Harvard Pilgrim Health Care | TUFTS Health Plan

Medical Necessity Guidelines
Medical Benefit Drugs
# Tzield™ (teplizumab-mzwv)

*Effective: October 1, 2026*

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| **Guideline Type** | ☒ Prior Authorization<br>☐ Non-Formulary<br>☐ Step-Therapy<br>☐ Administrative |

**Public Plans Products**

☒ Tufts Health One Care* – A Medicare-Medicaid Plan (a dual eligible product); Fax 617-673-0956

*The MNG applies to Tufts Health One Care members unless a less restrictive LCD or NCD exists.

**Senior Products**

☒ Tufts Health Plan Senior Care Options (SCO), (a dual-eligible product); Fax 617-673-0956

☒ Tufts Medicare Preferred HMO, (a Medicare Advantage product); Fax 617-673-0956

☒ Tufts Medicare Preferred PPO, (a Medicare Advantage product); Fax 617-673-0956

**Note:** While you may not be the provider responsible for obtaining prior authorization, as a condition of payment you will need to ensure that prior authorization has been obtained.

## Overview

Approximately 5%–10% of people with diabetes have T1D, which results from the inability to make insulin and requires insulin replacement to survive. T1D is typically diagnosed in children and young adults. An estimated 1.6 million Americans are living with T1D (200,000 youth [<20 years of age] and 1.4 million adults [≥20 years of age]). Approximately 64,000 people are diagnosed with T1D each year, and 5 million people are expected to have T1D by 2040, including nearly 600,000 youth.

FDA approved Provention Bio's Tzield (teplizumab-mzwv) as the first treatment to delay the onset of stage 3 type 1 diabetes (T1D) in adults and pediatric patients 8 years of age and older with stage 2 T1D. Tzield is an intravenously (IV) administered anti-CD3-directed antibody designed to bind to certain immune system cells and delay progression to stage 3 T1D. Tzield is administered by intravenous infusion once daily for 14 consecutive days.

Teplizumab-mzwv binds to CD3 (a cell surface antigen present on T lymphocytes). The mechanism may involve partial agonistic signaling and deactivation of pancreatic beta cell autoreactive T lymphocytes. Teplizumab-mzwv leads to an increase in the proportion of regulatory T cells and of exhausted CD8+ T cells in peripheral blood.

The approval of Tzield was based on the Phase 2, randomized, double-blind, placebo-controlled, TN-10 trial, which included 76 patients with stage 2 T1D (defined as the presence of two or more T1D-related autoantibodies and dysglycemia) who received Tzield or a placebo once daily via IV infusion for 14 days. The primary measure of efficacy was the time from randomization to diagnosis of stage 3 T1D. Over a median follow-up of 51 months, 45% of the 44 patients who received Tzield were later diagnosed with stage 3 T1D, compared with 72% of the 32 patients who received placebo. The time from randomization to diagnosis of stage 3 T1D was 50 months for patients who received Tzield, compared with 25 months for those who received placebo.

Accelerated approval was granted in children aged eight to 17 years old recently diagnosed with stage 3 T1D to delay the decline in endogenous insulin productionThe approval was supported by data from the PROTECT phase 3 study (clinical study identifier: NCT03875729), evaluating beta cell function as assessed by significantly slowing the decrease in mean C-peptide levels (area under the curve after a four-hour, mixed-meal tolerance test; difference in least-squares means 0.13 pmol/mL; 95% confidence interval: 0.09-0.17; p<0.001) at trial completion, compared to placebo, as well as data from the broader clinical development program that included over 900 patients who received Tzield.

