Media & Investor Release



New four-year data show Roche's ENSPRYNG significantly reduces debilitating relapses in people with neuromyelitis optica spectrum disorder

- New data demonstrate ENSPRYNG's robust and sustained longer-term efficacy in preventing relapses in people with neuromyelitis optica spectrum disorder (NMOSD)
- More than 70% of people treated with ENSPRYNG remained relapse-free after four years in the SAkuraStar (73%) and SAkuraSky (71%) open-label extension (OLE) studies, with a favourable safety profile
- ENSPRYNG is now approved in 58 countries, including the United States, Canada, Japan, South Korea and the European Union

Basel, 14 October 2021 – Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced new longer-term efficacy and safety data for ENSPRYNG* (satralizumab). The data show ENSPRYNG has a favourable benefit:risk profile and is effective in reducing relapses over four years of treatment in people with anti-aquaporin-4 antibody (AQP4-IgG) seropositive neuromyelitis optica spectrum disorder (NMOSD), a rare debilitating disease that affects the central nervous system. Efficacy and safety results from the open-label extension (OLE) periods of the SAkuraStar and SAkuraSky studies, in addition to the design of SAkuraBONSAI, a new study in people with AQP4-IgG seropositive NMOSD who are treatment naïve, or where prior rituximab (or biosimilar) treatment has failed, will be presented at the 37th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS).

"The positive longer-term efficacy and safety results for ENSPRYNG are important for physicians as they consider ENSPRYNG as a treatment option for their patients," said Prof. Dr. Ingo Kleiter, Ruhr University Bochum and Marianne-Strauß-Klinik, Germany. "Just one NMOSD relapse can lead to lifelong disability. An early accurate diagnosis followed by an effective treatment is vital to conserving the quality of life of people with this chronic disease."

The pivotal SAkuraStar and SAkuraSky four year OLE data found that 73% and 71% of people with AQP4-IgG seropositive NMOSD treated with ENSPRYNG remained relapse-free after 192 weeks (3.7 years), respectively, and 90% and 91% remained free from severe relapse*. These results demonstrate that the robust efficacy observed in the studies' double-blind periods is sustained longer-term for ENSPRYNG as both a monotherapy and in combination with immunosuppressive therapy.

The data also demonstrate a favourable safety and tolerability profile for ENSPRYNG in the overall ENSPRYNG treatment period of up to seven years, comparable to the double-blind treatment periods in both SAkuraStar and SAkuraSky studies. Rates of adverse events and serious adverse events during the overall treatment periods were consistent with ENSPRYNG and placebo in the double-blind periods.

^{*}Relapse associated with low likelihood of recovery, resulting in permanent disability

The most common adverse reactions observed were: headache, arthralgia, white blood cell count decrease, hyperlipidaemia, and injection-related reactions. No new safety signals were observed.

"We are pleased that these longer-term data further reinforce the previously observed efficacy and safety of ENSPRYNG, which was specifically designed for this lifelong, chronic disease by targeting the IL-6 pathway to reduce the frequency of relapses," said Levi Garraway, M.D., Ph.D., Roche's Chief Medical Officer and Head of Global Product Development. "ENSPRYNG is the only treatment for NMOSD that can be administered subcutaneously at home and has now been approved in over 50 countries. The totality of data, combined with the experience of people treated and their physicians, underscores the importance of this treatment option."

Roche is also initiating SAkuraBONSAI, a multicentre, Phase 3b, international study, to further evaluate disease activity and progression using comprehensive imaging, biomarker and clinical assessments in NMOSD populations where further research is warranted. People with AQP4-IgG seropositive NMOSD, who are treatment-naïve or where prior rituximab (or biosimilar) treatment has failed, will be administered ENSPRYNG monotherapy for two years and evaluated using clinical measures such as magnetic resonance imaging, optical coherence tomography and biomarkers of blood and cerebrospinal fluid.

ENSPRYNG is the first and only NMOSD treatment administered subcutaneously every four weeks, allowing for home-dosing and increasing flexibility and convenience for people with NMOSD. ENSPRYNG is approved in 58 countries, including the United States, Canada, Japan, South Korea and the European Union and applications are under review in additional countries.

About SAkuraStar and SAkuraSky in NMOSD

ENSPRYNG has been investigated in two pivotal Phase III studies in neuromyelitis optica spectrum disorder (NMOSD), with the primary endpoint of both studies being time to first protocol-defined relapse (PDR) adjudicated by an independent review committee in the double-blind period. In the open-label extension (OLE) periods of the SAkura studies, PDRs were determined by the investigator.

The Phase III SAkuraStar study evaluated the efficacy and safety of ENSPRYNG monotherapy administered to adults with NMOSD. In the anti-aquaporin-4 antibody (AQP4-IgG) seropositive subgroup, 83% treated with ENSPRYNG remained relapse-free at 48 weeks, compared with 55% of those treated with placebo. At 96 weeks, 77% of those treated with ENSPRYNG remained relapse-free, compared with 41% with placebo.

