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For Immediate Release

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Sumitomo Dainippon Pharma and Otsuka Announce a Worldwide Collaboration and License Agreement for Four Psychiatry and Neurology Compounds

Sumitomo Dainippon Pharma Co., Ltd. (Head Office: Osaka, Japan; Representative Director, President and CEO: Hiroshi Nomura; Securities Code: 4506, First Section of TSE), its U.S.-based subsidiary Sunovion Pharmaceuticals Inc. and Otsuka Pharmaceutical Co., Ltd. (Head Office: Tokyo, Japan; Representative Director, President and CEO: Makoto Inoue) announce today that we have executed a collaboration and license agreement for worldwide joint development and commercialization of the following four novel candidate compounds (hereinafter referred to as the "four compounds") currently under development in psychiatry and neurology area by Sumitomo Dainippon Pharma and Sunovion.

Development code (generic name)	Indication (current development stage and geography)
SEP-363856 (ulotaront)	Schizophrenia (Phase 3 in the U.S., Phase 2/3 in Japan and China)
SEP-4199	Bipolar I depression (Phase 3 in the U.S., preparing for Phase 3 in Japan)
SEP-378614	To be determined (Phase 1 in the U.S.)
SEP-380135	To be determined (Phase 1 in the U.S.)

Under the terms and conditions of this agreement, Sunovion grants Otsuka rights to jointly develop and commercialize the four compounds worldwide. The Sumitomo Dainippon Pharma Group (Sumitomo Dainippon Pharma, Sunovion, Sumitomo Pharmaceuticals (Suzhou) Co., Ltd., and Sumitomo Pharmaceuticals Asia Pacific Pte. Ltd.) and Otsuka will pursue joint development of these compounds. With regard to commercialization, the Sumitomo Dainippon Pharma Group will record sales in the following each country and region: the United States, Canada, Japan and Asia (China, Taiwan, Singapore, Thailand, Vietnam, and Malaysia) and, the Sumitomo Dainippon Pharma Group and Otsuka plan to co-promote the four compounds jointly in principle. In addition, Otsuka will record sales in 41 other countries and regions including countries in Europe. (The parties will discuss other regions in the future.)
Sunovion and Otsuka will share expenses and profits involved in clinical studies, applications for approval, and commercialization in each of these countries and regions under the agreement. Additional indications for ulotaront and indications for SEP-378614 and SEP-380135 will be determined after future consultations between the Sumitomo Dainippon Pharma Group and Otsuka.

Upon the completion of this agreement, Otsuka will pay Sunovion a lump-sum upfront payment of USD 270 million (approximately JPY 30 billion). In the future, Otsuka will make development milestone payments for the four compounds of USD 620 million (approximately JPY 69 billion), and potentially more depending on the number of additional indications obtained for them. Potentially, sales milestone payments will also be made by Otsuka.

"We are pleased to have signed this agreement with Otsuka, which has wide global reach and significant neuropsychiatry

expertise. We will work together to more rapidly and reliably develop and commercialize valuable pharmaceuticals for more patients around the world with the expectation that these new medications will grow," said Hiroshi Nomura, president and CEO of Sumitomo Dainippon Pharma. "Sumitomo Dainippon Pharma aims to achieve sustained growth through global collaboration in anticipation of the loss of the atypical antipsychotic agent Latuda®'s exclusivity in the United States and other future changes in the business environment. This collaboration is a major step forward in this initiative."

"Otsuka has been committed to providing new antipsychotics that contribute to patients worldwide in the field of neuropsychiatry by leveraging internal capabilities and external collaborations, starting with the launch of antipsychotics in the United States in 2002," said Makoto Inoue, president and representative director of Otsuka. "We are advancing in new areas such as the development of drugs to treat agitation associated with dementia of the Alzheimer's type and the deployment of the world's first digital medicine. Through this agreement, we are confident the companies will be able to deliver even more value to patients through the experience and networks that we have cultivated over many years worldwide."

The consolidated business forecast of fiscal 2021 announced by Otsuka Holdings on August 6, 2021 will not be changed.

