Long-term Safety of Ofatumumab in Patients With Relapsing Multiple Sclerosis

Stephen L. Hauser¹, Anne H. Cross², Kevin Winthrop³, Heinz Wiendl⁴, Jacqueline Nicholas⁵, Sven G. Meuth⁶, Paul S. Giacomini⁷, Francesco Saccà⁸, Ronald Zielman⁹, Ayan Das Gupta¹⁰, Jing Xi¹¹, Ratnakar Pingili¹², Roseanne Sullivan¹², Virginia DeLasHeras¹³, Wendy Su¹², Ludwig Kappos¹⁴

¹UCSF Weill Institute for Neurosciences, University of California, San Francisco, California, USA, ²Washington University School of Medicine, Saint Louis, Missouri, USA, ³Public Health and Preventive Medicine, Division of Infectious Diseases, Oregon Health and Sciences University, Portland, Oregon, USA, ⁴University of Muenster, Muenster, Germany, ⁵OhioHealth Multiple Sclerosis Center, Columbus, Ohio, USA, ⁶Department of Neurology, Medical Faculty, Heinrich-Heine-University, Düsseldorf, Germany, ⁷Department of Neurology and Neurosurgery, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, ⁸NSRO Department, University "Federico II" of Naples, Naples, Italy, ⁹Novartis Pharma B.V., Amsterdam, The Netherlands, ¹⁰Novartis Healthcare Pvt. Ltd., Hyderabad, India, ¹¹China Novartis Institutes For Biomedical Research Co., Ltd., Shanghai, People's republic of China, ¹²Novartis Pharmaceuticals Corporation, East Hanover, New Jersey, USA, ¹³Novartis Pharma AG, Basel, Switzerland, ¹⁴Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC2NB) and MS Center, Departments of Head, Spine and Neuromedicine, Clinical Research, Biomedicine and Biomedical Engineering, University Hospital and University of Basel, Basel, Switzerland

Objective:

To assess the long-term safety and tolerability of ofatumumab treatment in patients with relapsing multiple sclerosis (RMS).

Background:

Ofatumumab, a fully-human anti-CD20 monoclonal antibody with a 20 mg subcutaneous monthly dosing regimen, is approved for treating RMS in adults. Previously published data demonstrated that ofatumumab treatment up to 30 months had a favorable safety profile and was generally well-tolerated. Longer-term safety of ofatumumab in RMS patients continues to be monitored.

Design/Methods:

Patients completing the core ASCLEPIOS I/II, APOLITOS and APLIOS clinical trials could enter ALITHIOS, an ongoing, open-label, umbrella extension trial. Here, we analyze the cumulative data for up to 4 years of ofatumumab treatment (data cutoff: 25-Sep-2021) in the overall (N=1969), continuous (ofatumumab in core+extension; N=1292) and newly-switched (teriflunomide core and ofatumumab extension; N=677) groups. The proportion of patients with treatment-emergent adverse events (AEs), serious AEs, serious infections including opportunistic infections, and malignancies will be assessed. Laboratory parameters including neutrophils, lymphocytes, and serum immunoglobulin (Ig) G and IgM levels will be analyzed.

Results:

In data reported from ALITHIOS with a cut-off of 29-Jan-2021, representing ofatumumab treatment for up to ~3.5 years, 83.8% of patients had \geq 1 AEs (exposure-adjusted incidence rate [EAIR], 148.7) and 9.7% had \geq 1 serious AEs (EAIR, 4.8) with a low incidence of serious infections (2.9%; EAIR, 1.4) and malignancies (0.6%; EAIR, 0.3). Updated safety data representing continuous ofatumumab treatment for up to 4 years will be presented, focusing on the incidence of serious infections including opportunistic infections, incidence of malignancies, and deaths. The long-term trend of IgG/IgM levels and their association with serious infections will also be investigated.

Conclusions:

Safety findings for up to 3.5 years showed of atumumab treatment to be well-tolerated with no new safety risks identified. This additional safety data will help confirm of atumumab's longer-term safety profile and provide further confidence to the MS community.

10/11/21, 11:47 PM



Close