Review of: "Reduced Blood to Brain Glucose Transport as The Cause For Hyperglycemia: a Model That Resolves Multiple Anomalies in Type 2 Diabetes"

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Potential competing interests: No potential competing interests to declare.

This manuscript proposes a refined model of glucose regulation that considers brain glucose and insulin levels as the ultimate target of homeostasis and combines central and peripheral mechanisms of regulation. A model considering the reduced rate of blood-to-brain transportation of glucose and insulin as primary pathology explains most of the patterns, with or without insulin resistance.

Before the paper can be considered for publishing, several concerns need to be addressed and clarified. These include the need for a clear introduction that summarizes the problem statement, hypothesis, and research significance to provide readers with a better understanding of the context before delving into the model and data analysis specifics. The discussion section should be expanded to provide a more comprehensive study of the data, their significance in understanding type 2 diabetes, and the potential clinical applications of these findings. It's important to ensure that the paper's references are up to date and cover relevant previous research. Additionally, the text lacks a comprehensive overview of prior research related to the transfer of glucose from the blood into the brain and its connection to diabetes. Please offer a more in-depth discussion on how their model addresses the anomalies that traditional models cannot explain. Please mention to the limitations in these methodologies that might affect the interpretation of the results. The conclusion should summarize the most important results and emphasize their significance.

Best Regards