**Food and Drug Administration (FDA) Approved Indications:**

**Tzield (teplizumab-mzwv)** is a CD3-directed antibody indicated to 1) delay the onset of Stage 3 type 1 diabetes in adults and pediatric patients 8 years of age and older with Stage 2 type 1 diabetes and 2) delay the decline in endogenous insulin production in individuals recently diagnosed with Stage 3 T1D

## Clinical Guideline Coverage Criteria

The plan may authorize coverage of Tzield when **ALL** of the following clinical criteria are met:

For Stage 2 Type 1 Diabetes:

1. Documented diagnosis of stage 2 pre-type1 diabetes* as evidenced by **both** of the following:

a. Lab results confirming the presence of two or more positive pancreatic islet autoantibodies (Glutamic acid decarboxylase 65 (GAD) autoantibodies, Insulin autoantibody (IAA), Insulinoma-associated antigen 2 autoantibody (IA-2A), or Zinc transporter 8 autoantibody (ZnT8A) Islet cell autoantibody) within the last 6 months
b. Evidence of dysglycemia** without overt hyperglycemia using an Oral Glucose Tolerance Test (OGTT), or alternative method if appropriate and OGTT is not available or clinically inappropriate **AND**

2. Documentation of provider attestation that the Member's clinical history does not suggest Type 2 diabetes **AND**
3. The Member is 1 year of age or older **AND**
4. The prescribing physician is an endocrinologist

For Stage 3 Type 1 Diabetes:

1. Documented diagnosis of stage 3 type 1 diabetes as evidenced by **both** of the following:
   a. Lab results confirming the presence of two or more positive pancreatic islet autoantibodies (Glutamic acid decarboxylase 65 (GAD) autoantibodies, Insulin autoantibody (IAA), Insulinoma-associated antigen 2 autoantibody (IA-2A), or Zinc transporter 8 autoantibody (ZnT8A) Islet cell autoantibody) within the last 6 months
   b. Evidence of overt hyperglycemia (HbA1c 6.5% or higher, Fasting plasma glucose 126 mg/dL or higher, OGTT test of 200mg/dL or higher) **AND**
2. Documentation of provider attestation that the Member's clinical history does not suggest Type 2 diabetes **AND**
3. The member is 8 to 17 years of age **AND**
4. The prescribing physician is an endocrinologist

*Stage 2 pre-type 1 diabetes includes beta cell autoimmunity with greater than two islet autoantibodies with abnormal glucose tolerance and no symptoms.

**Dysglycemia is defined as a fasting glucose level of 110 to 125 mg/dl (6.1 to 6.9 mmol/L), a 2-hour postprandial plasma glucose level of at least 140 mg/dl (7.8mmol/L) and less than 200 mg/dl (1.1mmol/L), or an intervening postprandial glucose level at 30,60, or 90 minutes of greater than 200 mg/dl on two occasions.

## Limitations

- Authorization of Tzield will be limited to one 14-day treatment course per lifetime for Stage 2 Type 1 Diabetes
- Authorization of Tzield will be limited to two 12-day treatment course per lifetime for Stage 3 Type 1 Diabetes

## Codes

**Table 1: HCPCS Codes**

| HCPCS Codes | Description |
|---|---|
| J9381 | Injection, teplizumab-mzwv, 5 mcg |

