Lumasiran ILLUMINATE-A and -B Phase 3 Studies

ILLUMINATE-A:

A randomized, double-blind, placebo-controlled Phase 3 study with an extended dosing period to evaluate the efficacy and safety of lumasiran in children (age six or older) and adults with primary hyperoxaluria type 1 (PH1).

Study Objective

To evaluate the safety and efficacy of lumasiran in children and adults with PH1.

ILLUMINATE-A Design

- The global, multicenter trial enrolled PH1 patients, age six or older, with preserved renal function (estimated glomerular filtration rate or eGFR not less than 30 mL/min/1.73m^2)[4], at clinical centers worldwide.
- Study participants were randomized 2:1 to receive three monthly loading doses of lumasiran or placebo at 3 mg/kg, followed by quarterly maintenance doses[4].
- All patients completing the six-month treatment period, with either lumasiran or placebo, may continue to an open-label extension (OLE) study for long-term follow-up.

ILLUMINATE-B:

An open-label Phase 3 study in infants and young children with PH1.

Study Objective

To evaluate the safety, efficacy, pharmacokinetics (PK), and pharmacodynamics (PD) of lumasiran in infants and young children with a confirmed diagnosis of PH1.

ILLUMINATE-B Design

- The open-label, multicenter trial is enrolling PH1 patients, under the age of six, with preserved renal function (eGFR not less than 45 mL/min/1.73m^2)[4], at clinical centers worldwide.
- Dosing regimen will be based on weight with three monthly loading doses followed by quarterly maintenance doses[4].

ILLUMINATE-A and -B Endpoints:

- The primary endpoint of the studies is the percent change in 24-hour urinary oxalate excretion from baseline to Month 6.
- Key secondary and exploratory endpoints will evaluate additional measures of urinary and plasma oxalate, eGFR, safety, tolerability, and clinical outcome.

Planned ILLUMINATE Development Timeline

September 2018 ILLUMINATE-A Phase 3 study initiated

April 2019 ILLUMINATE-B Phase 3 study initiated

Mid-2019 ILLUMINATE-A Phase 3 study enrollment completed

Late 2019 ILLUMINATE-A Phase 3 topline results

Early 2020 New Drug Application filing in the U.S.

Mid-2020 ILLUMINATE-B Phase 3 topline results

For more information on ILLUMINATE-A (NCT03681184) and ILLUMINATE-B (NCT03905694), please visit www.clinicaltrials.gov or contact media@alnylam.com.

1. Cochat P and Rumsby G. Primary hyperoxaluria. N Engl J Med. 2013;369:649-658 2. Milliner DS et al. GeneReviews®; [updated Nov 30, 2017]. https://www.ncbi.nlm.nih.gov/books/NBK1283/ 3. Hoppe B, Beck BB, Milliner DS. The primary hyperoxalurias. Kidney Int. 2009, 75:1264-1271. 4. Data on File.

Fast Facts About PH1

- PH1 is a rare, life-threatening, inherited disease that can cause serious damage to kidneys and progressively to other organs[1].
- PH1 is characterized by the overproduction of oxalate, an end product of metabolism that, when in excess, is toxic and accumulates in the kidneys forming calcium oxalate crystals.[1] This can lead to recurrent kidney stones associated with symptoms that include flank pain, urinary tract infections, painful urination, and blood in the urine[1,2].
- Patients with advanced disease require a liver transplant to correct the metabolic defect, combined with a kidney transplant to replace the terminally damaged kidneys[1,3].

About Lumasiran

Lumasiran (ALN-GO1) is an investigational, subcutaneously administered RNAi interference (RNAi) therapeutic targeting glycolate oxidase (GO) in development for the treatment of PH1.

Alnylam® PHARMACEUTICALS