



THE UNIVERSITY of TEXAS

HEALTH SCIENCE CENTER AT HOUSTON

Office of Technology Management

GASTRO-PROTECTIVE COMPOUNDS POTENTIALLY USEFUL TO TREAT ULCER DISEASE

Market: The CDC estimates 25 million Americans suffer from gastric ulcers. One in ten Americans will develop gastric ulcers in their lifetime. The CDC further estimates 1 million hospitalizations and 6,500 deaths due to this condition. All this leads to a huge market. Business Week placed the global anti-ulcer market at over \$8 billion.

Competitors and Current Problems: It is unsurprising given the size of the market to find current therapeutics on the market. However, current medications are not without side effects. Chronic administration of H₂ agonists can lead to increased gastric and respiratory infections, while H⁺/K⁺ ATPase inhibitors can result in pre-malignant changes in the stomach.

The Technology: Researchers at The University of Texas Health Science Center at Houston identified a class of compounds, phosphorylated alcohols in combination with polyvalent cations, that are potentially useful to treat ulcer disease. These compounds were designed to avoid the above-mentioned side effects. Our scientists found the compounds form a lipid bilayer resistant to ion diffusion. Acid challenge studies in rats were done using inositol hexaphosphate with both bismuth (Bi⁺³) and gold (Au⁺³). The results of the animal studies showed almost complete lesion protection.

NON-CONFIDENTIAL TECHNOLOGY DESCRIPTION

The preceding is intended to be a non-confidential summary of a novel technology created at the University of Texas Health Science center at Houston (UTHSCH), for which the University has obtained patent protection.

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License Available: world-wide; exclusive or non-exclusive

To obtain further information about this technology, please contact:
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