

Alexion Pipeline

MARKET

Soliris® (eculizumab) for Paroxysmal Nocturnal Hemoglobinuria (PNH)

Soliris is approved for the treatment of PNH in nearly 50 countries, including the United States, EU and Japan. PNH is an ultra-rare blood disorder in which chronic, uncontrolled activation of complement, a component of the normal immune system, results in hemolysis (destruction of the patient's red blood cells).

Soliris® (eculizumab) for Atypical Hemolytic Uremic Syndrome (aHUS)

Soliris is approved for the treatment of aHUS in nearly 40 countries, including the United States, EU and Japan. aHUS is a chronic, ultra-rare, and life-threatening disease in which a lifelong and permanent genetic deficiency in one or more complement regulatory genes causes chronic uncontrolled complement activation, resulting in complement-mediated thrombotic microangiopathy (TMA), the formation of blood clots in small blood vessels throughout the body.

Soliris® (eculizumab) for Anti-AchR+ Generalized Myasthenia Gravis (gMG)

Soliris® (eculizumab) is approved in the U.S. and Japan for the treatment of adult patients with generalized myasthenia gravis (gMG) who are anti-acetylcholine receptor (AChR) antibody-positive and in the European Union for the treatment of refractory gMG in adult patients who are anti-AchR antibody-positive. MG is a debilitating, chronic and progressive autoimmune neuromuscular disease that typically begins with weakness in the muscles that control the movements of the eyes and eyelids, and often progresses to the more severe and generalized form, known as gMG, with weakness of the head, neck, trunk, limb and respiratory muscles. While most patients with gMG can be managed with current MG therapies, 10% to 15% of patients fail to respond adequately to or cannot tolerate multiple therapies for MG and continue to suffer profound muscle weakness and severe disease symptoms that limit function.

Strensiq® (asfotase alfa) for Hypophosphatasia (HPP)

Strensiq is approved in the United States, EU, Japan and Canada for the treatment of patients with HPP, a genetic, chronic and progressive ultra-rare metabolic disease characterized by defective bone mineralization. HPP can cause destruction and deformity of bones and other skeletal abnormalities, as well as systemic complications such as profound muscle weakness, seizures, pain, and respiratory failure leading to premature death in infants.

Kanuma® (sebelipase alfa) for Lysosomal Acid Lipase Deficiency (LAL-D)

Kanuma is approved in the United States, EU and Japan for the treatment of patients with LAL-D, a genetic, chronic and rare metabolic disease associated with multi-systemic organ damage including hepatic fibrosis, cirrhosis, liver failure, accelerated atherosclerosis, cardiovascular disease, and other devastating consequences.

ADVANCED CLINICAL DEVELOPMENT

Soliris® (eculizumab) for Relapsing Neuromyelitis Optica Spectrum Disorder (NMOSD)

Soliris® (eculizumab) is being evaluated in NMOSD, a rare, devastating, complement-mediated disorder of the central nervous system (CNS). Alexion has completed a Phase 3 study in patients with anti-aquaporin-4 (AQP4) auto antibody-positive NMOSD. Complement activation by anti-AQP4 auto-antibodies leads to destruction of vital cells in the CNS, causing demyelination and death of neurons, predominantly in the spinal cord and optic nerve. The disease leads to severe weakness, paralysis, respiratory failure, loss of bowel and bladder function,

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blindness and premature death. Most patients experience an unpredictable, relapsing course of disease where each individual attack adds to cumulative neurologic disability.

ALXN1210 IV for PNH

ALXN1210 is an investigational, long-acting C5 inhibitor being evaluated for the treatment of patients with PNH, a severe and ultra-rare blood disorder. Alexion has completed two Phase 3 studies in adults with PNH – one study in complement inhibitor treatment-naïve patients and one study in patients who were stable on Soliris®. A Phase 3 study in children and adolescents under the age of 18 who have PNH is currently underway.

ALXN1210 IV for aHUS

ALXN1210 is an investigational, long-acting C5 inhibitor being evaluated for the treatment of patients with aHUS, a chronic, ultra-rare, and life-threatening disease. Alexion has a Phase 3 trial under way with ALXN1210 administered intravenously every eight weeks in complement inhibitor treatment-naïve adolescent and adult patients with aHUS, as well as a Phase 3 trial of ALXN1210 in pediatric patients with aHUS.

WTX101 for Wilson Disease

WTX101 (bis-choline tetrathiomolybdate) is a novel oral copper-protein binding agent with a unique mechanism of action, under investigation for Wilson disease, a rare, chronic, genetic, and potentially life-threatening liver disorder of impaired copper transport. A Phase 3 study is underway in patients with Wilson disease ages 18 and older.

EARLY CLINICAL DEVELOPMENT

ALXN1210 Subcutaneous QW

ALXN1210 is an investigational, long-acting C5 inhibitor. Based on discussions with regulators, Alexion plans to initiate a single, PK-based Phase 3 study of ALXN1210 delivered subcutaneously once per week to support registration in PNH and aHUS in late 2018.

ALXN1210 IV for Generalized Myasthenia Gravis (gMG)

ALXN1210 is an investigational, long-acting C5 inhibitor. Alexion plans to initiate a study with ALXN1210 for the treatment of gMG, a debilitating, chronic and progressive autoimmune neuromuscular disease, in 2018.

ALXN1810 Subcutaneous Q2W or Q4W

A Phase 1 study of ALXN1210 co-administered with Halozyme's ENHANZE® drug-delivery technology, PH20, is underway. Pending co-formulation data, this next-generation subcutaneous formulation will be called ALXN1810 and has the potential to further extend the dosing interval to once every two weeks or once per month.

SYNT001 for Warm Autoimmune Hemolytic Anemia (WAIHA), Pemphigus Vulgaris (PV) or Pemphigus Foliaceus (PF)

SYNT001 is a humanized monoclonal antibody that inhibits the interaction of neonatal Fc receptor (FcRn) with Immunoglobulin G (IgG) and IgG immune complexes and has the potential to improve treatment in a number of rare IgG-mediated diseases. SYNT001 is currently being evaluated in Phase 1b/2a studies in patients with warm autoimmune hemolytic anemia (WAIHA) and in patients with pemphigus vulgaris (PV) or pemphigus foliaceus (PF) and has demonstrated proof of mechanism showing rapid IgG reduction.



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PRECLINICAL

ALXN1210 IV for IgA Nephropathy (IgAN)

ALXN1210 is -an investigational, long-acting C5 inhibitor. Alexion plans to initiate a study with ALXN1210 for the treatment of IgAN, a form of immune complex-mediated glomerulonephritis characterized by granular deposits of IgA and C3, in 2018.

CP010

Alexion and Complement Pharma are co-developing C6 complement inhibitor CP010 for neurodegenerative disorders.

GalXC™ RNA interference (RNAi)

Alexion and Dicerna are jointly discovering and developing up to four subcutaneously delivered GalXC™ RNAi candidates for the treatment of complement-mediated diseases.

Additional Complement

Alexion's Research & Development pipeline includes additional complement inhibitor candidates for the potential treatment of severe and devastating complement-mediated disorders.