CareSource Rxinnovations

PHARMACY POLICY STATEMENT
Arkansas PASSE

DRUG NAME	Tzield (teplizumab-mzwv)
BILLING CODE	J3490/J3590
BENEFIT TYPE	Medical
STATUS	Prior Authorization Required

Tzield, approved by the FDA in 2022, is a CD3-directed antibody 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. It is the first approved drug to delay progression to Stage 3 T1D, the stage at which patients become symptomatic. Tzield is administered by IV infusion once daily for one cycle of 14 consecutive days. Side effects of note include cytokine release syndrome (CRS), lymphopenia, leukopenia, and rash.
T1D is a chronic, T-cell-mediated autoimmune condition that leads to destruction of insulin-producing beta cells and dependence on exogenous insulin for survival. It usually develops in children, teenagers, and young adults, at a peak age of 13-14 years, but could occur at any age.
Tzield works by binding 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 cells.
In the pivotal Phase 2 clinical trial, TN-10, treatment with Tzield delayed the onset of Stage 3 T1D by approximately 2 years compared to placebo, which is statistically significant. An extended follow-up of this trial demonstrated a delay of 2.7 years.

Tzield (teplizumab-mzwv) will be considered for coverage when the following criteria are met:

Type 1 Diabetes (T1D)

For **initial** authorization:

1. Member is at least 8 years of age; AND
2. Medication must be prescribed by or in consultation with an endocrinologist; AND
3. Member has a diagnosis of Stage 2 T1D confirmed by BOTH of the following:
   a) At least 2 positive pancreatic islet cell autoantibodies (i.e., Glutamic acid decarboxylase 65 (GAD) autoantibodies, Insulin autoantibody (IAA), Insulinoma-associated antigen 2 autoantibody (IA-2A), Zinc transporter 8 autoantibody (ZnT8A))
   b) Dysglycemia without overt hyperglycemia using an oral glucose tolerance test (OGTT) or alternative method; AND
4. Member does NOT have a history suggestive of type 2 diabetes; AND
5. Member does NOT have any active serious infection or chronic active infection other than localized skin infections; AND
6. Member's baseline lab results do NOT show any of the following:
   a) Lymphocyte count < 1,000 lymphocytes/mcL
   b) Hemoglobin < 10 g/dL
   c) Platelet count < 150,000 platelets/mcL
   d) Absolute neutrophil count (ANC) < 1,500 neutrophils/mcL
   e) Elevated ALT or AST greater than 2 times the upper limit of normal (ULN) or bilirubin greater than 1.5 times ULN
   f) Acute infection with Epstein-Barr virus (EBV) or cytomegalovirus (CMV).
7. **Dosage allowed/Quantity limit:** 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.

If all the above requirements are met, the medication will be approved for 3 months.

For **reauthorization**:
1. Continuation beyond 1 course of 14-day treatment will not be authorized.

CareSource considers Tzield (teplizumab-mzwv) not medically necessary for the treatment of conditions that are not listed in this document. For any other indication, please refer to the Off-Label policy.

DATE	ACTION/DESCRIPTION
01/18/2023	New policy for Tzield created.

References:

1. Tzield [prescribing information]. Provention Bio, Inc.; 2022.
2. Herold KC, Bundy BN, Long SA, 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. Sims EK, Bundy BN, Stier K, et al. Teplizumab improves and stabilizes beta cell function in antibody-positive high-risk individuals. *Sci Transl Med*. 2021;13(583):eabc8980. doi:10.1126/scitranslmed.abc8980
4. Insel RA, Dunne JL, Atkinson MA, et al. Staging presymptomatic type 1 diabetes: a scientific statement of JDRF, the Endocrine Society, and the American Diabetes Association. *Diabetes Care*. 2015;38(10):1964-1974. doi:10.2337/dc15-1419
5. ElSayed NA, Aleppo G, Aroda VR, et al. 2. Classification and Diagnosis of Diabetes: Standards of Care in Diabetes-2023. *Diabetes Care*. 2023;46(Suppl 1):S19-S40. doi:10.2337/dc23-S002
6. VanBuecken D, Lord S, Greenbaum CJ. Changing the Course of Disease in Type 1 Diabetes. [Updated 2022 Jan 6]. In: Feingold KR, Anawalt B, Boyce A, et al., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK326738/
7. Holt RIG, DeVries JH, Hess-Fischl A, et al. The management of type 1 diabetes in adults. A consensus report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD) [published correction appears in Diabetologia. 2022 Jan;65(1):255]. *Diabetologia*. 2021;64(12):2609-2652. doi:10.1007/s00125-021-05568-3

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