

Tziel

DELAYING DIABETES

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Tziel: Delaying Diabetes

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There have been some truly groundbreaking advances in diabetes over the past decade. With more accurate continuous glucose monitors, automated insulin delivery systems continue to get closer to the dream of a fully “closed-loop” system. New medications are also available for people with diabetes that help protect kidney and heart health, as well as improving time in range. And now, in 2022, we have access to a drug that can help delay the onset of type 1 diabetes.

How does it work?

Teplizumab, or Tziel, is what’s called an immunomodulatory drug. This means that it disrupts the autoimmune process in the body, particularly the process of the body destroying its own beta cells. It can be administered to someone who is already showing signs of developing type 1 diabetes, specifically when they are in what’s [known as “stage two.”](https://childrenwithdiabetes.com/clinical-director/working-to-prevent-type-1-diabetes/) When you are positive for two or more autoantibodies, have some blood sugars that are out of what’s considered normal, but don’t need insulin yet, you are in stage two.

How do you get antibodies tested?

You can get tested a few ways –

1. Through your doctor’s office
2. Order an at home test through [T1 Detect*](https://www.jdrf.org/t1d-resources/t1detect/) (https://www.jdrf.org/t1d-resources/t1detect/)
3. Through the [Trial Net](https://www.trialnet.org/) (https://www.trialnet.org/) studies or other local studies near you

*T1 Detect home testing costs \$55, but you may qualify for financial assistance which can lower the cost. To look for other diabetes research studies in your area, you can check clinicaltrials.gov. For additional information on screening, check out CWD’s [recorded Screenside chat](https://www.youtube.com/watch?v=0yFloHaw324&t=5s) (https://www.youtube.com/watch?v=0yFloHaw324&t=5s) with Dr. Diana Miller that discusses Screening Options for Type 1 Diabetes.

How long can Tziel delay stage 3 type 1 diabetes?

In the studies for teplizumab, it delayed the onset of stage three diabetes by an average of two years. These studies are still ongoing. Since it is so new, more studies are needed to see how it does in a larger population over a longer period of time.

How do you take Tziel?

The medication is taken through an intravenous (IV) infusion daily for 14 days. It takes around 30 minutes to complete the infusion each day, and you can expect additional waiting time depending on where you are able to get it done.

Are there side effects?

The most common side effects from Tzield from the studies were:

1. Rash
2. Headache
3. Low white blood cell count

Most often these resolved quickly, and it was not so severe that people stopped completing the infusions.

How do you get access to take Tzield?

Your first step will be to talk to your healthcare team. They will work with the company that makes Tzield, [Provention Bio](https://proventionbio.com/), (https://proventionbio.com/) along with their patient navigators, to help make the process as easy as possible. You must be eight years old to qualify to take Tzield at this time, and further studies are ongoing for other age groups. For more information, you can visit the website for Tzield at tzield.com.

This is the first available method to delay the onset of type 1 diabetes, and hopefully many other options will follow. It's a very exciting time for families who have members with positive autoantibodies, and for those who will get their families screened. It's also another reason to consider screening your family members if you or someone in your family has t1d. If someone does test positive, you can possibly delay their need for daily insulin, blood glucose monitoring, and all the added stress of t1d.