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(54) Title: METHODS FOR TREATING RESPIRATORY DISEASES CHARACTERIZED BY MUCUS HYPERSECRETION

(57) Abstract: The invention therefore provides methods of treating a respiratory disease characterized by mucus hyper-secretion comprising administering to a human patient in need of such treatment a gamma secretase inhibitor (GSI), wherein the administration of a GSI is effective in reducing mucus in such patient's lungs or inhibiting mucus accumulation in said patient's lungs. In some embodiments, the methods of the invention are effective in treating a respiratory disease selected from the group consisting of cystic fibrosis, chronic obstructive pulmonary disease, primary ciliary dyskinesia, chronic bronchitis, asthma, idiopathic and secondary bronchiectasis, bronchiolitis obliterans, idiopathic pulmonary fibrosis and other fibrotic lung disorders, respiratory infection including exacerbations in chronic respiratory disorders, and mucus accumulation in response to acute infection. Methods of the invention further include methods of treating cystic fibrosis wherein a GSI is administered to a patient being administered or in need of a CFTR modulator, wherein the mucus in such patient's lungs is reduced or mucus accumulation in such patient's lungs is inhibited.

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