RS-2023-00282888

A Phase 2b clinical study for iron-based T1-MRI contrast agent: Advancing towards Phase 3

INVENTERA Pharmaceuticals Inc.

OTHERS | Phase 2

Product Type	T_1 MRI contrast agent
Indication	Magnetic resonance arthrography
Target	Arthrography using magnetic resonance imaging (MRI) for shouler, hip, elbow, knee, wrist, and ankle joints.
MoA(Mechanism of Action)	• The trivalent iron in NEMO-103 gives paramagnetic property in that it can accelerate water proton spin-lattice relaxation and generate bright contrast in T1-MRI. The dextran core and un-coordinated carboxylic acid functional groups provide water solubility of NEMO-103. • By intraarticular injection of NEMO-103, signal intensity in articular space is increased and thereby becomes brighter than other anatomical structures in MRI image. • After intraarticular injection, NEMO-103 is first distributed in the articular space. Then, the compound is gradually eliminated from articular space and excreted from body in unchanged form via the kidneys by glomerular filtration.
Competitiveness	• NEMO-103 is a ready-to-use product and thus can eliminate septic risk related to the on-site preparation currently approved products. • NEMO-103 increases signal intensity in the articular space and improves overall image quality (joint distension, sharpness, and contrast) for better diagnosis of joint diseases. • NEMO-103's contrast effects last for at least 2 hrs after administration which is 4-fold longer than that of gadolinium-based contrast agent. • NEMO-103 is composed of biocompatible materials of polysaccharide and iron and does not contain gadolinium and in that free from gadolinium-related toxicity and side effects.
Development Stage	Phase 2
Route of Administration	Intraarticular injection

kddf_bd@kddf.org
KDDF Business Development Team

KDDF Korea Drug Development Fund