Idorsia initiates a multiple-dose efficacy and safety study with cenerimod for the treatment of systemic lupus erythematosus

Allschwil, Switzerland - January 7, 2019
Idorsia Ltd (SIX: IDIA) today announced that the first patient has been enrolled into a multiple-dose study to evaluate the efficacy and safety of cenerimod, a selective S1P1 receptor modulator for the treatment of adults with systemic lupus erythematosus (SLE).

Idorsia is investigating cenerimod, an oral once-daily tablet in patients with lupus. Cenerimod has the potential to add a distinct mechanism to the treatment armamentarium for this underserved patient population.

Martine Clozel, MD and Chief Scientific Officer, commented:
“Cenerimod was selected for development due to its unique properties in experimental models. We believe that a combination of high selectivity for the S1P1 receptor and an attenuated calcium response in endothelial cells are responsible for the excellent preclinical efficacy without bronchoconstrictor or vasoconstrictor side-effects. SLE was selected as the target indication because of the pathogenic role of T and B lymphocytes and antibody production in this disease.”

In the Phase 1 program, cenerimod showed marked and sustained circulating lymphocyte lowering effects. A Phase 2 safety study with cenerimod, which investigated the pharmacodynamics, safety and tolerability of cenerimod in adult patients with SLE, has been conducted. The study enrolled 67 patients to receive either 0.5, 1, 2 or 4 mg/day of cenerimod or placebo over a treatment period of 12 weeks. The results of the study showed that cenerimod induces a dose-dependent, sustained reduction in circulating lymphocyte counts that was reversible after treatment discontinuation. Cenerimod was well tolerated at all dose levels. The occurrence of adverse events was similar in all five treatment groups.

About the study
Cenerimod is being investigated in a multiple-dose study to evaluate its efficacy and safety for the treatment of adult patients with moderately to severely active, autoantibody-positive SLE. The multicenter, randomized, double-blind, placebo-controlled, parallel-group study will enroll around 500 patients, who will be randomized into four cenerimod treatment arms: 0.5, 1, 2, and 4mg once-daily orally or placebo for up to 12 months. Patients will receive study treatment in addition to background SLE therapy. The study aims to validate the appropriate dose, patient population and endpoints for further development in SLE.

Guy Braunstein, MD and Head of Global Clinical Development, commented:
“This study is based on a clinical pharmacology program in healthy volunteers and a Phase 2 safety study in patients with lupus, which showed that cenerimod reduced circulating lymphocytes in a dose-dependent manner and was safe and well tolerated at doses up to 4 mg. It has been designed to include input from health authorities. As background therapy may confound the treatment effect, the protocol recommends keeping SLE medications as stable as possible during the double-blind treatment period. The study also considers important patient perspectives, such as the overall quality of life and debilitating symptoms like fatigue.”
Notes to the editor

About systemic lupus erythematosus
SLE – known more simply as “lupus” since it is the most common form of lupus – is an autoimmune disease, which means that the body’s immune system malfunctions and attacks the body’s own tissues, causing inflammation and organ damage. Some autoimmune diseases affect individual organs, but in the case of lupus, most parts of the body can be affected: most commonly the skin, joints, gut, blood cells, and lungs, as well as the brain, heart, and kidneys.

Lupus can range from mild to life-threatening and can randomly become worse (so-called ‘flare ups’) and then better again, which can make living with lupus unpredictable and its impact on day-to-day life wide-ranging. Around five million people worldwide have a form of lupus and while it affects people of all races, genders, and ages, as much as ninety percent of diagnosed cases are in women. The condition is also more common in people of Afro-Caribbean and Asian origin compared to Caucasians and is likely to affect these ethnic groups more severely.

There is no cure for lupus. Most people with lupus are prescribed a combination of different medications including anti-inflammatory, anti-malarial drugs, corticosteroids, immunomodulators.

About cenerimod in systemic lupus erythematosus
How and why lupus affects the immune system’s defense mechanisms is still not fully understood. However, T and B lymphocytes are considered the key immune system cells that contribute to the symptoms of the disease, because their normal development and mechanism for developing tolerance to the body’s own tissues has malfunctioned in lupus.

T and B lymphocytes have receptors on the surface called “Sphingosine-1-phosphate receptor 1” (S1P1). This receptor senses the gradient of sphingosine-1-phosphate or S1P, which is high in blood, guiding the lymphocytes out of lymph nodes towards the circulation.

Cenerimod, a selective S1P1 receptor modulator, binds to the S1P1 receptor on the surface of T and B lymphocytes. This interaction leads to internalization of the S1P1 receptor, so that the lymphocyte can no longer sense S1P. As a result, the lymphocytes are held in the lymph nodes, reducing the availability of these key players in inflammation to the affected organs and tissues. The effect of cenerimod on lymphocyte trafficking is reflected by the dose-dependent, sustained and reversible reduction in circulating lymphocyte counts observed upon administration of cenerimod.

Key scientific literature

About Idorsia
Idorsia Ltd is reaching out for more - We have more ideas, we see more opportunities and we want to help more patients. In order to achieve this, we will develop Idorsia into one of Europe’s leading biopharmaceutical companies, with a strong scientific core.

Headquartered in Switzerland - a biotech-hub of Europe - Idorsia is specialized in the discovery and development of small molecules, to transform the horizon of therapeutic options. Idorsia has a broad portfolio of innovative drugs in the pipeline, an experienced team, a fully-functional research center, and a strong balance sheet – the ideal constellation to bringing R&D efforts to business success.

Idorsia was listed on the SIX Swiss Exchange (ticker symbol: IDIA) in June 2017 and has over 700 highly qualified specialists dedicated to realizing our ambitious targets.

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