Innovation all for the patients

CHUGAI

Roche A member of the Roche group

Chugai Presents Results from Second Positive Global Phase III Clinical Study of Satralizumab in NMOSD at ECTRIMS 2019

- Following a positive study where satralizumab was added to baseline therapy, satralizumab monotherapy significantly reduced risk of relapse by 55% in patients with NMOSD.
- Satralizumab monotherapy showed a similar safety profile compared to placebo, consistent with satralizumab added to baseline immunosuppressant therapy.
- Global regulatory filings for a proposed indication of treatment of NMOSD are planned this year.

TOKYO, Sep 12, 2019 -- Chugai Pharmaceutical Co., Ltd. (TOKYO: 4519) announced that the results from SAkuraStar Study were presented at the Congress of European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) 2019 (from September 11 to 13). SAkuraStar study is a phase III multicenter, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of an investigational anti-IL-6 receptor humanized recycling antibody satralizumab (development code: SA237) as monotherapy for the treatment of neuromyelitis optica spectrum disorder (NMOSD).

In SAkuraStar study, satralizumab significantly reduced the risk of relapse by 55% (hazard ratio=0.45 [95% confidence interval: 0.23-0.89], p=0.0184 [stratified log-rank test]) in the overall population, representative of NMOSD patients (including aquaporin-4 antibodies [AQP4-IgG] seropositive and seronegative patients). Satralizumab has shown a favorable safety profile during the study.

“Satralizumab is the first investigational medicine for the treatment of NMOSD that has demonstrated benefits both as a monotherapy and add-on therapy to baseline treatment in two separate trials, suggesting that IL-6 inhibition could be a novel therapeutic approach for NMOSD, and satralizumab may contribute to a broad range of patients,” said Dr. Yasushi Ito, Chugai’s Executive Vice President, Co-Head of Project & Lifecycle Management Unit. “NMOSD is a disease in which relapse may lead to accumulation of disabilities, and can be life-threatening. We will collaborate with Roche to file global regulatory applications this year so that we can bring satralizumab as a potential new treatment to patients as soon as possible.”

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 (NCT02073279)

Summary:

A phase III multicenter, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of satralizumab administered to patients with NMOSD

<Primary Endpoint>
Time to first protocol-defined relapse adjudicated by an independent review committee in the double-blind period
<Main Secondary Endpoints>
Visual Analogue Scale (VAS) score for pain
Functional Assessment of Chronic Illness Therapy (FACIT) Fatigue score

Study design:

- 95 male and female patients aged from 20 to 70 years were randomized.
- Patients were randomized to satralizumab or placebo in a 2:1 ratio. Satralizumab (120 mg) or placebo was subcutaneously administered at Week 0, 2, and 4. The subsequent treatment was continued at 4-week intervals.
- The double-blind treatment period ended when the total number of protocol-defined relapse (PDR) had reached 44 or at 1.5 years after the enrollment of the last patient, whichever occurred first. After experiencing a PDR or completion of the study, patients in both groups were offered treatment with satralizumab in an open-label extension period.
- Patients with AQP4-IgG seropositive or seronegative neuromyelitis optica (NMO)* and those with AQP4-IgG seropositive NMOSD were enrolled.
  *NMO defined in 2006

Main results:

- Satralizumab significantly reduced the risk of relapse by 55% (hazard ratio=0.45 [95% confidence interval: 0.23-0.89], p=0.0184 [stratified log-rank test]) in the overall population, representative of NMOSD patients (including AQP4-IgG seropositive and seronegative patients), achieving the primary endpoint of time to first protocol-defined relapse in the double-blind period.
- In a prespecified subgroup analysis for time to relapse, hazard ratio of satralizumab to placebo in AQP4-IgG seropositive patients was 0.26 (N=64, 95% confidence interval: 0.11-0.63).
- Satralizumab has shown a favorable safety profile during the study. The proportion of serious adverse events, including serious infections, was similar in patients treated with satralizumab or placebo.

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

About satralizumab

Satralizumab, created by Chugai, is an anti-IL-6 receptor humanized 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 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 in the U.S. and Europe. In addition, it has been granted Breakthrough Therapy Designation for the treatment of NMO and NMOSD by the U.S. Food and Drug Administration in December 2018.

About neuromyelitis optica spectrum disorder (NMOSD)

NMOSD is a rare, lifelong, and debilitating autoimmune disease of the central nervous system (CNS) characterized by inflammatory lesions in the optic nerves and spinal cord. 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. NMOSD is commonly associated with pathogenic antibodies (AQP4-IgG) that target and damage a specific central nervous cell type, called astrocytes resulting in inflammatory lesions of the optic nerve(s), spinal cord and brain. AQP4-IgG are detectable in the blood serum of around two-thirds of NMOSD patients. The inflammatory cytokine IL-6 is now emerging as an important factor in NMOSD pathogenesis [1)-4)].

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 [5)].

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. Wingerchuk DM, Banwell B, Bennett JL et al. International consensus diagnostic criteria for neuromyelitis optica spectrum disorders. Neurology 2015;85:177-89.

Contact

For Media
Chugai Pharmaceutical Co., Ltd.
Media Relations Group, Corporate Communications Dept.,
Tomoko Shimizu
Tel: +81-3-3273-0881

E-mail: pr@chugai-pharm.co.jp

For US media
Chugai Pharma USA Inc.
Casey Astringer
Tel: +1-908-516-1350
E-mail: pr@chugai-pharm.com

For European media
Chugai Pharma U.K. Ltd.
Carter Westwood
Tel: +44-20-8987-5680
E-mail: pr@chugai.eu

For Taiwanese media
Chugai Pharma Taiwan Ltd.
Susan Chou
Tel: +886-2-2715-2000
E-mail: pr@chugai.com.tw

For Investors
Chugai Pharmaceutical Co., Ltd.
Investor Relations Group, Corporate Communications Dept.,
Toshiya Sasai
Tel: +81-3-3273-0554
E-mail: ir@chugai-pharm.co.jp

###