

Korea's 1ST Biotherapeutics and SK Biopharma announce partnership for Parkinson's treatment

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Deal valued at up to \$314.8 million, including milestones, with a separate \$2.2 million strategic equity investment



South Korea-based 1ST Biotherapeutics, Inc. and SK Biopharmaceuticals have entered into an exclusive global licensing agreement and strategic equity investment (SI) partnership to advance 1ST-104, a novel drug candidate for the treatment of Parkinson's disease.

Under the terms of the agreement, 1STBIO will receive an upfront payment of \$1.8 million. The total licensing agreement is valued at up to \$314.8 million, including a short-term milestone of \$1.8 million upon candidate selection and additional milestones. Upon commercialisation, 1STBIO is also eligible to receive tiered royalties based on global net sales. Separately, SKBP has made a \$2.2 million strategic equity investment in 1STBIO to foster a long-term partnership.

The licensed programme, 1ST-104, is being developed as an oral small-molecule treatment for Parkinson's disease, using a dual-inhibition strategy that simultaneously inhibits LRRK2 and c-Abl. LRRK2 is considered a therapeutic target directly linked to the pathogenesis of Parkinson's disease.

However, some Type 1 LRRK2 inhibitors have faced development challenges, particularly due to pulmonary findings reported in preclinical studies.

To address these limitations, 1STBIO developed 1ST-104 as a next-generation Type 2 LRRK2 inhibitor. By leveraging a Type 2 binding mode, 1ST-104 offers a differentiated approach compared to conventional Type 1 inhibitors and has demonstrated target selectivity along with blood-brain barrier (BBB) permeability in preclinical studies.

Furthermore, since 2024, 1STBIO has been a member of LITE (LRRK2 Investigative Therapeutics Exchange), the research consortium supported by The Michael J. Fox Foundation for Parkinson's Research (MJFF)—the world's leading non-profit funder of Parkinson's disease research. Through LITE, the company continues to engage in global scientific and technical collaboration.