LIPIGON PHARMACEUTICALS

DEVELOPS FIRST- IN-CLASS TREATMENTS FOR ORPHAN INDICATIONS IN THE LIPID RELATED DISEASE AREA

Market need and potential
Cardiovascular disease (CVD) is the number one cause of mortality and morbidity in the major pharmaceutical markets. Although treatment goals are reached only 30 % of all CVD events are prevented. A great proportion of the residual risk is due to an unmet medical need for treating dyslipidemia.
Sales predictions for orphan prescription drugs by 2023 are estimated to be 20 % of all pharmaceutical sales.
Lipigon maneuvers the dyslipidemia space where both orphan disease opportunities and broader indications are within the reach of our 3 active programs.

Our front runner Program 1 develops the candidate drug Lipisense that can target e.g. both ultra-orphan Familial Chylomicronemia Syndrome (FCS) and hypertriglyceridemia (HTG). Both patient populations are largely unresponsive to conventional treatments. Hence, there is a significant and urgent demand for novel treatments that utilize different mechanisms of action. Whereas

Program 2 develops treatment for lipodystrophy and has been out-licensed to the gene therapy platform company CombiGene AB (publ) in October 2019.

Program 3 also targets a multi-billion $ dyslipidemia market and will be approached by a new screening method – DNA encoded library screening, with a world leading partner in early 2020.

Business idea
Lipigon's business idea builds on 50 years of lipid biology expertise, to select drug targets for lipid related diseases, unrestricted by chemical modalities. By finding the best collaborators, we can develop drugs fast and efficiently.

In Lipisense we have combined our expertise with an advanced antisense oligonucleotide platform. Lipisense is hitting a well validated target (ANGPTL4) via a mechanism which is de-risking previous safety concerns. In addition, the novel mechanism allows treatment on top of existing alternatives making our drug candidate perfect for patients in need of additional alternatives. This strategy is unmatched by current competitors and Lipisense has first-in-class potential.

Developing orphan therapies has several advantages, including less extensive clinical trials, support from authorities, advice and opportunities for market exclusivity, as well as reduced fees for regulatory activities.

Some recent partnering deals in the field of antisense drugs for treatment of dyslipidemia;
• Pfizer inlicensed a phase 2 ANGPTL3 ASO from Akcea ; $250M upfront and $1,3B in milestone payments
• Dicerna-Novo Nordisk, 2019 for metabolic disease platform, $175M upfront and many $B in milestone payments

Competition
Competition for the Lipisense program is restricted to other targets, and the closest competitors are targeting ANGPTL3 – a member of the same gene family. The major difference in biology is that ANGPTL4 regulates fasting (instead of non-fasting) plasma triglyceride levels, which is the biomarker defining HTG. Thus, providing a clear and clinically relevant differentiation.

Advantages
- Experienced team and strong strategic partners
- Orphan indications in focus, but possibility to expand into broader indications
- Exciting pipeline with early exit opportunities in all programs
- Genetically and clinically validated targets

Current status
Lipisense is our front-runner program where we aim at selecting a candidate drug (CD) 2020. Preclinical screening, validation and optimization is finished. Next steps are manufacturing, toxicology and clinical studies.

Contact
Stefan K Nilsson
+46 70 578 1768
stefan@lipigon.se

Website
www.lipigon.se

IPR
Several patents applications filed for Lipisense. November 2019

Capital Need
Total of 120 – 170 MSEK needed to bring Program 1 – Lipisense, through First in Man (Phase 1) trials.

First round 8–10 MSEK by April 2020 to provide preclinical proof-of-principle data and launch manufacturing plans for Program 1

Partnership/collaboration sought
We are seeking contact with investors and pharmaceutical partners

Team/Scientific advisors
Stefan K Nilsson, PhD, MBA, CEO
Gunilla Olivecrona, Professor, CSO
Maj Hedtjärn, PhD – advisor, antisense expert

Troels Koch, PhD – advisor, antisense expert

Management/Board
Carina Schmidt, Chairperson – life science professional
Lars Öhman, Board – business development
Jens Ålander, Board – financing
Mikael Elofsson, Prof. Board – medicinal chemist

Background
Lipigon develops first in class treatments for orphan indications in lipid related diseases. The company was founded 2010 by lipid biology experts, based on 50 years of world-class science from Umeå University.

UMEÅ BIOTECH INCUBATOR
UMEÅ UNIVERSITY
VINNOVA
EUROPEAN UNION
European Regional Development Fund