EIP Pharma Announces Presentation of Neuroimaging Data Exhibiting Potential Effects of Neflamapimod on Cholinergic Structure and Function at AD/PD™ 2023

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Structural and functional brain MRI of patients before and after neflamapimod treatment shows increased NbM volume and increased functional dynamic connectivity between NbM and deep grey matter

BOSTON, MA – April 3, 2023 – EIP Pharma Inc., a clinical stage company focused on developing treatments for neurodegenerative diseases, today announced the oral presentation by academic investigators from the Amsterdam University Medical Center of neuroimaging results from a phase 2a clinical study in patients with early Alzheimer's disease (AD) at the International Conference on Alzheimer's and Parkinson's Diseases (AD/PD™) 2023, which took place virtually and in person March 28 – April 1, 2023, in Gothenburg, Sweden.

The goal of this exploratory analysis was to assess the treatment effects of neflamapimod on the Nucleus basalis of Meynert (NbM), the largest cluster of cholinergic neurons in the basal forebrain, assessed by MRI (magnetic resonance imaging), in a previously completed phase 2a study in patients with early AD (n=15). Structural and MRI assessments had been conducted at baseline and following 12 weeks of treatment with neflamapimod. The analysis demonstrated that the NbM volume was statistically significantly higher at the end of treatment (EOT, mean 3.1% higher vs. baseline, p=0.03); with 8 of 15 patients having greater than 3% higher NbM volume at EOT, compared to baseline. Treatment with neflamapimod was also associated with a statistically significantly higher functional dynamic connectivity between the NbM and deep grey matter (DGM) at EOT (mean 11% higher vs. baseline, p=0.04); with 6 of 13 showing a greater than 10% higher dynamic NbM-DGM connectivity at EOT, compared to baseline. The potential regression of atrophy and recovery of function in neflamapimod-treated patients in this study suggests a restoration of cholinergic neurons in the NbM and are supportive of data generated in previous preclinical studies that demonstrated neflamapimod reversed the neurodegenerative process in the basal forebrain cholinergic system.

"The data presented this weekend at AD/PD 2023 continue to support the thesis that inhibiting p38 MAP kinase alpha (p38α) activity has a positive impact on the cholinergic degenerative process and that functional and structural MRI assessments of the NbM may have utility as biomarkers for therapeutic effects when patients are treated with neflamapimod," said John Alam, MD, Chief Executive Officer of EIP Pharma. "We are encouraged by these findings and are pleased to share these important results with the medical and scientific community."

Oral Presentation Details:

Title: Effects of the p38-Alpha Kinase Inhibitor Neflamapimod on the Basal Forebrain in Patients, Assessed by Structural MRI
Session: SOC Drugs and Other Targeted Therapies in AD (Clinical Trials)
Speaker: Chen-Pei Lin, Department of Anatomy and Neurosciences, Amsterdam University Medical Center
Date and Time: April 1, 2023, at 5:55-6:10pm CET (11:55-12:10pm EDT)
Location: Gothenburg, Sweden (Swedish Exhibition & Congress Centre; Hall F4+F5)

A PDF copy of the presentation slides is available at www.eippharma.com/scientific-literature.

About Neflamapimod

Neflamapimod is an investigational drug that is an orally administered small molecule brain penetrant that inhibits p38MAP kinase alpha (p38a). P38a, which is expressed in neurons under conditions of stress and disease, plays a major role in inflammation-induced synaptic toxicity, leading to synaptic dysfunction. Neflamapimod is currently being developed for the treatment of dementia with Lewy bodies (DLB) and is the first treatment with the potential to have a positive impact on cognition, function and motor function.

In preclinical studies, neflamapimod reversed synaptic dysfunction, including and particularly within the part of the brain most impacted in DLB – the basal forebrain cholinergic system. In Phase 1 and Phase 2 clinical studies involving more than 300 participants, neflamapimod has been shown to be generally well tolerated. Results from the AscenD-LB Phase 2a clinical study demonstrated that neflamapimod significantly improved dementia severity compared to placebo and also showed significant improvement on motor function compared to placebo. At the highest dose evaluated, neflamapimod improved cognition. The combined preclinical and clinical data are consistent with neflamapimod treating the underlying DLB disease process and suggest it has the potential to be the first disease-modifying treatment for DLB. Neflamapimod was granted Fast Track status by the U.S. Food and Drug Administration for the treatment of DLB, and EIP Pharma was recently awarded a $21 million grant from the National Institutes of Health's National Institute on Aging (NIA) to evaluate neflamapimod in a Phase 2b clinical study in DLB. The NIA grant funds will be disbursed over the course of study as the costs are incurred.

