Opaganib shows preclinical promise in the treatment of diabetes and obesity.

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Opaganib, a sphingosine kinase two (SPHK2) inhibitor, has shown promising activity *in vivo* for treating type 2 diabetes and obesity[1]. Red Hill BioPharma (Nasdaq: RDHL) and its US-based collaborator, Apogee Biotechnology Corporation, have announced that Opaganib appears effective for weight loss and glucose control in animals fed a high-fat diet.

Dr Mark Levitt, Red Hills Chief Scientific Officer, noted," Sphingolipid metabolism is a key pathway in many diseases, including obesity, but has not been adequately examined as a therapeutic target for human therapy. Opaganib, which acts as a sphingosine competitor, is the first clinical drug to target three key enzymes in this pathway."

Red Hill BioPharma will initiate clinical trials to test the safety and efficacy of Opaganib in managing diabetes/obesity. If successful, it could become the first SPHK2 inhibitor to take on the glucagon-like peptide receptor agonists (GLP1-RA), such as Ozempic, Wegovy, Mounjaro and Zepbound, in treating the two closely associated conditions.

Sphingolipids are a class of lipid implicated in a wide array of pathophysiological conditions. They are pro-inflammatory and contribute to the development of atherosclerosis[2], diabetes[3], and some cancers[4]. More recently, they have been shown to facilitate the replication of viruses such as SARS-CoV2 [5].

Opaganib is indeed a broad-acting drug. The company is currently investigating its efficacy in several other human trials. Phase 1 investigations include solid organ tumours, multiple myeloma, and cholangiocarcinoma. Phase 2 studies include prostate cancer and SARS-Cov-2-associated pneumonia.

Definitive results are still a few years away, but Red Hill and Opaganib are well-positioned in the chronic disease arena going forward.

References

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