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CNS Pharmaceuticals Receives Approval from U.S. FDA for Protocol Amendment to Ongoing Potentially Pivotal Global Trial Evaluating Berubicin for the Treatment of GBM

Expanded eligibility for patients who have received multiple therapies as first line therapy for GBM

Company continues to enroll patients for the trial with 19 clinical trial sites open to-date, and an additional 42 sites selected across the U.S., Italy, France, Spain, and Switzerland that will be initiated and enrolling soon

Interim analysis of the trial when 30- 50% of subjects reach 6 months in study

HOUSTON, June 23, 2022 /PRNewswire/ --**CNS Pharmaceuticals, Inc. (NASDAQ: CNSP)** ("CNS" or the "Company"), a biopharmaceutical company specializing in the development of novel treatments for primary and metastatic cancers in the brain and central nervous system, today announced that it has received approval from the U.S. Food and Drug Administration (FDA) for its ongoing potentially pivotal global study evaluating the efficacy and safety of Berubicin compared with Lomustine (Gleostine) administered after first line therapy for the treatment of recurrent glioblastoma multiforme (GBM), one of the most aggressive types of brain cancer.

"We are pleased to have received this positive response from the FDA and to continue driving the Berubicin clinical development program forward. The key objectives for the protocol amendment are based on the feedback we received from investigators and further

consideration of the needs of patients on the study. We have also incorporated the recent WHO classification of glioblastoma[1] with pertinent guidelines, ensuring that these patients meet specific criteria that allows us to accurately position the program for success. I am proud of the progress we continue to make on the clinical and regulatory fronts and look forward to further advancing this important trial," commented John Climaco, CEO of CNS Pharmaceuticals.

Berubicin is a novel anthracycline and the first anthracycline to appear to cross the blood-brain barrier currently being evaluated in a global potentially pivotal study evaluating its efficacy and safety.

The potentially pivotal trial is an adaptive, multicenter, open-label, randomized and controlled study in adult patients with recurrent glioblastoma multiforme (WHO Grade IV) after failure of standard first-line therapy. The primary endpoint of the study is Overall Survival (OS), which is a rigorous endpoint that the FDA has recognized as a basis for approval of oncology drugs when a statistically significant improvement can be shown relative to a randomized control arm. Results from the trial will compare Berubicin to a current standard of care (Lomustine), with a 2 to 1 randomization of patients to receive either Berubicin or Lomustine. The amended protocol expands eligibility for the study to patients who have received additional treatments as part of the first line therapy for their disease considering advancements in this area. This change was made due to the complexity of new agents introduced as a component of first line therapy, which allows an additional group of patients that can enroll on the study after what may constitute multiple procedures as their initial treatment.

A pre-planned, non-binding futility analysis will be performed after 30 to 50% of all planned patients have completed 6 months on therapy. This evaluation will include safety as well as secondary efficacy endpoints. Enrollment will not be paused during this interim analysis.

"The operational objectives of this study remain our priority, including using patient reported outcomes, stratification based on MGMT methylation status (a prognostic factor in glioblastomas), and providing both the study drug, Berubicin, as well as the comparator drug, Lomustine, to all sites. With the recent regulatory authority approvals received in Europe, we are currently on the cusp of opening clinical sites globally, including France, Italy, Spain, and Switzerland, to expand the scope and outreach to patients for this trial. We remain dedicated to driving this study forward and ultimately hope to provide a much-needed option for treatment in GBM as a safe and effective therapy," added Sandra L. Silberman, M.D., Ph.D. Chief Medical Officer of CNS Pharmaceuticals.

The FDA has granted CNS Pharmaceuticals Fast Track Designation for Berubicin which enables more frequent interactions with them to provide guidance on expediting the development and review process. Additionally, the Company has also received Orphan Drug Designation from the FDA which may provide seven years of marketing exclusivity upon approval of an NDA.

For more information about the potentially pivotal Berubicin trial, visitclinicaltrials.gov and reference identifier NCT04762069.

About Berubicin

Berubicin is an anthracycline, a class of anticancer agents that are among the most powerful

chemotherapy drugs and effective against more types of cancer than any other class of chemotherapeutic agents. Anthracyclines are designed to utilize natural processes to induce deoxyribonucleic acid (DNA) damage in targeted cancer cells by interfering with the action of topoisomerase II, a critical enzyme enabling cell proliferation. Berubicin treatment of brain cancer patients appeared to demonstrate positive responses that include one durable complete response in a Phase 1 human clinical trial conducted by Reata Pharmaceuticals, Inc. Berubicin, was developed by Dr. Waldemar Priebe, Professor of Medicinal Chemistry at The University of Texas MD Anderson Cancer Center.

About CNS Pharmaceuticals, Inc.

CNS Pharmaceuticals a clinical-stage pharmaceutical company developing a pipeline of anti-cancer drug candidates for the treatment of primary and metastatic cancers of the brain and central nervous system. The Company's lead drug candidate, Berubicin, is a novel anthracycline and the first anthracycline to appear to cross the blood-brain barrier. Berubicin is currently in development for the treatment of a number of serious brain and CNS oncology indications including glioblastoma multiforme (GBM), an aggressive and incurable form of brain cancer.

Additionally, the Company is advancing the development of its WP1244 drug technology portfolio, which utilizes anthracycline and distamycin-based scaffolds to create small molecule agents and is believed to be 500x more potent than daunorubicin in inhibiting tumor cell proliferation. Preclinical studies of WP1244 demonstrated high uptake in the brain with antitumor activity. CNS Pharmaceuticals is evaluating the use of WP1244 in the treatment of brain cancers, pancreatic, ovarian, and lymphomas.

For more information, please visit www.CNSPharma.com, and connect with the Company on Twitter, Facebook, and LinkedIn.

Forward-Looking Statements

Some of the statements in this press release are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, which involve risks and uncertainties. Forward-looking statements in this press release include, without limitation, the timing of opening new sites in Europe. These statements relate to future events, future expectations, plans and prospects. Although CNS believes the expectations reflected in such forward-looking statements are reasonable as of the date made, expectations may prove to have been materially different from the results expressed or implied by such forward-looking statements. CNS has attempted to identify forward-looking statements by terminology including "believes," "estimates," "anticipates," "expects," "plans," "projects," "intends," "potential," "may," "could," "might," "will," "should," "approximately" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including those discussed under Item 1A. "Risk Factors" in CNS's most recently filed Form 10-K filed with the Securities and Exchange Commission ("SEC") and updated from time to time in its Form 10-Q filings and in its other public filings with the SEC. Any forward-looking statements contained in this press release speak only as of its date. CNS undertakes no obligation to

update any forward-looking statements contained in this press release to reflect events or circumstances occurring after its date or to reflect the occurrence of unanticipated events.

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[1] WHO Classification of Tumours Editorial Board. *World Health Organization Classification of Tumours of the Central Nervous System*. 5th ed. Lyon: International Agency for Research on Cancer; 2021

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