APPLICATION SEEKING MANUFACTURING AND MARKETING APPROVAL IN JAPAN SUBMITTED FOR PARKINSON'S DISEASE TREATMENT SAFINAMIDE

Meiji Seika Pharma Co., Ltd. (Headquarters: Tokyo, CEO: Daikichiro Kobayashi, "Meiji") and Eisai Co., Ltd. (Headquarters: Tokyo, CEO: Haruo Naito, "Eisai") announced that an application seeking manufacturing and marketing approval in Japan was submitted as of today by Meiji for the Parkinson's disease treatment ME2125 (safinamide mesylate, "safinamide").

This application is primarily based on a double-blind, placebo-controlled Phase II/III study to evaluate the efficacy and safety of safinamide as add-on therapy, as well as an open label Phase III study to evaluate the safety and efficacy of long-term administration of safinamide in Japanese patients with Parkinson's disease with wearing-off phenomenon^{*1} who are currently receiving levodopa.

Under the license agreement signed between Eisai and Meiji in March 2017, Eisai has the exclusive rights to market safinamide in Japan, as well as to develop and market safinamide in Asia^{*2}. Meiji conducted clinical trials, and then submitted a manufacturing and marketing authorization application for the drug in Japan. Eisai will submit applications for manufacturing and marketing approval for the drug in Asia.

Through the development of safinamide, Eisai and Meiji will make further contributions to address the diversified needs of, and increase the benefits provided to, Parkinson's disease patients and their families.

^{*&}lt;sup>1</sup> Wearing off phenomenon: As the disease progresses, levodopa's duration of effect ("on" time) decreases, and Parkinson's disease symptoms return before the next dose

^{*&}lt;sup>2</sup> South Korea, Taiwan, Brunei, Cambodia, Laos, Malaysia, the Philippines, Indonesia, Thailand, Vietnam, Myanmar, Singapore, Hong Kong, Macao

<Notes to editors>

1. About safinamide mesylate (generic name, development code: ME2125)

Safinamide is a selective monoamine oxidase B (MAO-B) inhibitor, which reduces the degradation of excreted dopamine, helping to maintain the density of dopamine in the brain. Additionally, safinamide blocks sodium ion channels and inhibits glutamate release, and as such, has potential as a new Parkinson's disease treatment which possesses both dopaminergic and non-dopaminergic mechanisms. Global clinical trials of safinamide in combination with levodopa for the treatment of mid- to late-stage Parkinson's disease showed extended "on" time and an improvement in motor function.^{1,2}

Safinamide was discovered and developed by Newron Pharmaceuticals S.p.A. (Headquarters: Italy, Milan, "Newron"). In 2011, Newron entered into a licensing agreement with Meiji, granting Meiji exclusive rights to develop, manufacture and commercialize the drug in Japan and Asia. Safinamide is marketed under the name "Xadago" in 15 countries in Europe and the United States.

2. About the Phase II/III Clinical Study (ME2125-3)

Study ME2125-3 was a multicenter, double-blind, placebo-controlled, randomized, parallel group study to evaluate the efficacy and safety of two doses of safinamide (50 and 100 mg, once a day for 24 weeks) administered orally as add-on therapy in Japanese patients with Parkinson's disease with wearing-off phenomenon who are currently receiving levodopa. In this study, the primary endpoint was the change in mean daily "on" time from baseline to 24 weeks of the treatment phase, and verified the superiority of each dose of safinamide over placebo.

3. About the Phase III Clinical Study (ME2125-4)

Study ME2125-4 was an open-label, multicenter study to evaluate the long-term efficacy and safety of two doses of safinamide (50 and 100 mg, once a day for 52 weeks) administered orally as add-on therapy in Japanese patients with Parkinson's disease with wearing-off phenomenon who are currently receiving levodopa. In this study, in addition to evaluating the safety of long-term administration of safinamide, the study evaluated the change in mean daily "on" time from baseline to 52 weeks of the treatment phase as the primary efficacy endpoint.

4. About Parkinson's Disease

Parkinson's disease is a neurodegenerative disease which causes motor impairment, including shaking in the limbs, muscular rigidity and shuffling gait. It is caused by degeneration of the dopamine nervous system, which leads to a shortage of dopamine, a neurotransmitter in the brain.

According to Eisai's internal estimates, there are approximately 300,000 patients suffering from Parkinson's disease in Asia (excluding China and India). According to a survey by the Ministry of Health, Labour and Welfare, the number of patients suffering from Parkinson's disease in Japan numbered 163,000 in 2014.³ The number of patients increasing due to the aging of the population.⁴

Levodopa is widely used to treat Parkinson's disease by replenishing the brain's supply of dopamine. However, as the disease progresses, levodopa's duration of effect ("on" time) decreases, and there are cases of Parkinson's disease symptoms returning before the next dose ("wearing-off" phenomenon). To prevent the "wearing-off" phenomenon, combination therapy with a drug that has a different mechanism of action to levodopa is administered.

5. About Eisai Co., Ltd.

Eisai Co., Ltd. is a leading global research and development-based pharmaceutical company headquartered in Japan. We define our corporate mission as "giving first thought to patients and their families and to increasing the benefits health care provides," which we call our *human health care* (*hhc*) philosophy. With approximately 10,000 employees working across our global network of R&D facilities, manufacturing sites and marketing subsidiaries, we strive to realize our *hhc* philosophy by delivering innovative products to address unmet medical needs, with a particular focus in our strategic areas of Oncology and Neurology.

As a global pharmaceutical company, our mission extends to patients around the world through our investment and participation in partnership-based initiatives to improve access to medicines in developing and emerging countries. For more information about Eisai Co., Ltd., please visit https://www.eisai.com/.

- ¹ Borgohain R et al. Randomized Trial of Safinamide Add-On to Levodopa in Parkinson's Disease With Motor Fluctuations. *Mov Disord*. 2014 Feb;29(2):229-37
- ² Schapira AH et al. Assessment of Safety and Efficacy of Safinamide as a Levodopa Adjunct in Patients With Parkinson Disease and Motor Fluctuations: A Randomized Clinical Trial. *JAMA Neurol.* 2017 Feb 1;74(2):216-224
- ³ Patient Survey 2014 (Disease and Injury) by Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare
- ⁴ Japan Intractable Diseases Information Center: <u>http://www.nanbyou.or.jp/</u>