## **BIOBUSINESS BRIEFS**

MARKET WATCH

## Upcoming catalysts in Q3 2014

In the third quarter of 2014, important market catalysts include the release of top-line data from Phase III trials of alirocumab (developed by Regeneron and Sanofi) for the treatment of hypercholesterolaemia, and of sebelipase alfa (developed by Synageva) for lysosomal acid lipase (LAL) deficiency, as well as a US Food and Drug Administration (FDA) Advisory Committee meeting for liraglutide (developed by Novo Nordisk and Johnson & Johnson) for the treatment of obesity.

Alirocumab is an antibody that targets proprotein convertase subtilisin kexin 9 (PCSK9), an enzyme involved in cholesterol homeostasis. PCSK9 inhibition increases low-density lipoprotein (LDL) receptor levels, thereby reducing levels of circulating LDL cholesterol. The Phase III ODYSSEY programme involves approximately 23,000 patients in 14 trials of alirocumab as a monotherapy or in combination with other lipid-lowering therapies. Top-line data on the primary end point of 24-week LDL cholesterol reduction are expected from several trials in the third quarter. Top-line results from one study in the programme, ODYSSEY Mono, were released in late 2013; alirocumab met the primary end point compared to ezetimibe (Zetia; Merck). What remains to be seen is whether up-titration of poor responders from 75 mg to 150 mg of

alirocumab, as specified in the protocol of many of these studies, provides efficacy that is comparable to other PCSK9-targeted drugs without such protocols, such as Amgen's evolocumab.

Synageva holds FDA orphan, fast-track and breakthrough therapy designations for the recombinant enzyme replacement therapy sebelipase alfa for the treatment of LAL deficiency, a currently untreatable lysosomal storage disease characterized by systemic lipid build-up that leads to cirrhosis, accelerated atherosclerosis and, in early-onset patients, death in infancy. Top-line data from the placebo-controlled Phase III ARISE trial of sebelipase alfa in 66 children and adults with LAL deficiency are expected in the third quarter. In earlier-stage studies, sebelipase alfa reduced levels of liver damage biomarkers in adults after 2 years of treatment, increased survival in early-onset infants and was generally well tolerated. If results remain consistent in the larger ARISE study, Synageva expects to file global submissions by the end of the first quarter of 2015 for this orphan indication.

An FDA Advisory Committee meeting is scheduled on 11 September 2014 to discuss the supplemental new drug application (sNDA) of liraglutide (at a dose of 3 mg) for chronic weight management in adults with obesity or who are overweight with comorbidities. Liraglutide is an injectable, once-daily analogue of glucagon-like peptide 1 (GLP1), a hormone that increases insulin secretion and slows gastric emptying in response to food intake, and a daily dose of 1.8 mg is already approved for the treatment of type 2 diabetes. The liraglutide sNDA includes data from the over 5,000-patient Phase III SCALE programme and from the treatment's use in type 2 diabetes. Although liraglutide has shown significant efficacy for weight loss, the panel will evaluate the safety of the drug with a focus on the possible association between GLP1 treatments and an increased risk of acute pancreatitis, which can lead to organ failure and other serious complications.

Ryan Haggerty is a BioMedTracker Research Analyst at Sagient Research Systems, 3655 Nobel Drive, San Diego, California 92122, USA. e-mail: <u>Rhaggerty@sagientresearch.com</u> doi:10.1038/nrd4375

The author declares no competing interests.

±0 ₩008#80 liri Hera/Alamy