Asporin Pulmonary Fibrosis Augmentation Therapy

Asporin topical delivery as an anti-fibrotic treatment for Idiopathic Pulmonary Fibrosis and other fibrotic diseases

Intellectual Property ID Number
282

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Field
Idiopathic Pulmonary Fibrosis

Technology
Topical Pulmonary Drug to prevent further damage in IPF

Key Benefit
Prevents further fibrosis

Stage of Development
Shown effective in a Mouse Model system

Status
Seeking licensing partner and/or sponsored research

Patent Status
Provisional Patent 62847643

Fibrosis Treatment and/or Preventative

Idiopathic Pulmonary Fibrosis (IPF) is a slowly degenerative disease that eventually leads to fatalities. Asporin is an extracellular matrix protein this is downstream to the alveolar epithelial cell repair gene Trim 72. Asporin was shown to inhibit the TGF β signaling pathway. Both Asporin and Trim 72 have been shown to have anti-fibrosis functions in a preclinical IPF model. This work has shown Asporin is suitable to further develop toward a pharmaceutical treatment and preventative for IPF and possibly other fibrotic diseases.

Pharmaceutical Characteristics

In the US, only two drugs are approved by the FDA to treat IPF, but neither decreases fatality. Addition of therapeutic Asporin may help prevent further fibrotic processes and maintain pulmonary function.

Market

The current global Idiopathic Pulmonary Fibrosis market was estimated at $2 billion in 2018. The market is expected to grow at a CAGR of 12.7% through 2026. This drug may also be appropriate for other types of pulmonary fibrosis and fibrotic diseases of other organs such as liver, kidney, skin, and connective tissue.

Opportunity

EVMS is seeking sponsored research and/or licensing partners to commercialize this technology.