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Alexion Receives Positive CHMP Opinion for Soliris® (Eculizumab) for the Treatment of Patients with Refractory Generalized Myasthenia Gravis (gMG) in the European Union

NEW HAVEN, Conn.--(BUSINESS WIRE)-- Alexion Pharmaceuticals, Inc. (NASDAQ:ALXN) announced today that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has adopted a positive opinion to extend the current therapeutic indication for Soliris® (eculizumab) to include the treatment of refractory generalized myasthenia gravis (gMG) in patients who are anti-acetylcholine receptor (AChR) antibody-positive. The final decision from the European Commission (EC) is anticipated in the third quarter of 2017. If approved, Soliris will be the first treatment available in the European Union (EU) for patients with refractory gMG who are anti-AChR antibody-positive, and the first and only complement inhibitor approved for this disease.

"Despite existing treatment options for gMG, patients with refractory gMG continue to suffer from severe symptoms and disease complications that significantly impact their daily lives," said John Orloff, M.D., Executive Vice President and Head of Research & Development at Alexion. "The positive CHMP opinion is a critical milestone in bringing Soliris to patients with refractory gMG who are anti-AChR antibody-positive and for whom physicians currently have no approved therapy."

Patients with refractory gMG have difficulties walking, talking, swallowing and breathing normally. Exacerbations and crises of their disease may require hospitalization and intensive care and may be life-threatening. Patients with refractory gMG who are anti-AChR antibody-positive represent an ultra-rare segment of patients with myasthenia gravis (MG).¹⁻¹⁰

The CHMP based its opinion on comprehensive clinical data from the Phase 3 REGAIN study (MG-301) and its long-term extension study (MG-302). A summary of the CHMP opinion can be accessed [here](#).

Soliris is approved in the United States (U.S.), EU, Japan and other countries for the treatment of patients with paroxysmal nocturnal hemoglobinuria (PNH) and atypical hemolytic uremic syndrome (aHUS), two ultra-rare, complement-mediated disorders. Alexion's supplemental Biologics License Application (sBLA) in the U.S. and a supplemental new drug application in Japan for Soliris as a treatment for patients with anti-AChR antibody-positive refractory gMG have been accepted for review by the U.S. Food and Drug Administration (FDA) and the Japanese Ministry of Health, Labour and Welfare (MHLW), respectively. Soliris has received Orphan Drug Designation (ODD) for the treatment of patients with MG in the U.S. and EU, and for the treatment of patients with refractory gMG in Japan.

About Refractory Generalized Myasthenia Gravis

Patients with refractory generalized myasthenia gravis (gMG) who are anti-acetylcholine receptor (AChR) antibody-positive represent an ultra-rare segment of patients with myasthenia gravis (MG) who continue to suffer from severe disease symptoms and complications despite available treatment options for gMG. There are no approved therapies for patients with anti-AChR antibody-positive refractory gMG.¹⁻³

MG is a chronic, debilitating and progressive autoimmune neuromuscular disease that typically begins with weakness in the ocular muscles and often progresses to the more severe and generalized form, known as gMG, which includes weakness of the head, neck, trunk, limb and respiratory muscles.⁴⁻⁶ While most symptoms in patients with gMG are managed with conventional therapies, 10% to 15% of patients are considered refractory—meaning they do not respond to multiple conventional therapies and continue to suffer profound muscle weakness throughout the body that can result in slurred speech, impaired swallowing, double or blurred vision, disabling fatigue, shortness of breath, immobility requiring assistance, frequent hospital and intensive care unit admissions with prolonged stays and periods of respiratory failure. Complications, exacerbations and crises of refractory gMG can be life-threatening.^{5,7-10}

In patients with anti-AChR antibody-positive MG, the body's own immune system turns on itself to produce antibodies against AChR, a receptor located on muscle cells in the neuromuscular junction (NMJ) and used by nerve cells to communicate with the muscles these nerves control. The binding of these antibodies to AChR activates the complement cascade, another part of the immune system, which leads to progressive inflammatory damage at the NMJ. As a result, the communication between nerve and muscle is impaired, which in turn leads to a loss of normal muscle function.^{4,5,8,11-13}

About Soliris® (eculizumab)

Soliris® is a first-in-class terminal complement inhibitor developed from the laboratory through regulatory approval and commercialization by Alexion. Soliris is approved in the U.S. (2007), European Union (2007), Japan (2010) and other countries as the first and only treatment for patients with paroxysmal nocturnal hemoglobinuria (PNH) to reduce hemolysis. PNH is a debilitating, ultra-rare and life-threatening blood disorder, characterized by complement-mediated hemolysis (destruction of red blood cells). Soliris is also approved in the U.S. (2011), European Union (2011), Japan (2013) and other countries as the first and only treatment for patients with atypical hemolytic uremic syndrome (aHUS) to inhibit complement-mediated thrombotic microangiopathy, or TMA (blood clots in small vessels). aHUS is a debilitating, ultra-rare and life-threatening genetic disorder characterized by complement-mediated TMA. Soliris is not indicated for the treatment of patients with Shiga-toxin E. coli-related hemolytic uremic syndrome (STEC-HUS). For the breakthrough medical innovation in complement inhibition, Alexion and Soliris have received some of the pharmaceutical industry's highest honors: the Prix Galien USA (2008, Best Biotechnology Product) and France (2009, Rare Disease Treatment).

