RS-2025-02222987

Development of a ZBP1-Targeting Small Molecule Therapeutic for Alcoholic Liver Disease: Lead Compound Identification Through Inhibition of Inflammatory Cell Death Pathways

UNIST
울산과학기술원
ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY

METABOLIC | **Hit**

Product Type	Small molecules
Indication	Alcoholic Liver Disease (ALD)
Target	Innate immune sensor ‘ZBP1’
MoA(Mechanism of Action)	In the ALD animal model, administration of the ZBP1 inhibitor (ZBP1i) demonstrated therapeutic potential by reducing inflammation, lipid accumulation, inflammatory cell death, and liver damage.
Competitiveness	Our research team is undertaking the world’s first attempt to develop a first-in-class drug targeting ZBP1, offering a distinct advantage over other target proteins. Given that no FDA-approved drugs currently exist for alcoholic liver disease, this approach presents a highly competitive and promising therapeutic strategy.
Development Stage	Hit
Route of Administration	The current route of administration for the compound is intraperitoneal (I.P.) injection. However, through this project, we aim to develop an orally administrable (P.O.) formulation as the final goal.