

Tzield® (teplizumab-mzwv)

When requesting Tzield® (teplizumab-mzwv), the individual requiring treatment must be diagnosed with one of the following FDA-approved indications and meet the specific coverage guidelines and applicable safety criteria for the covered indication.

FDA-Approved Indications

Tzield is indicated to delay the onset of Stage 3 type 1 diabetes in adults and pediatric patients 1 year of age and older with Stage 2 type 1 diabetes.

Tzield is indicated to delay the decline in endogenous insulin production in pediatric patients 8 to 17 years of age recently diagnosed with Stage 3 type 1 diabetes.

Coverage Guidelines

Stage 2 Type 1 Diabetes

The individual must meet **all** of the following criteria for authorization:

- Is 1 year of age or older;
- Does not have a clinical diagnosis of type 1 diabetes (i.e., Stage 3 type 1 diabetes); *(Note: Clinical type 1 diabetes is also referred to as Stage 3 type 1 diabetes. "Stage 1 type 1 diabetes" and "Stage 2 type 1 diabetes" are considered preclinical states and would not fall into the category of clinical type 1 diabetes);*
- Has tested positive for at least TWO of the following type 1 diabetes-related autoantibodies on two separate occasions: glutamic acid decarboxylase 65 (anti-GAD65) autoantibody; islet antigen-2 (IA-2) autoantibody [also referred to as insulinoma-associated antigen-2 autoantibody {IA-2A}]; islet-cell autoantibody (ICA); insulin autoantibody (IAA); zinc transporter 8 (ZnT8) autoantibody;
- Meets one of the following:
 - o Has a 2-hour postprandial glucose level ≥ 140 to < 200 mg/dL during an oral glucose tolerance test in the preceding 2 months; OR
 - o Has a fasting plasma glucose level ≥ 100 to < 126 mg/dL in the preceding 2 months; OR
 - o Has an HbA_{1c} $\geq 5.7\%$ to $< 6.5\%$ in the preceding 2 months;
- At baseline (prior to the initiation of Tzield), does not have evidence of hematologic compromise, as defined by meeting all of the following:
 - o Lymphocyte count $\geq 1,000$ lymphocytes/mcL; AND
 - o Hemoglobin ≥ 10 g/dL; AND
 - o Platelet count $\geq 150,000$ platelets/mcL; AND
 - o Absolute neutrophil count $\geq 1,500$ neutrophils/mcL;
- At baseline (prior to the initiation of Tzield), does not have evidence of hepatic compromise, as defined by meeting all of the following:

- o Alanine aminotransferase (ALT) $\leq$ 2 times the upper limit of normal (ULN); AND
 - o Aspartate aminotransferase (AST) $\leq$ 2 times the ULN; AND
 - o Bilirubin $\leq$ 1.5 times the ULN;
- Does not have any of the following:
 - o Laboratory or clinical evidence of acute infection with Epstein-Barr Virus or cytomegalovirus; OR
 - o Active serious infection; OR
 - o Chronic active infection (other than localized skin infection);
- Has not received Tziel in the past;
- Tziel is prescribed by an endocrinologist.

Approval duration: 30 days

Stage 3 Type 1 Diabetes

The individual must meet **all** of the following criteria for authorization:

- Is $\geq$ 8 years of age and $\leq$ 17 years of age;
- Meets BOTH of the following:
 - o Diagnosis has been confirmed by ONE of the following:
 - Previous or current 2-hour post-prandial plasma glucose $\geq$ 200 mg/dL; OR
 - Previous or current fasting plasma glucose $\geq$ 126 mg/dL; OR
 - Previous or current HbA1C $\geq$ 6.5%; AND
 - o Diagnosis is $\leq$ 8 weeks prior to the first dose of Tziel;
- Has tested positive for at least ONE of the following type 1 diabetes-related autoantibodies: glutamic acid decarboxylase 65 (GAD65) autoantibody; islet antigen-2 (IA-2) autoantibody [also referred to as insulinoma-associated antigen-2 autoantibody {IA-2A}]; islet-cell autoantibody (ICA); zinc transporter 8 (ZnT8) autoantibody;
- Has a peak C-peptide level $\geq$ 0.2 pmol/mL on a mixed-meal tolerance test or an alternative method;
- At baseline, does not have evidence of hematologic compromise, as defined by meeting ALL of the following:
 - o Lymphocyte count $\geq$ 1,000 lymphocytes/mL; AND
 - o Hemoglobin $\geq$ 10 g/dL; AND
 - o Platelet count $\geq$ 150,000 platelets/mL; AND
 - o Absolute neutrophil count $\geq$ 1,500 neutrophils/mL;
- At baseline, does not have evidence of hepatic compromise, as defined by meeting ALL of the following:
 - o Alanine aminotransferase $\leq$ 2 times the upper limit of normal; AND
 - o Aspartate aminotransferase $\leq$ 2 times the upper limit of normal; AND
 - o Bilirubin $\leq$ 1.5 times the upper limit of normal;
- Does not have any of the following:
 - o Laboratory or clinical evidence of acute infection with Epstein-Barr virus or cytomegalovirus; OR

- o Active serious infection; OR
 - o Chronic active infection (other than localized skin infection);
- Meets ONE of the following:
 - o Patient has not received Tzield in the past; OR
 - o Patient has not received more than one course of Tzield in the past;
- Tzield is prescribed by an endocrinologist.

Approval duration: 12 months

Dosing Recommendations

Stage 2 Type 1 Diabetes

Tzield is administered by intravenous infusion (over a minimum of 30 minutes), using a body surface area-based dosing, once daily for 14 consecutive days as follows:

- 65 mcg/m² body surface area (BSA) on Day 1;
- 125 mcg/m² BSA on Day 2;
- 250 mcg/m² BSA on Day 3;
- 500 mcg/m² BSA on Day 4;
- 1,030 mcg/m² BSA once daily on Days 5 through 14.

Stage 3 Type 1 Diabetes

Tzield is administered by intravenous infusion (over a minimum of 30 minutes), using a body surface area-based dosing, once daily for 12 consecutive days as follows:

- 106 mcg/m² body surface area (BSA) on Day 1;
- 425 mcg/m² BSA on Day 2;
- 850 mcg/m² BSA on Days 3 through 12.

References

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3. American Diabetes Association. Standards of medical care in diabetes – 2025. *Diabetes Care*. 2025;48(Suppl 1):S1-S352.
4. Phillip M, Achenbach P, Adala A, et al. Consensus guidance for monitoring individuals with islet autoantibody-positive pre-stage 3 type 1 diabetes. *Diabetes Care*. 2025;47:1276-1298.
5. Mehta S, Ryabeta-Linehard A, Patel N, et al. Pediatric Endocrine Society statement on consideration for use of teplizumab (Tzield™) in clinical practice. *Horm Res Paediatr*. 2025;98:597-608.
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8. Sanofi. A study to investigate efficacy and safety of teplizumab compared with placebo in participants 1 to 25 years of age with stage 3 type 1 diabetes (BETA PRESERVE). In: ClinicalTrials.gov [Internet]. Bethesda (MD):

National Library of Medicine (US). 2000- [cited 2025 11 Nov]. Available at: Study Details | NCT07088068 | A Study to Investigate Efficacy and Safety of Teplizumab Compared With Placebo in Participants 1 to 25 Years of Age With Stage 3 Type 1 Diabetes | ClinicalTrials.gov. NLM Identifier: NCT07088068.

9. Gitelman SE, Simmons K, Sherr JL, et al. Safety and pharmacokinetics of teplizumab in children less than 8 years of age with stage 2 type 1 diabetes. *Diabetologia*. 2025;69:330-342.
10. Herold KC, Sherr JL, Haller MJ, et al. TN-10 extension study – teplizumab following Stage 3 type 1 diabetes diagnosis in participants from the TN-10 trial [abstract 840-P]. Presented at: the American Diabetes Association (ADA) 85th Scientific Sessions; San Diego, CA; June 20-24, 2025.