Reference

About ulotaront (SEP-363856)

Ulotaront (SEP-363856) is a trace amine-associated receptor 1 (TAAR1) agonist with serotonin 5-HT_{1A} agonist activity, jointly developed by Sunovion and PsychoGenics Inc, which is a small-molecule oral agent that does not bind to dopamine D_2 or serotonin 5-HT_{2A} receptors. Sunovion discovered ulotaront in collaboration with PsychoGenics using its in vivo phenotypic SmartCube® platform and associated artificial intelligence algorithms. Phase 2 study results supported efficacy in treating both positive and negative symptoms of schizophrenia while demonstrating a side effect profile with notable similarities to placebo in extrapyramidal symptoms, weight gain, lipid and glucose derangements, and prolactin elevation. The full results of the study were published in the *New England Journal of Medicine (NEJM)* in April 2020.

The agent is undergoing Phase 3 studies for schizophrenia in the United States and global clinical Phase 2/3 studies in Japan and China, with other indications under consideration. The U.S. Food and Drug Administration (FDA) granted Breakthrough Therapy Designation for ulotaront for the treatment of schizophrenia in May 2019.

About SEP-4199

SEP-4199 is a small-molecule oral agent with a non-racemic ratio of amisulpride enantiomers developed by Sunovion. Sunovion discovered that the pharmacology of amisulpride is enantiomer-specific, and increasing the ratio of R-amisulpride to S-amisulpride increases the potency for serotonin 5-HT_7 receptors relative to dopamine D_2 receptors. SEP-4199 was designed with an 85:15 ratio of R-amisulpride to S-amisulpride to increase levels of serotonin 5-HT_7 activity intended to enhance antidepressant efficacy and produce reduced levels of D_2 receptor occupancy appropriate for the treatment of bipolar depression. In September 2021, Sunovion initiated a global clinical Phase 3 study, which is randomized, double-blind, placebo-controlled, parallel-group, fixed-dosed study for the treatment of bipolar I depression in the U.S. Japan will join this global clinical Phase 3 study.

About SEP-378614

SEP-378614, jointly discovered by Sunovion and PsychoGenics, is a small-molecule oral agent that acts on the central nervous system. Sunovion discovered SEP-378614 in collaboration with PsychoGenics using its in vivo phenotypic SmartCube® platform and associated artificial intelligence algorithms. Pre-clinical study results suggest that it may have rapid onset and long-lasting antidepressant-like activity and enhance neuroplasticity.

The agent is undergoing Phase 1 studies in the U.S.

About SEP-380135

SEP-380135, jointly developed by Sunovion and PsychoGenics, is a small-molecule oral agent that acts on the central nervous system. Sunovion discovered SEP-380135 in collaboration with PsychoGenics using its in vivo phenotypic SmartCube®

platform and associated artificial intelligence algorithms. Pre-clinical study results suggest its efficacy against a number of behavioral and psychological symptoms in dementia, including agitation/aggression, psychomotor hyperactivity, depression, and deficits in social interaction.
The agent is undergoing Phase 1 studies in the U.S.

About Neuropsychiatric Disorders

Neuropsychiatric disorders are among the most complex and difficult to treat. Disorders of the brain are often associated with significant and often disabling effects on patients, impacting their loved ones and society more broadly. Nearly one in six people worldwide live with a neurological disorder[1], approximately 29 million people worldwide are living with bipolar disorder[2], and approximately 20 million people worldwide are living with schizophrenia[3].

Source:

[1] World Health Organization (WHO) Neurological Disorders: Public Health Challenges 2006.
[Internet] Available from: https://www.who.int/mental_health/neurology/neurological_disorders_report_web.pdf. Accessed February 2021.

[2] World Health Organization. Global Burden of Disease, 2004 Report.
[Internet] Available from: http://www.who.int. Accessed March 29, 2013 (To Access: Health Topics, Global Burden of Disease, The Global Burden of Disease: 2004 Update).

[3] World Health Organization. Mental Disorders.
[Internet] Available from: https://www.who.int/news-room/fact-sheets/detail/mental-disorders. Accessed April 2021.