Guesstimate probable partial self-recovery of pancreatic beta cells using calculations of annualized glucose data using GH-Method: math-physical medicine

Gerald C Hsu

eclaireMD Foundation, USA

Abstract

The author describes his hypothesis on the probable partial self-recovery of some insulin regeneration capability of pancreatic beta cells on a Type 2 diabetes (T2D) patient via his collected data of both postprandial plasma glucose (PPG) and fasting plasma glucose (FPG) during the period of 2014 to 2019. As a T2D patient for 25 years, he took various diabetes medications to control his elevated glucose levels since 1998. For the last 20 years, he has suffered many T2D complications, including five cardiac episodes and renal complications, except for having a stroke. Starting from 2013, he reduced the dosages of his three prescribed diabetes medications. In August 2015, he discontinued taking his last remaining medication, the classical metformin HCL. In other words, his body has been free of any chemical compound from medications or insulin injections for four years. Since then, he has completely relied on a stringent lifestyle management program to control his diabetes conditions. As a result, his T2D has been under control (HbA1C ~6.5%) since 2016. He has kept nearly two million data of his own medical conditions and lifestyle details. He also developed sophisticated computer software by using artificial intelligence to analyze, process, and manage this massive health data. The author observed improvement in his diabetes conditions after following a stringent lifestyle management since 2014. From examining his own glucose data in 2018 including the existing vulnerable conditions of his "damaged" beta cells due to his high carbs/sugar intake, he hypothesized that beta cells are still able to "repair" themselves to a certain degree. This "dual-phenomena" can be observed with his higher open and close PPG values and his ultra-high PPG values when he violated his own strict control rules of diet and exercise during the same period of pancreatic beta cells partial recovery.

Biography

Gerald C Hsu received an honorable PhD in mathematics and majored in engineering at MIT. He attended different universities over 17 years and studied seven academic disciplines. He has spent ~30,000 hours in endocrinology research with an emphasis in diabetes. First, he studied six metabolic diseases and food nutrition from 2010 to 2013, then conducted his own diabetes research from 2014 to 2019. His approach is "quantitative and precision medicine" based on mathematics, physics, optical and electronics physics, engineering modeling, wave theory, energy theory, signal processing, computer science, big data analytics, statistics, machine learning, and artificial intelligence. His main focus is on preventive medicine using prediction tools. He believes that the better the prediction, the more control you have. Thus far, he has written, published and presented more than 200 medical papers.

Glob. J. Med. Med. Sci. 2020
ISSN: 2449-1888

Volume 8| Issue 4 | 04