Geisinger

POLICIES AND PROCEDURE MANUAL

Policy: MBP 276.0

Section: Medical Benefit Pharmaceutical Policy

Subject: Zynteglo (betibeglogene autotemcel)

I. Policy:
Zynteglo (betibeglogene autotemcel)

II. Purpose/Objective:
To provide a policy of coverage regarding Zynteglo (betibeglogene autotemcel)

III. Responsibility:
A. Medical Directors
B. Medical Management
C. Pharmacy Department

IV. Required Definitions
1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than
3. the department requiring/authoring the policy.
4. Devised – the date the policy was implemented.
5. Revised – the date of every revision to the policy, including typographical and grammatical changes.
6. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions
Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
b. provided for the diagnosis and the direct care and treatment of the Member's condition, illness disease or injury;
c. in accordance with current standards good medical treatment practiced by the general medical community;
d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient

Medicaid Business Segment
Medically Necessary — A service, item, procedure, or level of care compensable under the Medical Assistance program that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

i. Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
ii. Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
iii. Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age.

DESCRIPTION:
Zynteglo (betibeglogene autotemcel) is a gene therapy consisting of autologous CD34+ hematopoietic cells transduced with the BB305 lentiviral vector to add functional copies of a modified β-globin gene (Locatelli 2022). After betibeglogene autotemcel infusion, transduced CD34+ cells engraft in the bone marrow and differentiate to produce RBCs containing a modified β-globin protein (βA-T87Q-globin) to combine with α-globin and produce functional adult Hb. βA-T87Q-globin expression corrects the β/α-globin imbalance in erythroid cells of patients with β-thalassemia to increase functional adult HbA and total Hb to normal levels and eliminate dependence on RBC transfusions.

CRITERIA FOR USE: Requires Prior Authorization by Medical Director or Designee

Zynteglo (betibeglogene autotemcel) will be considered medically necessary for all lines of business when ALL of the following criteria are met:

- Prescription written by a hematologist and/or stem cell transplant specialist **AND**
- Medical record documentation of age greater than or equal to 4 years and less than or equal to 50 years **AND**
- Medical record documentation of a diagnosis of transfusion dependent beta-thalassemia AND one of the following:
    - Medical record documentation of a history of ≥ 100 mL/kg/year of packed red blood cells in the prior 2 years **OR**
    - Medical record documentation of a history of ≥ 8 transfusions of packed red blood cells per year in the prior 2 years

  AND
- Medical record documentation that the member has not had a prior hematopoietic stem cell transplant **AND**
- Medical record documentation the member is a candidate for a hematopoietic stem cell transplant but ineligible due to absence of Human Leukocyte Antigen (HLA)-matched family donor* **AND**
- Medical record documentation that the member has a negative serology test for Human Immunodeficiency Virus (HIV)

AUTHORIZATION DURATION: Zynteglo will be approved for a one-time authorization for one administration of Zynteglo. Requests for authorizations exceeding these limits will require the following medical record documentation of peer-reviewed literature citing well-designed clinical trials to indicate that the member's healthcare outcome will be improved by dosing beyond the FDA-approved treatment duration.

*Note to reviewer: The package insert recommends confirming that hematopoietic stem cell transplantation (HSCT) is appropriate prior to Zynteglo since patients will be going through similar steps (mobilization, apheresis, and myeloablative) required for a HSCT. However, the clinical trials excluded patients who had a known and available HLA-matched family donor. Considering that HSCT has been available for longer and has more evidence supporting its use, it may be appropriate to require HSCT as an alternate to Zynteglo. While it is possible for patients to have a matched unrelated donor, outcomes are best with matched related donors.

Note: For Medicaid (GHP Family), any requests for services that do not meet criteria set in the PARP will be evaluated on a case-by-case basis.

LINE OF BUSINESS:
Eligibility and contract specific benefit limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy.

This policy will be revised as necessary and reviewed no less than annually**.**

Devised: 3/21/23

Revised:

Reviewed: