

Original Effective Date: 03/10/2023 Current Effective Date: 03/10/2023 Last P&T Approval/Version: 01/25/2023

Next Review Due By: 01/2024 Policy Number: C24729-A

Tzield (teplizumab-mzwv)

PRODUCTS AFFECTED

Tzield (teplizumab-mzwv)

COVERAGE POLICY

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

This Coverage Guideline provides information related to coverage determinations only and does not imply that a service or treatment is clinically appropriate or inappropriate. The provider and the member are responsible for all decisions regarding the appropriateness of care. Providers should provide Molina Healthcare complete medical rationale when requesting any exceptions to these guidelines.

Documentation Requirements:

Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

DIAGNOSIS:

Stage 2 type 1 diabetes

REQUIRED MEDICAL INFORMATION:

This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. If a drug within this policy receives an updated FDA label within the last 180 days, medical necessity for the member will be reviewed using the updated FDA label information along with state and federal requirements, benefit being administered and formulary preferencing. Coverage will be determined on a case-by case basis until the criteria can be updated through Molina Healthcare, Inc. clinical governance. Additional information may be required on a case-by-case basis to allow for adequate review.

A. DELAY ONSET OF STAGE 3 TYPE 1 DIABETES

- Documentation of Stage 2 Type 1 diabetes- DOCUMENTATION REQUIRED of TWO positive pancreatic islet auto antibodies
 - NOTE: Glutamic acid decarboxylase 65 (GAD) autoantibodies, Insulin autoantibody (IAA), Insulinoma-associated antigen 2 autoantibody (IA-2A), Zinc transporter 8 autoantibody (ZnT8A), Islet cell autoantibody (ICA)
 - AND
- 2. Documentation of member having dysglycemia without overt hyperglycemia using an oral glucose tolerance test within the last 60 days (if an oral glucose tolerance test is not available, an

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Drug and Biologic Coverage Criteria

alternative method for diagnosing dysglycemia without overt hyperglycemia may be appropriate) [DOCUMENTATION REQUIRED]

NOTE: Dysglycemia defined as a fasting glucose level of 110 to 125 mg/dL (6.1 to 6.9 mmo/L), a 2-hour postprandial plasma glucose level of at least 140 mg/dL (7.8 mmol/L) and less than 200 mg/dL (11.1 mmol/L), or an intervening postprandial glucose level at 30, 60, or 90 minutes of greater than 200 mg/dL on two occasions.

- Prescriber attests that the member's clinical history does not suggest type 2 diabetes
 AND
- 4. Prescriber attests that member does not have any of the following in which Tzield is NOT recommended: Lymphocyte count less than 1,000 lymphocytes/mcL, Hemoglobin less than 10 g/dL, Platelet count less than 150,000 platelets/mcL, Absolute neutrophil count less than 1,500 neutrophils/mcL, Elevated ALT or AST greater than 2 times the upper limit of normal (ULN) or bilirubin greater than 1.5 times ULN, Laboratory or clinical evidence of acute infection with Epstein-Barr virus (EBV) or cytomegalovirus (CMV), or Active serious infection or chronic active infection other than localized skin infections
- Prescriber attests age-appropriate vaccinations have been evaluated and administered if needed prior to treatment AND
- 6. Documentation of member's current body surface area [and/or height and weight (within the last 30 days)]

CONTINUATION OF THERAPY:

NA

DURATION OF APPROVAL:

Initial authorization: 1 month- one course of 14 days per member lifetime

PRESCRIBER REQUIREMENTS:

Prescribed by or in consultation with a board-certified endocrinologist [If prescribed in consultation, consultation notes must be submitted with initial request and reauthorization requests]

AGE RESTRICTIONS:

8 years of age and older

QUANTITY:

Day 1: 65 mcg/m2 Day 2: 125 mcg/m2 Day 3: 250 mcg/m2 Day 4: 500 mcg/m2

Days 5 through 14: 1,030 mcg/m2

PLACE OF ADMINISTRATION:

The recommendation is that infused medications in this policy will be for pharmacy or medical benefit coverage administered in a place of service that is a non-hospital facility-based location as per the Molina Health Care Site of Care program.

Note: Site of Care Utilization Management Policy applies for Tzield (teplizumab-mzwv). For information on site of care, see <a href="https://www.molinamarketplace.com/marketplace/wa/en-us/Providers/-/media/Molina/PublicWebsite/PDF/Common/Specialty-Medication-Administration-Site-of-Care-Coverage-Criteria-Policy v2.pdf

DRUG INFORMATION

ROUTE OF ADMINISTRATION:

Intravenous

DRUG CLASS:

Antidiabetic-Anti-CD3 Antibodies

FDA-APPROVED USES:

Indicated to delay the onset of Stage 3 type 1 diabetes (T1D) in adults and pediatric patients aged 8 years and older with Stage 2 T1D

COMPENDIAL APPROVED OFF-LABELED USES:

None

APPENDIX

APPENDIX:

Over 1.8 million Americans have Type 1 diabetes (T1D), an autoimmune disease caused by the destruction of beta cells. Diagnosis of T1D usually occurs in children and young adults, but it can happen at any age after symptoms appear when a person cannot make enough insulin.

According to the Centers for Disease Control and Prevention (CDC), about 5%–10% of people with diabetes have type 1, which usually develops in children, teenagers, and young adults, but could happen at any age.

Patients who have a genetic susceptibility to developing T1D progress through stages before developing overt hyperglycemia requiring insulin treatment.

