



THE UNIVERSITY of TEXAS

HEALTH SCIENCE CENTER AT HOUSTON

Office of Technology Management

A NOVEL CALPAIN-LIKE CYSTEINE PROTEASE IN TYPE 2 DIABETES

Market: The World Health Organization (WHO) has estimated that the diabetes 2 market will more than double by 2030. In the United States type 2 diabetes affected 20.8 million people in the year 2000. The number of patients diagnosed with diabetes 2 has been continuously increasing. Approximately 90% of all diabetes cases in the United States are of type 2. With a market size of more than \$11.2 billion in the US alone, there is a significant and growing market looking for better treatment options.

Competitors and Current Problems: Genome-wide screens for susceptibility genes for complex disorders have become standard procedure and genes for a number of different complex disorders have been successfully localized through linkage studies. However, there are no examples of the successful identification of a gene for a complex disease originally mapped by linkage that can be used to guide genetic studies. Thus, there is a need to provide a protocol for the identification of genes in complex disorder and further, there is a pressing need to identify the elusive type-2 diabetes susceptibility gene.

The Technology: Researchers at the University of Texas Health Science Center at Houston (UTHSC-H) have developed compositions and methods of diagnosing a propensity for type 2 diabetes mellitus, identifying compounds to treat type 2 diabetes mellitus, and new nucleic acid sequences encoding polypeptides related to type 2 diabetes mellitus. The inventors have discovered that analysis of mutations in calpain genes and gene products can be diagnostic for type 2 diabetes and have designed treatments in view of the fact that calpain mutations can cause diabetes.

UTHSC-H has secured patent protection and is interested in implementation of this technology into a clinical setting.

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 (UTHSC-H), for which the University has obtained patent protection.

UTHSC-H Ref. No.: 1998-0006

Inventors: Hanis, et al.

Patent Status: United States Issued Patent No. 6, 235, 481

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

To obtain further information about this technology, please contact:
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