

COMPOSITIONS AND METHODS FOR PREVENTION OF BLADDER FIBROSIS

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The Invention

A composition for the treatment of bladder fibrosis in a patient in need that includes a miR-29 mimic is disclosed. The miR-29 mimic may include a working RNA strand with the nucleotide sequence UAGCACCAUCUGAAAUCGGUUUU (SEQ ID NO 4) and a passenger RNA strand comprising the nucleotide sequence: AACCGAUUUCuuuUGGUGCUAUU (SEQ ID NO 5). The passenger RNA strand includes a 2'-Omethylation modification to increase stability. Cholesterol is conjugated to the 3'-end of the passenger RNA strand to enhance cellular uptake. The composition may further include a carrier molecule including, but not limited to, branched polyethylenimine at an N/P ratio of 0.8, where N denotes the nitrogens of the polyethylenimine and P denotes the phosphate groups of the working and passenger RNA strands. In some aspects, the composition may be an injectable composition that includes a polyplex dissolved in a 0.5% glucose solution, where the polyplex is formed from the working and passenger RNA strands and the carrier molecule.

Tech Fields

• Therapeutics & Vaccines: Other therapeutic technologies

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854