

# REMEDIUM BIO EXECUTIVE SUMMARY

Remedium Bio, Inc.

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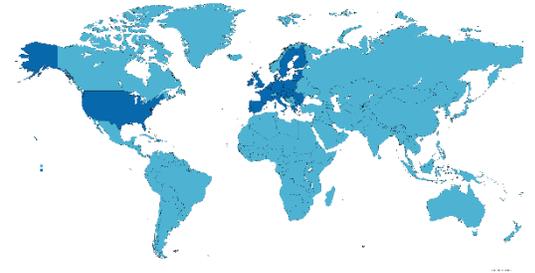
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Remedium is a gene therapy company raising \$2.3M to complete Seed round financing to support preclinical development of its lead product candidate, a first-in-class disease modifying therapy for Osteoarthritis (OA). Funding will be used to accelerate a Tufts University collaboration with a leading OA laboratory to generate in vivo data that will drive a Series A raise in early 2022.

Remedium's mission is to develop therapeutics that treat serious diseases by using technology with proven scientific fundamentals in novel ways. We target indications that are optimally suited for gene therapy, involving local delivery using well characterized vectors and employing the company's dose-adjustment technology platform. The lead product candidate, a potential first-in-class disease modifying therapy for OA, is an example of this transformational approach. Remedium's strategy is to design therapeutic constructs, secure intellectual property (IP), characterize and develop therapies consistent with US and EU regulatory requirements, thereby preparing assets for streamlined monetization. Remedium believes that significant value can be attained at the pre-clinical development stage of development. The company intends to fund itself through equity and non-dilutive collaborations.



**TAM**  
>\$38B Globally  
**CAGR**  
9%

## THE PROBLEM

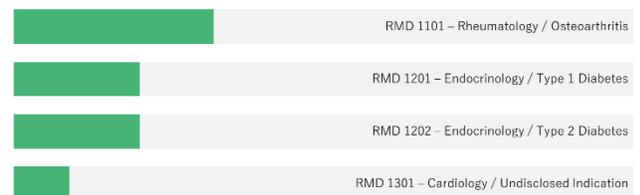
Osteoarthritis is the most common rheumatic disorder affecting 33 million, or 1 in 7 US adults. It is a progressive, degenerative disease characterized by the loss of cartilage leading to functional impairment and debilitating pain. Only palliative treatments are available, with no alternatives able to halt or reverse disease progression. Today's therapies are focused on oral pain medications or intra-articular analgesic injections with a large proportion of the population progressing to partial or total knee replacement surgery.

## THE SOLUTION

Repeat intra-articular FGF-18 injections have been shown to prevent rapid disease progression and even regenerate cartilage in OA patients. This approach is complicated by the inability to maintain therapeutic levels of growth factor in the joint due to the local fluid dynamic. This treatment, therefore, requires continuous repeat injections to prevent disease remission. Remedium's gene therapy solution reprograms the cells of the synovium to produce FGF-18 using a well characterized delivery vector. Our approach allows therapeutic growth factor levels to be maintained after a single injection.

Remedium's platform gene therapy technology, including the patented combination of dose-adjustment technology and therapeutic genes, is enabling a pipeline of potential development candidates in several indications. In addition to OA, Remedium has potential products in the treatment of Type 1 and Type 2 Diabetes. Seed funding will be used to complete Proof of Concept (PoC) studies (in vitro, ex vivo, and in vivo), initiate academic collaborations, and advance IP across the portfolio.

## R&D PRECLINICAL P1 P2 P3 LAUNCH



## MANAGEMENT TEAM

CEO & Co-founder: Frank Luppino. Previously COO of Anika Therapeutics. Successful development and licensing of leading US OA treatments and cartilage regenerative cell therapy.

COO and Co-founder: Alex Goraltchouk. Previously at Regeneron, Biogen, and Allergan. Successful development and industrialization of >20 biologics.

## SCIENTIFIC ADVISORS

Dr. Timothy McAlindon, Chief, Division of Rheumatology, Tufts Medical Center; Professor, Tufts University School of Medicine.

Dr. Anastassios Pittas, Chief, Division of Endocrinology at Tufts Medical Center and Professor, Tufts University School of Medicine.

## FUNDING

Remedium is currently in the process of testing several OA therapeutic candidates. Recent successes include the completion of plasmid production and transfection optimization, initiation of protein expression studies and vector packaging activities, as well as the completion of IP filings for the lead candidates and peripheral technology. Remedium is now seeking \$2.3M to complete Seed funding (\$3.5M total) that will be used in the following ways:

- Hire VP of R&D to oversee development activities at CROs.
- Accelerate the OA program to animal efficacy studies.
- Advance OA PoC studies to scientific publication and podium presentation stages.
- Expand KOL interactions and assess potential pipeline products.
- Complete in vitro and ex vivo efficacy studies and data analysis.
- Further expand the IP coverage for OA and pipeline products.



The Osteoarthritis therapeutics market is anticipated to grow at a rate of 9% driven primarily by the aging population, increasing obesity, and generally rising longevity.



The current market dynamics create a positive environment for a potential exit prior to the generation of clinical data with an estimated valuation of \$ 500-1,000 M.



Timeline to generation of sufficient pre-clinical data to support an IND filing is estimated at 1.5 – 2 years with a total investment of \$20-25 M. Creating significant potential return on total funds invested.