Lumasiran

An investigational RNAi Therapeutic for Primary Hyperoxaluria Type 1 (PH1)

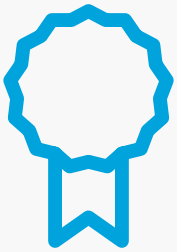
Overview

- Lumasiran (ALN-GO1) is an investigational, subcutaneously administered (under the skin) RNA interference (RNAi) therapeutic targeting glycolate oxidase (GO) in development for the treatment of primary hyperoxaluria type 1 (PH1).
- PH1 is a rare, life-threatening disease that can cause serious damage to kidneys and progressively to other organs.[1]
- PH1 is characterized by the pathologic overproduction of oxalate by the liver. Oxalate is an end product of metabolism that, when in excess, is toxic and accumulates in the kidneys forming calcium oxalate crystals.[1,2]
- Symptoms of PH1 are often associated with recurrent kidney stones and include flank pain, urinary tract infections, painful urination, and blood in the urine.[2,3]
- Currently, the only curative treatment is a liver transplant, to correct the metabolic defect, combined with a kidney transplant, to replace the terminally damaged kidneys.[1,3]

Clinical Development

- The safety and efficacy of lumasiran are being evaluated in a randomized, double-blind, placebo-controlled, global, multicenter Phase 3 study of approximately 30 PH1 patients, called ILLUMINATE-A (NCT03681184).
- The primary endpoint is percent change in 24-hour urinary oxalate excretion from baseline to Month 6.
- Key secondary and exploratory endpoints in ILLUMINATE-A will evaluate additional measures of urinary oxalate, estimated glomerular filtration rate (eGFR), safety, and tolerability.
- Alnylam expects to report topline results in late 2019.

Regulatory Designations



- Breakthrough Therapy Designation by the U.S. Food and Drug Administration (FDA)
- Priority Medicines (PRIME) Designation from the European Medicines Agency (EMA)
- Orphan Drug Designations in both the U.S. and the European Union

For more information about lumasiran, please contact media@alnylam.com.

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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.