For more information on Soliris, please see full prescribing information for Soliris, including BOXED WARNING regarding risk of serious meningococcal infection, available at www.soliris.net.

Important Soliris Safety Information

The U.S. prescribing information for Soliris includes the following warnings and precautions: Life-threatening and fatal meningococcal infections have occurred in patients treated with Soliris. Meningococcal infection may become rapidly life-threatening or fatal if not recognized and treated early. Comply with the most current Centers for Disease Control (CDC)'s Advisory Committee on Immunization Practices (ACIP) recommendations for meningococcal vaccination in patients with complement deficiencies. Immunize patients with meningococcal vaccines at least two weeks prior to administering the first dose of Soliris, unless the risks of delaying Soliris therapy outweigh the risk of developing a meningococcal infection. Monitor patients for early signs of meningococcal infections and evaluate immediately if infection is suspected. Soliris is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS). Under the Soliris REMS, prescribers must enroll in the program. Enrollment in the Soliris REMS program and additional information are available by telephone: 1-888-SOLIRIS (1-888-765-4747) or at www.solirisrems.com.

Patients may have increased susceptibility to infections, especially with encapsulated bacteria. Aspergillus infections have occurred in immunocompromised and neutropenic patients. Children treated with Soliris may be at increased risk of developing serious infections due to *Streptococcus pneumoniae* and *Haemophilus influenzae* type b (Hib). Soliris treatment of patients with PNH should not alter anticoagulant management because the effect of withdrawal of anticoagulant therapy during Soliris treatment has not been established. Administration of Soliris may result in infusion reactions, including anaphylaxis or other hypersensitivity reactions.

In patients with PNH, the most frequently reported adverse events observed with Soliris treatment in clinical studies were headache, nasopharyngitis, back pain and nausea. In patients with aHUS, the most frequently reported adverse events observed with Soliris treatment in clinical studies were headache, diarrhea, hypertension, upper respiratory infection, abdominal pain, vomiting, nasopharyngitis, anemia, cough, peripheral edema, nausea, urinary tract infections, and pyrexia.

About Alexion

Alexion is a global biopharmaceutical company focused on developing and delivering life-transforming therapies for patients with devastating and rare disorders. Alexion is the global leader in complement inhibition and has developed and commercializes the first and only approved complement inhibitor to treat patients with paroxysmal nocturnal hemoglobinuria (PNH) and atypical hemolytic uremic syndrome (aHUS), two life-threatening ultra-rare disorders. In addition, Alexion's metabolic franchise includes two highly innovative enzyme replacement therapies for patients with life-threatening and ultra-rare disorders, hypophosphatasia (HPP) and lysosomal acid lipase deficiency (LAL-D). Alexion is advancing its rare disease pipeline with highly innovative product candidates in multiple therapeutic areas. This press release and further information about Alexion can be found at: www.alexion.com.

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Forward-Looking Statement

This news release contains forward-looking statements, including statements related to the potential medical benefits of Soliris® (eculizumab) for the treatment of myasthenia gravis, and Alexion's future clinical, regulatory and commercial plans for Soliris for the treatment of myasthenia gravis. Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including for example, the risks and uncertainties of drug development, decisions of regulatory authorities regarding the adequacy of our research, marketing approval or material limitations on the marketing of eculizumab for the treatment of generalized Myasthenia Gravis (gMG), delays, interruptions or failures in the manufacture and supply of our products and our product candidates, failure to satisfactorily address

matters raised by the FDA and other regulatory agencies, the possibility that results of clinical trials are not predictive of safety and efficacy results of our products in broader patient populations, the possibility that clinical trials of our product candidates could be delayed, the adequacy of our pharmacovigilance and drug safety reporting processes, the risk that third party payers (including governmental agencies) will not reimburse or continue to reimburse for the use of our products at acceptable rates or at all, risks regarding government investigations, including investigations of Alexion by the SEC and DOJ, the risk that anticipated regulatory filings are delayed, the risk that estimates regarding the number of patients with gMG are inaccurate, risks related to potential disruptions to our business as a result of leadership changes, and a variety of other risks set forth from time to time in Alexion's filings with the U.S. Securities and Exchange Commission, including but not limited to the risks discussed in Alexion's Quarterly Report on Form 10-Q for the period ended March 31, 2017 and in our other filings with the U.S. Securities and Exchange Commission. Alexion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof, except when a duty arises under law.

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