About EIP Pharma

EIP Pharma, Inc. is a privately held clinical-stage biotechnology company advancing CNS-focused therapeutics to benefit patients with a range of debilitating neurodegenerative diseases. EIP Pharma is currently developing neflamapimod, an investigational orally administered small molecule brain penetrant that inhibits p38MAP kinase alpha (p38a). Neflamapimod has the potential to treat synaptic dysfunction, the reversible aspect of the underlying neurodegenerative processes that cause disease in dementia with Lewy bodies (DLB) and certain other major neurological disorders. Current institutional investors in EIP Pharma include Access Industries, Adage Capital Management, Mossrock Capital and Rock Springs Capital.

For more information, please visit www.eippharma.com or engage with us on Twitter and LinkedIn.

Forward-Looking Statements

This press relates includes express and implied forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, regarding management's intentions, plans, beliefs, expectations or forecasts for the future, including, but not limited to, the potential of

neflamapimod to treat the underlying DLB disease process and to be the first disease-modifying treatment for DLB. Terms such as “believes,” “estimates,” “anticipates,” “expects,” “plans,” “intends,” “may,” “could,” “might,” “will,” “should,” “approximately,” “suggest” “potential” or other words that convey uncertainty of future events or outcomes may identify these forward-looking statements. Although there is believed to be reasonable basis for each forward-looking statement contained herein, forward-looking statements by their nature involve risks and uncertainties, known and unknown, many of which are beyond the company’s control and, as a result, actual results could differ materially from those expressed or implied in any forward-looking statement.

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Important Additional Information and Where to Find It

In connection with a proposed transaction between Diffusion Pharmaceuticals, Inc. (Diffusion Pharmaceuticals) and EIP Pharma, Diffusion Pharmaceuticals intends to file relevant materials with the Securities and Exchange Commission (SEC), including a registration statement that will contain a proxy statement and prospectus related to a special meeting of its stockholders. Diffusion Pharmaceuticals will mail the definitive proxy statement and prospectus to Diffusion Pharmaceuticals’ stockholders as of the record date to be established for voting on the merger and any other matters to be voted on at the special meeting. BEFORE MAKING ANY VOTING DECISION, DIFFUSION PHARMACEUTICALS URGES INVESTORS AND STOCKHOLDERS TO READ THESE MATERIALS – INCLUDING THE DEFINITIVE PROXY STATEMENT, ANY AMENDMENTS OR SUPPLEMENTS THERETO, AND ANY DOCUMENTS INCORPORATED THEREIN – CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT DIFFUSION PHARMACEUTICALS, EIP PHARMA, THE PROPOSED TRANSACTION AND RELATED MATTERS. This communication is not a substitute for the registration statement, definitive proxy statement/prospectus or any other documents that Diffusion Pharmaceuticals may file with the SEC or send to Diffusion Pharmaceuticals’ stockholders in connection with the proposed transaction. Investors and stockholders will be able to obtain free copies of the proxy statement, prospectus and other documents filed by Diffusion Pharmaceuticals with the SEC (when they become available) through the website maintained by the SEC at www.sec.gov. In addition, investors and stockholders will be able to obtain free copies of the proxy statement, prospectus and other documents filed by Diffusion Pharmaceuticals with the SEC by contacting Diffusion Pharmaceuticals by mail at 300 East Main Street, Suite 201, Charlottesville, VA 22902, Attn: Corporate Secretary.

Participants in the Solicitation

Diffusion Pharmaceuticals and EIP Pharma, and each of their respective directors and executive officers and certain of their other members of management and employees, may be deemed to be participants in the solicitation of proxies in connection with the proposed transaction. Information regarding these persons and their interests in the transaction will be included in the prospectus and proxy statement relating to the transaction and other relevant materials to be filed with the SEC. Additional information regarding Diffusion Pharmaceuticals’ directors and officers is included in Diffusion Pharmaceuticals’ Annual Report on Form 10-K for the year ended December 31, 2022, which was filed with the SEC on March 24, 2023. These documents can be obtained free of charge from the SEC and Diffusion Pharmaceuticals sources indicated above.