

Dr. Tom Elliott MBBS, FRCPC Medical Director

 400 - 210 W Broadway
 phone:
 604.683.3734

 Vancouver, BC
 fax:
 604.628.3821

 V5Y 3W2 Canada
 email: drtomelliott@bcdiabetes.ca

2025-Oct-01

teplizumab "Tzield" treatment for early Type 1 diabetes

On 2025-May-5 Health Canada approved of teplizumab branded as "Tzield" manufactured by Sanofi Canada, for the treatment of stage 2 Type 1 diabetes (T1D).

The Health Canada application was based on a series of papers including the following,

original paper = https://www.nejm.org/doi/full/10.1056/NEJMoa1902226

and the 2023 update of the original paper = https://doi.org/10.2337/dc23-0675,

For individuals with stage 2 T1D (see definition below) who received a single 14 day course of teplizumab per protocol the literature supports a delay of approximately 2 years in the development of stage 3 (clinical) T1D. <u>Delgado's 2024 update</u> showed that 36% of individuals who received teplizumab remained clinically diabetes free at 5 years.

Tzield is available for prescription but not through regular Pharmacy channels, rather through sh1eld, a patient support program (PSP) that supplies Tzield and arranges infusion of Tzield. Here is the sh1eld_PSP application form. The first Tzield infusion in Canada was administered to a BCDiabetes client 2025-Sep-29. BCDiabetes recommends insertion of a midline catheter to minimize IV requirements. Click here for BCDiabetes routine premedication & infusion related bloodwork orders. Qualified individuals will receive Tzield at no cost. The retail cost of a 14 day infusion of Tzield is expected to be CAD\$250,000. Private and eventually public coverage for Tzield is expected in time.

Tzield protocol:

teplizumab will be given according to <u>Heath Canada product monograph</u> for 14 days by daily IV over 30 min minimum.

Tzield is indicated for individuals aged >8.0 years to delay the onset of stage 3 T1D (full-blown T1), with **Confirmed stage 2 TID** which requires both

two or more positive islet cell autoantibodies: anti-GAD65, anti-ICA512, anti-insulin (IAA), anti-ZnT8, and/or ICA. **No-cost autoantibody fingerpoke screening for all Canadians is now available**. BCDiabetes tested its first client July 22 and offers no-cost autoAb testing to the public for ages >8 years on a drop-in basis Tuesdays and Thursdays 09:00-16:00 hrs.

dysglycemia- at least two of the following, or meeting the same single criteria at two time points within 12 months:

- Fasting glucose 5.6-6.9 mmol/L
- 2-hour post meal glucose 7.8-11.0 mmol/L
- o 30, 60, 90-min post meal glucose ≥ 11.1 mmol/L
- A1C 5.7-6.4%, or ≥10% increase from baseline

Safety testing:

All individuals must be clinically well without suspicion of EBV or CMV & get these labs done.

CBC, differential and absolute neutrophil count

ALT, AST, bilirubin, HIV, anti-HCV, HBsAg, anti-HBs, and anti-HBc

Here is a Lifelabs form with the necessary testing checked off.

Short URL = https://bit.ly/Tziel