Promising New Drug from the Sea for Cystic Fibrosis and COPD

Extracted from marine algae, Brevenal™ is a unique, patented agent with potential therapeutic benefits for patients with cystic fibrosis and Chronic Obstructive Pulmonary Disease (COPD). Researchers at the University of North Carolina Wilmington (UNCW) MARBIONC lab are investigating this very small but potent molecule that holds promise for the symptomatic treatment of cystic fibrosis and COPD. Preclinical studies are successfully near completion.

The marine algae Karenia brevis, which naturally occurs in the Gulf of Mexico waters off Florida and Texas, produce this promising medical marvel, Brevenal™. This potential new treatment has been shown effective in animal studies to clear the thick, sticky mucus that builds up in the lungs of patients with pulmonary disorders such as cystic fibrosis and COPD.

Cystic fibrosis is a genetic disorder affecting approximately 30,000 children and adults in the United States and leads to life-threatening lung infections. The World Health Organization estimates that COPD will become the third most common cause of death worldwide by 2020.

In ongoing pre-clinical studies, this natural product has been shown to improve whole lung clearance, increase tracheal mucous velocity and block and reverse the mucociliary dysfunction caused by cystic fibrosis.

Marine Biotechnology in North Carolina is an R&D-based economic development program that discovers, develops and markets new products and technologies derived from the sea. MARBIONC is at the forefront of marine biotechnology research and development on marine natural products and researchers are uncovering their potential to treat or cure a variety of human diseases.

For more information, visit: www.uncw.edu/MARBIONC