

'Educating' patients' immune cells may help combat diabetes

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Blood glucose monitoring. Credit: Wikipedia

New research reveals that a treatment called Stem Cell Educator therapy is safe and effective for treating type 1 and type 2 diabetes. The therapy



cultures the patient's immune cells with cord blood stem cells and returns only the "educated" immune cells to the patient's circulation.

The strategy may provide benefits because abnormalities in multiple types of <u>immune cells</u> contribute to the autoimmunity in type1diabetes and the insulin resistance in type 2 diabetes.

"Current mechanistic studies demonstrated that platelets and their released mitochondria may contribute to the long-lasting clinical improvement of islet beta cell function in type 1 and 2 diabetic patients after Stem Cell Educator therapy," said Dr. Yong Zhao, lead author of the *Stem Cells Translational Medicine* study. "This therapy can also be applied to treat other autoimmune and inflammation-related diseases."

More information: *Stem Cells Translational Medicine* (2017). <u>DOI:</u> 10.1002/sctm.0078

Provided by Wiley

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