

FDA grants priority review to Roche's Mabthera/Rituxan (rituximab) in children with two rare blood vessel disorders

- **There are currently no US Food and Drug Administration (FDA) approved treatments for children living with granulomatosis with polyangiitis (GPA) or microscopic polyangiitis (MPA)**
- **The PePRS study is the first global trial of MabThera/Rituxan in paediatric patients with GPA or MPA**
- **MabThera/Rituxan in combination with glucocorticoids is the only FDA-approved therapy for adults with these two rare forms of vasculitis**
- **If approved, this would be the first paediatric indication for MabThera/Rituxan**

Basel, 12 June 2019 - Roche (SIX: RO, ROG; OTCQX: RHHBY) announced today that the US Food and Drug Administration (FDA) has accepted the company's supplemental Biologics License Application (sBLA) and granted Priority Review for the use of MabThera®/Rituxan® (rituximab), in combination with glucocorticoids (GCC), for the treatment of granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA) in children two years of age and older. GPA and MPA are rare, potentially life-threatening diseases affecting small and medium sized blood vessels.^[1]

“We are committed to delivering new treatment options for rare diseases, such as paediatric GPA and MPA, for which there are currently no approved medicines,” said Sandra Horning, MD, Roche's Chief Medical Officer and Head of Global Product Development. “We will continue to work closely with the FDA to bring MabThera/Rituxan to children with these two serious and potentially life-threatening diseases.”

Priority Review Designation is granted to medicines that, if approved, the FDA has determined to have the potential to provide significant improvements in the safety or effectiveness of the treatment of a serious disease.

The sBLA was submitted based on data from the PePRS study, a phase IIa, global, open-label, single-arm study investigating the safety, pharmacodynamics/pharmacokinetics and exploratory efficacy of intravenous MabThera/Rituxan in 25 patients with severe GPA or MPA between six and 17 years of age.^[2] Treatment with four weekly infusions of MabThera/Rituxan in combination with a tapering course of oral glucocorticoids was assessed in newly diagnosed or relapsing active GPA or MPA paediatric patients.

MabThera/Rituxan is currently indicated for the treatment of four autoimmune indications. The FDA approved MabThera/Rituxan for rheumatoid arthritis (RA) in 2006, for the treatment of adults with GPA and MPA in 2011, and for adults with pemphigus vulgaris in 2018. Since 2006, more than 900,000 patients have been treated with MabThera/Rituxan for autoimmune conditions worldwide. If approved, this would be the first paediatric indication for MabThera/Rituxan.

About Granulomatosis with Polyangiitis and Microscopic Polyangiitis

Granulomatosis with polyangiitis (GPA) (formerly known as Wegener's Granulomatosis) and microscopic polyangiitis (MPA) are two types of ANCA-associated vasculitis (AAV).^[3] AAV is a form of vasculitis, or blood vessel inflammation, that primarily affects small blood vessels.^[3] In general, GPA and MPA both affect the small blood vessels of the kidneys, lungs, sinuses, and a variety of other organs, but the diseases may affect each person differently.^[1,4] Both GPA and MPA are considered rare diseases, with an estimated prevalence globally of 23 to 160 cases per million in the population.^[5] Cases of paediatric onset GPA and MPA are even more rare and are associated with severe, potentially life-threatening symptoms.^[6]

About MabThera/Rituxan

MabThera (Rituxan in the US) in combination with methotrexate is indicated for the treatment of adults with severe active rheumatoid arthritis (RA) who have had an inadequate response or intolerance to other disease-modifying anti-rheumatic drugs (DMARD) including one or more tumour necrosis factor (TNF) inhibitor therapies. MabThera/Rituxan, in combination with glucocorticoids, is indicated for the treatment of adults with severe, active granulomatosis with polyangiitis (Wegener's, GPA) and microscopic polyangiitis (MPA). People with serious infections should not receive MabThera/Rituxan. It is not known if MabThera/Rituxan is safe or effective in children.

About Roche in rheumatology and beyond

For more than 50 years, Roche has followed the science to pioneer medicines for immune-mediated rheumatic diseases. First-in-class anti-IL-6 receptor therapy Actemra®/RoActemra® (tocilizumab) has treated more than one million people with debilitating conditions, such as rheumatoid arthritis (RA), polyarticular and systemic juvenile idiopathic arthritis, giant cell arteritis and chimeric antigen receptor T-cell-induced cytokine release syndrome. Rituxan®/MabThera® (rituximab), which targets CD20, has significant clinical and real-world experience treating rheumatic conditions including RA, granulomatosis with polyangiitis and microscopic polyangiitis. Roche aims to provide solutions for people that need new treatments most, particularly those with severe or life-threatening conditions and limited treatment options. Our pipeline consists of treatments designed to target immune pathways including a glycoengineered type II anti-CD20 antibody in lupus nephritis.

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 under one roof have made Roche the leader in personalised healthcare – a strategy that aims to fit the right treatment to each patient in the best way possible.

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. 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. 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 tenth consecutive year, Roche has been recognised as the most sustainable company 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 2018 employed about 94,000 people worldwide. In 2018, Roche invested CHF 11 billion in R&D and posted sales of CHF 56.8 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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