The Phase III SAkuraSky study evaluated the efficacy and safety of ENSPRYNG in combination with baseline immunosuppressive therapy in adults and adolescents with NMOSD. Overall, 92% of AQP4-IgG seropositive participants receiving ENSPRYNG in combination with immunosuppressive therapy remained relapse-free at 48 and 96 weeks, compared with 60% and 53% with placebo, respectively.

ENSPRYNG showed a favourable safety and tolerability profile in the Phase III studies. The most common adverse reactions observed were: headache, arthralgia, white blood cell count decrease, hyperlipidaemia and injection-related reactions.

About neuromyelitis optica spectrum disorder (NMOSD)

NMOSD is a rare, lifelong and debilitating autoimmune condition of the central nervous system that primarily damages the optic nerve(s) and spinal cord, causing permanent blindness, muscle weakness and paralysis. People with NMOSD experience unpredictable, severe relapses directly causing cumulative, permanent, neurological damage and disability. In some cases, relapse can result in death. NMOSD affects over 10,000 people in Europe, up to 15,000 people in the US and approximately 200,000 people worldwide. NMOSD can affect individuals of any age, race and gender, but is most common among women in their 30s and 40s, and appears to occur at higher rates in people of African or Asian background.

NMOSD is commonly associated with pathogenic antibodies (AQP4-IgG) that target and damage a specific cell type, called astrocytes, resulting in inflammatory lesions of the optic nerve(s), spinal cord and brain. AQP4-IgG antibodies are detectable in the blood serum of around 70-80% of people with NMOSD.

Although most cases of NMOSD can be confirmed through diagnostic tests, people living with the condition are still frequently misdiagnosed with multiple sclerosis. This is due to overlapping characteristics of the two disorders, including a higher prevalence in women, similar symptoms and the fact that people can experience relapses in both conditions.

About ENSPRYNG® (satralizumab)

ENSPRYNG, which was designed by Chugai, a member of the Roche Group, is a humanised monoclonal antibody that targets interleukin-6 (IL-6) receptor activity. The cytokine IL-6 is believed to be a key driver in NMOSD disease processes, triggering the inflammation cascade and leading to damage and disability. ENSPRYNG was designed using novel recycling antibody technology. When compared to conventional antibodies, ENSPRYNG's recycling antibody technology enables the medicine to remain in the bloodstream for a longer period of time and bind repeatedly to its target (the IL-6 receptor) - maximally sustaining IL-6 suppression in a chronic disease like NMOSD and enabling subcutaneous dosing every four weeks.

Positive Phase III results for ENSPRYNG, as both monotherapy and in combination with baseline immunosuppressive therapy, suggest that IL-6 inhibition is an effective therapeutic approach for NMOSD. The Phase III clinical development programme for ENSPRYNG included two studies: SAkuraStar and SAkuraSky.

ENSPRYNG is currently approved in 58 countries, including the United States, Canada, Japan, South Korea and the European Union.

ENSPRYNG has been designated as an orphan drug in the United States, Europe, Japan and Russia. In addition, it was granted Breakthrough Therapy Designation for the treatment of NMOSD by the FDA in December 2018, which is given to treatments that may demonstrate substantial improvement over other available options.

About Roche in neuroscience

Neuroscience is a major focus of research and development at Roche. Our goal is to pursue groundbreaking science to develop new treatments that help improve the lives of people with chronic and potentially devastating diseases.

Roche is investigating more than a dozen medicines for neurological disorders, including multiple sclerosis, Alzheimer's disease, Huntington's disease, Parkinson's disease, Duchenne muscular dystrophy and autism spectrum disorder. Together with our partners, we are committed to pushing the boundaries of scientific understanding to solve some of the most difficult challenges in neuroscience today.

About Roche

Roche is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives. The combined strengths of pharmaceuticals and diagnostics, as well as growing capabilities in the area of data-driven medical insights help Roche deliver truly personalised healthcare. Roche is working with partners across the healthcare sector to provide the best care for each person.

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases, ophthalmology and diseases of the central nervous system. Roche is also the world leader in in vitro diagnostics and tissue-based cancer diagnostics, and a frontrunner in diabetes management. In recent years, Roche has invested in genomic profiling and real-world data partnerships and has become an industry-leading partner for medical insights.

Founded in 1896, Roche continues to search for better ways to prevent, diagnose and treat diseases and make a sustainable contribution to society. The company also aims to improve patient access to medical innovations by working with all relevant stakeholders. More than thirty medicines developed by Roche are included in the World Health Organization Model Lists of Essential Medicines, among them life-saving antibiotics, antimalarials and cancer medicines. Moreover, for the twelfth consecutive year, Roche has been recognised as one of the most sustainable companies in the Pharmaceuticals Industry by the Dow Jones Sustainability Indices (DJSI).

The Roche Group, headquartered in Basel, Switzerland, is active in over 100 countries and in 2020 employed more than 100,000 people worldwide. In 2020, Roche invested CHF 12.2 billion in R&D and posted sales of CHF 58.3 billion. Genentech, in the United States, is a wholly owned member of the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, Japan. For more information, please visit www.roche.com.

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