Type 1 Diabetes (T1D) is a life-threatening condition that occurs when the immune system’s T cells destroy insulin-producing beta cells in the pancreas.

To survive, people with T1D must take insulin for the rest of their lives. Insulin is used to control blood sugar levels and reduce the risk of severe complications.

JOURNEY TO T1D TREATMENT

Since the 1970s discovery that the immune system causes T1D, scientists have worked to develop medications that prevent the immune attack.

NIH-funded and private sector scientists discovered the antibody OKT3 binds the CD3 protein on T cells.

Researchers discovered how OKT3 caused unwanted side effects and designed a safer antibody.

NIH-funded and industry clinical trials evaluated the safety and efficacy of teplizumab in children in Stage 2 T1D.

FDA approved teplizumab in November 2022 to delay progression of T1D from Stage 2 to Stage 3.

HOW TEPLIZUMAB WORKS

Teplizumab is the first drug approved for delaying T1D onset in at-risk patients. This delay reduces the potential for severe long-term complications, thereby improving quality of life of these patients.

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