Artificial Intelligence Offers Significant Rate of Remission for Type 2 Diabetes Compared to Standard Care

Whole Body Digital Twin Technology Enables Personalized Approach to Help Improve Disrupted Metabolism for Individuals with Type 2 Diabetes

NEW ORLEANS, La. (JUNE 4, 2022) – A new study powered by artificial intelligence (AI), Whole Body Digital Twin, reveals the highest reported rate of remission of type 2 diabetes to date. The findings were presented as a late-breaking poster session at the 82nd Scientific Sessions of the American Diabetes Association® (ADA) in New Orleans, LA.

For individuals with type 2 diabetes, remission is defined as sustaining normal blood glucose (blood sugar) levels for at least three months without taking diabetes medication.

Researchers conducted a randomized controlled trial designed to determine the effect of Twin Precision Treatment technology (TPT) versus standard care (SC) on change in A1C and type 2 diabetes remission at 90-day intervals. The TPT intervention uses the Whole-Body Digital Twin Platform, with AI and Internet of Things, to integrate multi-dimensional data to give precision nutrition, sleep, activity, and breathing guidance via the TPT app and coaches.

Baseline mean age, diabetes duration, and A1C obtained in 319 patients were 45 years old (±9.7y), 3.9 years (±2.9 years), and 9% (±1.9%), respectively. Interim analysis of 262 patients (TPT n=199; SC n=63) who reached 180 days showed 94.9% (189/199) of TPT patients achieved an A1C less than 6.5% on no medications or metformin only; 83.9% (167/199) achieved diabetes remission based on ADA criteria. All nine insulin-using patients stopped insulin before 90 days. The TPT intervention in patients with type 2 diabetes allowed for significant reduction in A1C, diabetes remission (~84%), and improvement in multiple metabolic parameters at six months.

"Our results demonstrate the potential of Whole Body Digital Twin technology to change the conventional, medication-driven management of type 2 diabetes to achieving remission of type 2 diabetes with a life free of medication," said Paramesh Shamanna, MD, lead author on the study. "The impact of the program on patient satisfaction, quality of life, and total cost of care is substantial and holds significant promise for large populations suffering from metabolic disease globally."

Whole Body Digital Twin is a predictive model that provides individualized nutrition, sleep, activity, and breathing guidance to patients and their health care providers, with the potential to help reverse diabetes and metabolic diseases. The technology was built from thousands of data points collected daily via non-invasive wearable sensors, providing a personalized representation of each individual's unique metabolism.

The authors note that future long-term studies are needed to support these initial findings.

Research presentation details:

- [Remission of Type 2 Diabetes and Improvement in Metabolic Markers with the Twin Precision Treatment Technology (TPT)—A Multicenter, Randomized, Controlled Trial](#)
- Presented on Sunday, June 5 at 12:00 p.m. CT

For more information or to request an interview, please contact the ADA Scientific Sessions media team at SciSessionsPress@diabetes.org.

About the ADA's Scientific Sessions
The ADA's 82nd Scientific Sessions, the world's largest scientific meeting focused on diabetes research, prevention, and care, will be a hybrid event held June 3–7, 2022 at the Ernest N. Morial Convention Center in New Orleans, LA. Leading physicians, scientists, and health care professionals from around the world will unveil cutting-edge research, treatment recommendations, and advances toward a cure for diabetes. We are eager to get back to safely participating in person and networking with colleagues while hearing the latest scientific advances and groundbreaking research presentations. Learn more and register at scientificsessions.diabetes.org and join the Scientific Sessions conversation on social media using #ADA2022.

About the American Diabetes Association
The American Diabetes Association (ADA) is the nation's leading voluntary health organization fighting to bend the curve on the diabetes epidemic and help people living with diabetes thrive. For 81 years, the ADA has driven discovery and research to treat, manage, and prevent diabetes while working relentlessly for a cure. Through advocacy, program development, and education we aim to improve the quality of life for the over 133 million Americans living with diabetes or prediabetes. Diabetes has brought us together. What we do next will make us Connected for Life. To learn more or to get involved, visit us at diabetes.org or call 1-800-DIABETES (1-800-342-2383). Join the fight with us on Facebook (American Diabetes Association), Spanish Facebook (Asociación Americana de la Diabetes), LinkedIn (American Diabetes Association), Twitter (@AmDiabetesAssn), and Instagram (@AmDiabetesAssn).

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