## References:


1. Tzield™ (teplizumab-mzwv) [prescribing information]. Redbank, NJ; Provention Bio, Inc.; November 2022.
2. Tzield™ ( teplizumab-mzwv) approved by FDA as the first and only treatment indicated to delay the onset of stage 3 type 1 diabetes(T1D) in adult and pediatric patients aged 8 years and older with Stage 2 T1D. Provention Bio Investor news accessed November 18, 2022 at https://investors.proventionbio.com/2022-11-17- TZIELD™ (teplizumab-mzwv) approved by FDA as the first and only treatment indicated to delay the onset of Stage 3 type 1 diabetes (T1D) in adult and pediatric patients aged 8 years and older with Stage 2 T1D - Nov 17, 2022 (proventionbio.com)
3. FDA approves first drug can delay onset of stage 3 type 1 diabetes accessed November 30,2022 at https://www.fda.gov/news-events/press-announcements/fda-approves-first-drug-can-delay-onset-type-1
4. Prevention of Type 1 Diabetes in Relatives at risk. Clinical Trials accessed November 30, 2022, at Teplizumab for Prevention of Type 1 Diabetes in Relatives "At-Risk" - Full Text View - ClinicalTrials.gov
5. Management of Diabetes Type1 in children. UpToDate accessed November 30, 2022 at Overview of the management of type 1 diabetes mellitus in children and adolescents - UpToDate
6. Diabetes staging Type 1. American Diabetes Association accessed December 4,2022 Staging Presymptomatic Type 1 Diabetes: A Scientific Statement of JDRF, the Endocrine Society, and the American Diabetes Association - PMC (nih.gov)
7. Centers for Disease Control and Prevention (CDC). What is type 1 diabetes? Last reviewed March 11, 2022. Accessed November. https://www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html
8. Herold KC, et al. An anti-CD3 antibody, teplizumab, in relatives at risk for type 1 diabetes [published correction appears in N Engl J Med. 2020 Feb 6;382(6):586]. N Engl J Med. 2019;381(7):603–613.

## Approval And Revision History

February 14, 2023: Reviewed by the Medical Policy Approval Committee (MPAC).

March 15, 2023: Reviewed by Pharmacy and Therapeutics Committee (P&T).

Subsequent endorsement date(s) and changes made:

- Originally approved March 15, 2023, by P&T and February 14, 2023 by MPAC committees effective April 1, 2023.
- Coding update per HCPCS level II quarterly release. Effective date July 1, 2023, the following HCPCS code has been added: J9381 replacing C9149.
- August 2023: Administrative update to rebrand Tufts Health Unify to Tufts Health One Care for 2024.
- November 2023: Administrative Update in support of calendar year 2024 Medicare Advantage and PDP Final Rule.
- November 12, 2024: Minor wording changes. Removed the Limitation “Tzield will only be approved for an FDA approved indication as per the product label. All other uses are considered experimental or investigational” (eff 1/1/25).
- December 2024: Joint Medical Policy and Health Care Services UM Committee review (eff 1/1/25).
- July 2025: Administrative update to remove Harvard Pilgrim Health Care Stride Medicare Advantage from the Medical Necessity Guideline template.
- December 9, 2025: No changes (eff 1/1/26)
- December 2025: Joint Medical Policy and Health Care Services UM Committee review (effective 1/1/26)
- June 2026: Joint Medical Policy and Health Care Services UM Committee review; updated age restriction to 1 years of age or older (effective 7/1/26)
- September 2026: Joint Medical Policy and Health Care Services UM Committee review; added criteria for stage 3 type 1 diabetes (effective 10/1/26)

## Background, Product and Disclaimer Information

Point32Health prior authorization criteria to be applied to Medicare Advantage plan members is based on guidance from Medicare laws, National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs). When no guidance is provided, Point32Health uses clinical practice guidance published by relevant medical societies, relevant medical literature, Food and Drug Administration (FDA)-approved package labeling, and drug compendia to develop prior authorization criteria to apply to Medicare Advantage plan members. Medications that require prior authorization generally meet one or more of the following criteria: Drug product has the potential to be used for cosmetic purposes; drug product is not considered as first-line treatment by medically accepted practice guidelines, evidence to support the safety and efficacy of a drug product is poor, or drug product has the potential to be used for indications outside of the indications approved by the FDA. Prior authorization and use of the coverage criteria within this Medical Necessity Guideline will ensure drug therapy is medically necessary, clinically appropriate, and aligns with evidence-based guidelines. We revise and update Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests revisions.

Treating providers are solely responsible for the medical advice and treatment of Members. The use of this guidelines not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to eligibility and benefits on the date of service, coordination of benefits, referral/authorization, utilization management guidelines when applicable, and adherence to plan policies, plan procedures, and claims editing logic.