

Pre-clinical studies of DMOAD candidate DRT-101 for Osteoarthritis

Darnatein

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OTHERS	Preclinical
Product Type	Design-Augmented (DA) Recombinant protein, DaRT-101
Indication	Induction of key matrix proteins, in particular, aggrecan and type II collagen Induction of cartilage cell growth and regeneration
Target	Cartilage tissue regeneration
MoA(Mechanism of Action)	Acting as a super-agonist of cartilage regeneration via BMP7 signaling pathway and possible local stem cell stimulation
Competitiveness	<ul style="list-style-type: none"> • Transmembrane signaling activity is over 30 times greater than BMP7. • Sustained drug release by HepaSH (heparin-based DA polymer) • Non-invasive intra-articular local injection to regenerate cartilage tissue • Superior In vivo efficacy further enhanced by HepaSH combination • first-in-class candidate of DMOAD (Disease Modifying Osteoarthritis Drug) • Negligible toxicity and immunogenicity
Development Stage	Preclinical
Route of Administration	topical non-invasive (non-surgical but needle), intraarticular injection