across all 4 cohorts were mild or moderate and unrelated or unlikely related to the study drug
- There was a mean reduction of CSF circulating tumor cells (CTCs) of 53% at 28 days post treatment vs. baseline (CTCs only performed on only Cohorts 1-3 as testing was commercially unavailable during Cohort 4)
- Median overall survival for Cohorts 1-4 was 12 months with 8 of 16 patients alive at the time of analysis

"The ReSPECT-LM Phase 1 dose escalation study continues to show feasibility, safety, and a response in circulating tumor cells in LM patients treated with Rhenium (^{186}Re) Obisbemeda," said Dr. Andrew Brenner, M.D., Ph.D., "Furthermore, a median overall survival rate of 12 months is very encouraging and is consistent with the high doses of absorbed radiation delivered and the mean circulating tumor cell reduction we have observed."

The FDA has granted Fast Track designation to Rhenium (^{186}Re) Obisbemeda for the treatment of LM. The FDA has also granted Orphan Drug designation to Rhenium (^{186}Re) Obisbemeda for the treatment of LM in breast cancer patients.

The ReSPECT-LM clinical trial is funded in part, by a 3-year, $17.6 million grant by the Cancer Prevention & Research Institute of Texas. Additional information about the ReSPECT-LM trial can be found here.

About Leptomeningeal Metastases (LM)

LM is a rare complication of cancer in which the primary cancer spreads to the cerebrospinal fluid (CSF) and leptomeninges surrounding the brain and spinal cord. All malignancies originating from solid tumors, primary brain tumors, or hematological malignancies have this LM complication potential with breast cancer as the most common cancer linked to LM, with 3-5% of breast cancer patients developing LM. Additionally, lung cancer, GI cancers and melanoma can also spread to the CSF and result in LM. LM occurs in approximately 5% of people with cancer and is usually terminal with 1-year and 2-year survival of just 7% and 3%, respectively. The incidence of LM is on the rise, partly because cancer patients are living longer and partly because many standard chemotherapies cannot reach sufficient concentrations in the spinal fluid to kill the tumor cells, yet there are no FDA-approved therapies specifically for LM patients, who often succumb to this complication within weeks to several months, if untreated.

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 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/.

About the Cancer Prevention & Research Institute of Texas (CPRIT)

CPRIT was created by the Texas Legislature and approved by a statewide vote in 2007 to lead the Lone Star State's fight against cancer. In 2019, Texas voters again voted overwhelmingly to continue CPRIT with an additional $3 billion for a total $6 billion investment in cancer research and prevention.

To date, CPRIT has awarded over $3 billion in grants to Texas research institutions and organizations through its academic research, prevention and product development research programs. CPRIT has recruited 281 distinguished researchers, supported the establishment, expansion or relocation of 52 companies to Texas and generated over $7.66 billion in additional public and private investment. CPRIT funding has advanced scientific and clinical knowledge and provided 8.2 million life-saving cancer prevention and early detection services reaching Texans from all 254 counties. Learn more at https://cprit.texas.gov/about-us

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; the intended functions of the Company's platform and expected benefits from such functions; and the development, utility and potential of the CNSide leptomeningeal metastases diagnostic test.

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.

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