July 19, 2023
KISSEI PHARMACEUTICAL CO., LTD.

# KISSEI Announces Withdrawal of Application for Marketing Approval for Rovatirelin (KPS-0373) for the Treatment of Spinocerebellar Degeneration in Japan

Kissei Pharmaceutical Co., Ltd. (Head Office: Matsumoto, Nagano; Chairman and CEO: Mutsuo Kanzawa, "Kissei") announces the withdrawal of application for marketing approval in Japan for Rovatirelin (generic name, development number: KPS-0373), a treatment for spinocerebellar degeneration, in order to consider the future development strategies.

Based on the results of two Phase III clinical trials and a combined analysis conducted to date, we determined that Rovatirelin was the first drug which has been verified to be effective to improve ataxia in patients with spinocerebellar degeneration assessed with international SARA score. We submitted an application for marketing approval on December 22, 2021*. However, Kissei decided to temporarily withdraw the application for marketing approval and discuss the possibility of conducting additional clinical trials with the Pharmaceuticals and Medical Devices Agency (PMDA), because the PMDA has recently expressed its opinion that the marketing approval based on the current clinical trial data would be difficult.

The impact of this matter on this fiscal year's business performance is minimal. If any matters requiring disclosure arise in the future, they will be promptly announced.

《 Reference 》

## About Rovatirelin (generic name, development number: KPS-0373)

Rovatirelin is a derivative of thyrotropin-releasing hormone (TRH) discovered by Shionogi & Co., Ltd. (Head Office: Osaka, Japan; Chief Executive Officer: Isao Teshirogi) It activates the nervous system by promoting the release of acetylcholine and monoamine neurotransmitters such as dopamine after binding to TRH receptors distributed in the central nervous system, and is expected to improve the ataxias in patients with spinocerebellar degeneration.

## About spinocerebellar degeneration

Spinocerebellar degeneration is a nerve degeneration disorder of unknown etiology in which symptoms such as ataxia appear owing to the degeneration of the cerebellum or spinal cord. It is designated as an intractable disease by the Ministry of Health, Labour and Welfare, with 30,000 or more patients certified with this condition in Japan. Although the pathogenesis has been investigated by recent basic research, many aspects remain unclear and there is no definitive treatment. Therefore, symptomatic treatment is currently performed. The "Survey of Medical Needs on Neurologic Diseases" conducted in cooperation

with the Japan Health Sciences Foundation and the Japan Society of Neurological Therapeutics reported that spinocerebellar degeneration is a "disease for which development of new therapies is urgent" for the following reasons: low treatment satisfaction, low availability of drugs, and the absence of effective treatment.

About SARA (Scale for the Assessment and Rating of Ataxia)

It is a semi-quantitative method for the assessment of ataxia in spinocerebellar degeneration and other similar conditions; it consists of eight categories (gait, stance, sitting, speech disturbance, finger chase, nose-finger test, fast alternating hand movements, and heel-shin slide) and is used internationally. The scores from the eight categories are summed, with a maximum score of 40; 0 indicates no symptoms and 40 indicates the most severe symptoms.

In addition, it is believed that caregiving is started to become necessary if SARA score exceeds 15 points.

* Press release on December 22,2021

Submission of New Drug Application for Rovatirelin (KPS-0373) for the treatment of Spinocerebellar Degeneration (https://www.kissei.co.jp/e_contents/news/2021/20211222-4253.html)