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ThirtyFiveBio Makes Its Debut With First-In-Class GPR35 Antagonist Approach

Targeting GI Diseases

by Ayisha Sharma

Emerging Company Profile: Backed by \$20m in seed funding, the UK firm is going against the grain by antagonizing, instead of agonizing, G protein-coupled receptor 35 with an eye to treating colorectal cancer and other gastrointestinal conditions.

New biotech ThirtyFiveBio has emerged from stealth mode following a \$20m seed financing as it advances a first-in-class G Protein-Coupled Receptor 35 (GPR35) antagonist approach for the treatment of gastrointestinal diseases, including cancer.

The firm was founded back in 2021 by biotech hub M:M Bio in collaboration with venture capital firm Canaan Partners with the aim of accelerating research on the GPR35 target. So far, the Oxford-based company has spent some of the seed money on developing a drug discovery platform aimed at this target.

ThirtyFiveBio CEO James Westcott told *Scrip*: “GPR35 is largely expressed in gut tissue and the lining of the gut as well as in myeloid cells and macrophages,” adding when the gene is “switched on too much,” it can lead to diseases of the GI tract. While most pipeline approaches to date have focused on increasing GPR35 activity with targeted agonists, research conducted by the firm has found antagonism could be a more appropriate path because it blocks unwanted GPR35 signaling.

There is just one GPR35 agonist in active development according to the Citeline database

Pharmaprojects, an unnamed preclinical asset for the treatment of inflammatory bowel disease backed by [GSK plc](#) and [Sosei Heptares](#). The only other GPR35 agonist listed on Pharmaprojects is [Patara Pharma/Roivant Sciences Ltd.](#) PA 101, which was previously in development for chronic cough in idiopathic pulmonary fibrosis but is now discontinued.

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By contrast, ThirtyFiveBio is advancing families of first-in-class GPR35 inhibitors through the lead optimization stage. The company has four lead series with strong PK and animal model data that it is starting to move into preclinical models of cancer. “It would be great to become known as the pioneers in this target,” Wescott said.

The firm is also in the midst of raising a seed financing extension of more than \$10m to fund its first in-human trial, a milestone it should reach within the next year or so. “We’re probably going to attain our proof-of-concept in colorectal cancer and we have good bioinformatic and genetic data that lends us to certain disease subtypes within that indication,” Westcott said, but added he could not give further color on these.

In the meantime, the UK firm will present its preclinical research on 16 April at the American Association for Cancer Research (AACR) meeting. The presentation will outline the hypothesis that GPR35 activity can drive pro-oncogenic growth biology and unveil data to show that GPR35 is upregulated in GI cancers. The company will also walk through its discovery of potent inhibitors of the target.

Notably, ThirtyFiveBio will benefit from access to M:M Bio’s hubs of excellence, which span a wide range of drug discovery and development services, as well as complete operational support. In the long term, the company hopes to engage with big pharma or large biotech firms to help bring its products to market, Westcott said.

Three First-In-Class Firms Set Up

ThirtyFiveBio is the third “ecosystem company” founded under a partnership between M:M Bio and Canaan Partners. The collaborators have together created two other firms with the goal of developing “first-in-class medicines with clear benefit to patients and payers”, the most recent one being [Grey Wolf Therapeutics, Ltd.](#). (Also see "[Grey Wolf Raises \\$49m To Bring ‘Tumor Unmasking’ Candidate To Clinic](#)" - Scrip, 26 Jan, 2023.)

In January, Grey Wolf closed an oversubscribed \$49m series B raise, which it is using to advance the development of an ERAP1 inhibitor, which could overcome the limitations of poor tumor visibility and T-cell exhaustion faced by other immuno-oncology drugs. Prior to this, M:M Bio and Canaan Partners founded [Pathios Therapeutics Ltd.](#) with an eye to advancing G protein-

coupled receptor 65 blockers in the solid tumor space.