Innovation all for the patients

CHUGAI

Roche A member of the Roche group

Chugai Files a New Drug Application for Satralizumab for NMOSD in Japan, Following the United States and Europe

- Satralizumab may provide a new therapeutic approach for NMOSD.
- The Application is based on the results from two positive global phase III studies evaluating satralizumab monotherapy and add-on therapy to baseline immunosuppressant therapy.
- The applications will be reviewed under priority review in Japan.

TOKYO, Nov 8, 2019 -- Chugai Pharmaceutical Co., Ltd. (TOKYO: 4519) announced that it filed a new drug application to the Ministry of Health, Labour and Welfare (MHLW) for satralizumab (development code: SA237), an anti-interleukin-6 (IL-6) receptor humanized recycling antibody, for the treatment of neuromyelitis optica spectrum disorder (NMOSD). Satralizumab received orphan drug designation from the MHLW on Sep 12, 2019, and the applications will be reviewed under priority review.

“With our proprietary recycling antibody technology, satralizumab is designed to inhibit the signal transduction of IL-6, an inflammatory cytokine that is related to the pathology of NMOSD, by subcutaneous administration once every 4 weeks. In clinical study with the overall population, NMOSD patients including both aquaporin-4 antibodies [AQP4-IgG] seropositive and seronegative patients, clinically significant therapeutic effects were shown either in monotherapy or add-on therapy to baseline treatment,” said Dr. Yasushi Ito, Chugai’s Executive Vice President, Co-Head of Project & Lifecycle Management Unit. “We believe that the efficacy and safety demonstrated by satralizumab will lead to the provision of a new treatment option to patients." We will work for the approval of satralizumab to provide patients with this new treatment as soon as possible.”

This application is based on the results from global phase III clinical studies in patients with NMOSD: SAkuraStar Study (NCT02073279) evaluating satralizumab monotherapy, and SAkuraSky Study (NCT02028884) evaluating satralizumab added to baseline treatment.

The application for satralizumab has been submitted in Europe and the U.S. The European Medicines Agency’s (EMA) Committee for Medicinal Products for Human Use (CHMP) recommendation and the U.S. Food and Drug Administration (FDA) decision is expected in 2020.

<Reference>
・SAkuraSky study
Chugai Presents Results from Phase III Study of Satralizumab in NMOSD at ECTRIMS 2018 (October 15, 2018)
https://www.chugai-pharm.co.jp/english/news/detail/20181015120001_561.html

CHUGAI PHARMACEUTICAL CO., LTD. Corporate Communications Dept.
1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku Tokyo, 103-8324 Japan
Media Relations Group TEL:+81-(0)3-3273-0881 E-mail:pr@chugai-pharm.co.jp
Investor Relations Group TEL:+81-(0)3-3273-0554 E-mail:ir@chugai-pharm.co.jp

・SAkuraStar study
Chugai Presents Results from Second Positive Global Phase III Clinical Study of Satralizumab in NMOSD at ECTRIMS 2019 (September 12, 2019)
https://www.chugai-pharm.co.jp/english/news/detail/20190912140300_638.html

Chugai Receives Orphan Drug Designation for Satralizumab in Neuromyelitis Optica and Neuromyelitis Optica Spectrum Disorder from the Ministry of Health, Labour and Welfare (September 13, 2019)
https://www.chugai-pharm.co.jp/english/news/detail/20190913140000_646.html

About satralizumab

Satralizumab, created by Chugai, is an anti-IL-6 receptor recycling antibody. The drug is expected to suppress relapse of NMOSD by inhibiting IL-6 signal transduction which is deeply related to the pathology. In two global phase III clinical studies in neuromyelitis optica (NMO) and NMOSD patients, the primary endpoint was achieved with satralizumab either as an add-on therapy to baseline treatment (NCT02028884) or as monotherapy (NCT02073279). These studies represent one of the largest clinical trial programs undertaken for this rare diseases. Satralizumab is designated as an orphan drug for the treatment of NMO and NMOSD in Japan, and for the treatment of the same disease group in Europe and the U.S. In addition, it was granted Breakthrough Therapy Designation by FDA in December 2018. The application was accepted for review by EMA and FDA in 2019.

About neuromyelitis optica spectrum disorder (NMOSD)

NMOSD is an autoimmune disease of the central nervous system characterized by inflammatory lesions in the optic nerves and spinal cord, and cause continual and significant decrease in quality of life due to permanent neurologic disorders. Patients with NMOSD frequently experience a relapsing disease course with repeated attacks leading to accumulating neurological damage and disability. Symptoms may include visual impairment, motor disability, and loss of quality of life. In some cases, attacks of NMOSD result in death. Aquaporin-4 antibodies (AQP4-IgG), pathogenic antibodies, are detected in at least two-thirds of NMOSD patients. AQP4-IgG is known to target and damage a specific central nervous cell type called astrocytes, resulting in inflammatory lesions of the optic nerve(s), spinal cord and brain[1-4]. The inflammatory cytokine IL-6 is now emerging as an important factor in NMOSD pathogenesis [5-8].

Diagnostic criteria introduced in 2006 for NMO were characterized by inflammation of the optic nerve (optic neuritis) and the spinal cord (myelitis). These were revised in 2007 with the definition of NMOSD, proposed for diseases with either optic neuritis or myelitis. In 2015, the definition of NMOSD was further revised to include a broader spectrum of disease. The diagnostic term NMOSD is now widely used [9].

Sources

1. Jarius S, Ruprecht K, Wildemann B et al. Contrasting disease patterns in seropositive and seronegative neuromyelitis optica: A multicentre study of 175 patients. J Neuroinflammation 2012;9:14.
2. Lennon VA, Wingerchuk DM, Kryzer TJ et al. A serum autoantibody marker of neuromyelitis optica: distinction from multiple sclerosis. Lancet 2004;364:2106-12.
3. Marignier R, Bernard-Valnet R, Giraudon P et al. Aquaporin-4 antibody-negative neuromyelitis

optica: Distinct assay sensitivity-dependent entity. Neurology 2013;80:2194-200.
4. Takahashi T, Fujihara K, Nakashima I et al. Anti-aquaporin-4 antibody is involved in the pathogenesis of NMO: a study on antibody titre. Brain 2007;130:1235-43.
5. Kimura A, Kishimoto T. IL-6: regulator of Treg/Th17 balance. Eur J Immunol 2010;40:1830-5.
6. Lin J, Li X, Xia J. Th17 cells in neuromyelitis optica spectrum disorder: a review. Int J Neurosci2016;126:1051-60.
7. Takeshita Y, Obermeier B, Cotleur AC, et al. Effects of neuromyelitis optica-IgG at the blood-brain barrier in vitro. Neurol Neuroimmunol Neuroinflamm. 2016;4(1):e311.
8. Obermeier B, Daneman R, Ransohoff RM. Development, maintenance and disruption of the blood-brain barrier. Nat Med 2013;19:1584-96.
9. Wingerchuk DM, Banwell B, Bennett JL et al. International consensus diagnostic criteria for neuromyelitis optica spectrum disorders. Neurology 2015;85:177-89.

###