- Stage 1 is defined by the appearance of autoantibodies.
- Stage 2 involves dysalvcemia.
- At Stage 3, autoimmune destruction of beta cells has occurred, so blood glucose is elevated and patients are symptomatic and require insulin treatment.

Eventually, all patients with T1D have to monitor blood sugar levels and are at risk of the same complications as patients with type 2 diabetes (T2D).

The American Diabetes Association (ADA) recommends screening for autoantibodies in patients with first-degree relatives with T1D. The peak age of T1D diagnosis is around 13–14 years, but people can be diagnosed much younger or older. Currently, broad-population screening for T1D does not occur. Interventions at Stage 1 or Stage 2 may delay the progression to Stage 3 T1D. While islet cell transplantation has been used, this treatment requires lifelong immunosuppression.

However, T1D starts in the body long before any symptoms appear and can be detected at this presymptomatic stage through a blood test. The psychological impact of T1D is hard to quantify, but a diagnosis is life-altering, and regular monitoring and maintenance can be extremely stressful. T1D typically takes more than a decade off a person's life, and life expectancy is reduced by 16 years on average for people diagnosed before the age of 10.

Insulin therapy and glucose monitoring are currently the standard of care for treating clinical-stage, or Stage 3 T1D, and are necessary to keep T1D patients alive. The constant monitoring and administration of insulin represents a significant life-long burden for patients.

TZIELD (teplizumab-mzwv) is a CD3-directed antibody indicated to delay the onset of Stage 3 T1D in adults and pediatric patients aged 8 years and older with Stage 2 T1D. TZIELD injection is supplied as a sterile, preservative-free, clear and colorless solution in a 2 mg/2 mL (1 mg/mL) single-dose vial for intravenous use. TZIELD should be administered by intravenous infusion (over a minimum of 30 minutes)

BACKGROUND AND OTHER CONSIDERATIONS

BACKGROUND:

TN-10 Study

TZIELD was investigated in the TN-10 Study, a pivotal randomized, double-blind, event driven, placebo controlled clinical trial which evaluated TZIELD for the delay of T1D (Stage 3, or clinical T1D) in Stage 2 T1D patients, defined by the presence of two or more T1D-related autoantibodies and dysglycemia. Seventy-six patients (TZIELD N=44, placebo N=32) were enrolled ages 8 to 49, with 72% under the age of 18, and randomized to receive a single 14-day course of either teplizumab or placebo by IV infusion. The primary efficacy endpoint in this study was the time from randomization to development of Stage 3 T1D diagnosis.

In Study TN-10, Stage 3 T1D was diagnosed in 20 (45%) of the TZIELD-treated patients and in 23 (72%) of the placebo-treated patients. A Cox proportional hazards model was used to analyze the time to Stage 3 T1D diagnosis, stratified by age and oral glucose tolerance test status at randomization. The median time from randomization to Stage 3 T1D diagnosis was 50 months in the TZIELD group and 25 months in the placebo group, for a difference of 25 months. With a median follow-up time of 51 months, therapy with TZIELD resulted in a statistically significant delay in the development of Stage 3 T1D, hazard ratio 0.41 (95% CI: 0.22 to 0.78; p=0.0066).

The most common adverse reactions (>10%) that occurred during treatment and through 28 days after the last study drug administration from the TN-10 study were lymphopenia (73% TZIELD, 6% Placebo), rash (TZIELD 36%, Placebo 0%), leukopenia (TZIELD 21%, Placebo 0%) and headache (TZIELD 11%, Placebo 6%).

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:

All other uses of Tzield (teplizumab-mzwv) are considered experimental/investigational and therefore, will follow Molina's Off- Label policy. There are no current FDA labeled contraindications. Use of TZIELD is not recommended in patients with active serious infection or chronic infection. Use of TZIELD is not recommended in patients with certain laboratory abnormalities. Administer all age-appropriate vaccinations prior to starting TZIELD.

OTHER SPECIAL CONSIDERATIONS:

None

CODING/BILLING INFORMATION

Note: 1) This list of codes may not be all-inclusive. 2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement

HCPCS CODE	DESCRIPTION
J3590	Unclassified biologics (Tzield)

AVAILABLE DOSAGE FORMS:

Drug and Biologic Coverage Criteria

Tzield SOLN 2 mg/2 mL (1 mg/mL) available as 1 single dose vial, 10 single dose vial package and 14 single dose vial package

REFERENCES

- 1. Tzield (teplizumab) [prescribing information]. Red Bank, NJ: Provention Bio Inc; November 2022.
- 2. 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. doi:10.1056/NEJMoa1902226
- 3. Ghalwash M, et al. Two-age islet-autoantibody screening for childhood type 1 diabetes: a prospective cohort study. Lancet Diabetes Endocrinol. 2022;10(8):589–596. doi:10.1016/S2213-8587(22)00141-3
- 4. Sims EK, et al. Teplizumab improves and stabilizes beta cell function in antibody-positive highrisk individuals. Sci Transl Med. 2021;13(583):eabc8980. doi:10.1126/scitranslmed.abc8980
- 5. Leung SS, Borg DJ, McCarthy DA, Boursalian TE, Cracraft J, Zhuang A, Fotheringham AK, Flemming N, Watkins T, Miles JJ, Groop PH, Scheijen JL, Schalkwijk CG, Steptoe RJ, Radford KJ, Knip M, Forbes JM. Soluble RAGE Prevents Type 1 Diabetes Expanding Functional Regulatory T Cells. Diabetes. 2022 Sep 1;71(9):1994-2008. doi: 10.2337/db22-0177.

SUMMARY OF REVIEW/REVISIONS	DATE
NEW CRITERIA	QUARTER 1 2023