Non-Confidential Description - PSU No. 4131

“Compositions and Methods for Targeting of the Surfactant Protein A Receptor”

Field of Invention/Keywords:
Therapeutics, Biomedical

Inventors:
Zissis Chroneos

Background
This technology allows for the specific targeting of cell-surface proteins using monoclonal antibodies, resulting in modulated intracellular signaling. Specifically, this invention describes inhibition of inflammatory intracellular signaling mediated by the Surfactant Protein A receptor in macrophages through the use of monoclonal antibodies that target the receptor.

Invention Description
This invention enhances eradication of the influenza virus, decreases harmful inflammation associated with influenza virus infection, promotes recovery of respiratory function, and reduces the risk of developing secondary bacterial infections in the respiratory system.

Every year, influenza viruses infect millions of people worldwide, leading to hundreds of thousands of deaths and hundreds of millions of dollars in healthcare costs. Vaccines against influenza viruses do not protect against all strains of the virus, and must be updated frequently to remain effective. Current drugs used to treat infected patients are only moderately effective and their use is contraindicated in certain patient populations. Therefore, there is a significant unmet medical need for better influenza treatment strategies.

Commercial Potential
This invention may be of particular interest to companies developing vaccines and/or therapeutic agents against viral and/or bacterial pathogens. Companies with a focus on cancer immunotherapy may also find this invention particularly valuable.

Status