



DIAPIN Therapeutics

Ann Arbor, MI, March 25 2014. Diapin Therapeutics, LLC., a company dedicated to the development of novel therapies for the treatment of type 2 diabetes, announced today issuance receipt of 2 patents from the United States Patent and Trademark Office.

The first, regarding US patent number 13/371,042 entitled “Peptide Compositions and Methods for Treating Prediabetic and Diabetic Patients”, provides claims for the use of Diapin’s lead peptides as oral dosage forms. This patent, on which Diapin co-founder Dr. Yuqing (Eugene) Chen is an inventor, has been licensed by Diapin Therapeutics from the University of Michigan.

The US patent number 13/722,495 entitled “Treatment of Type 2 Diabetes With FTY720” provides claims around the use of fingolimod to treat Type 2 diabetes. This patent has been assigned to Diapin Therapeutics by its Chief Scientific Officer Dr. Zhongmin “Alex” Ma.

“These new patents solidify our position in the arena of type 2 diabetes therapies and provide a firm basis on which to actively pursue our development programs” said Diapin Therapeutics CEO, Dr. Bruce Markham.

About Type 2 Diabetes

Non-insulin-dependent (type 2) diabetes is a major medical problem in the industrialized world. According to the Center for Disease Control, diabetes affects 8.3% (26 million) of the US population, and another 79 million have characteristics of pre-diabetes (insulin-resistance)¹. According to the New England Journal of Medicine, 9.7% of the population in China (94 million) is afflicted with diabetes with another 150 million with pre-diabetes². T2D is the most common form of diabetes. It is a chronic disease where the patient has high glucose levels in the blood. The disease results from problems in the way the body makes and/or uses insulin. Insulin stimulates cells to take up glucose where it is stored and used to produce energy. In patients with T2D, fat, liver, and muscle cells become resistant to the effects of insulin and glucose accumulates in the blood. T2D develops over time. As people gain weight and become obese, the fat cells and fat that accumulates in other cells inhibit the cellular response to insulin. Low activity level, poor diet and excess body fat increase the risk of developing the disease.

Early symptoms of T2D³ include frequent bladder, kidney skin or other infections that heal slowly, fatigue, hunger, increased thirst, increased urination, blurred vision, erectile dysfunction and pain or numbness in the extremities. If left untreated, or as the disease progresses, more serious complications can occur including eye problems (blindness or light sensitivity), sores that won’t heal and are prone to infection, cardiovascular complications including increases in blood pressure and cholesterol that can lead to heart attack and stroke, nerve damage, digestive problems, and kidney damage or failure.

¹ http://www.cdc.gov/diabetes/statistics/prevalence_national.htm

² Yang, W. et al., NEJM (2010) 362: 1090-1101

³ NIH-PubMed Health web page: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001356/>.

About Diapin Therapeutics

Diapin Therapeutics LLC, was founded by Dr. Yuqing (Eugene) Chen, M.D., Ph.D. and Bruce Markham, Ph.D. in July of 2011 to develop novel therapies for the treatment of type 2 diabetes. ⁴Diapin is developing DT 109, an orally active 3 amino acid peptide to control post-prandial blood glucose levels. The company has established an alliance with Beijing SL Pharmaceuticals to develop DT-109 for the Chinese market. This project is in the preclinical development phase and initial work on the peptide was recently published⁴. The worldwide market for diabetes products for 2011 is estimated to be \$31.2 billion and is growing at a rate of 12.6% per annum (p.a.). The oral glycemics market, of which DT-109 would be part, was estimated to be \$15 billion in 2011 with a growth rate of 12.9% p.a. Diapin Therapeutics expects Diapin to penetrate that market based on its oral bioavailability and a superior safety profile. The company also has a program focused on the regeneration of pancreatic β -cells stimulated by fingolimod, a sphingosine—1-phosphate receptor modulator. The company has core capabilities in discovery research and close alliances to facilitate chemistry, preclinical and early clinical development. Visit www.diapin.com for more information.

⁴ Zhang J. et al., PLoS One. 2013 Dec 27;8(12):e83509. doi: 10.1371/journal.pone.0083509.