Prior Authorization Review Panel

CHC-MCO Policy Submission

A separate copy of this form must accompany each policy submitted for review.
Policies submitted without this form will not be considered for review.

Plan: PA Health & Wellness	**Submission Date: 11/01/2020**
Policy Number: PA.CP.PHAR.392	**Effective Date: 01/2020** **Revision Date: 10/2020**
Policy Name: Pegademase Bovine (Adagen)	

Type of Submission – Check all that apply:

- ☐ **New Policy**
- ☐ **Revised Policy***
- ✓ **Annual Review - No Revisions**
- ☐ **Statewide PDL** - *Select this box when submitting policies for Statewide PDL implementation and when submitting policies for drug classes included on the Statewide PDL.*

***All revisions to the policy must be highlighted using track changes throughout the document.**

Please provide any changes or clarifying information for the policy below:

References reviewed and updates.

Name of Authorized Individual (Please type or print): **Auren Weinberg, MD**	**Signature of Authorized Individual:** 

Clinical Policy: Pegademase Bovine (Adagen)

Reference Number: PA.CP.PHAR.392
Effective Date: 10.17.18
Last Review Date: 11.20

Coding Implications
Revision Log

Description
Pegademase bovine (Adagen®) is a modified enzyme.

FDA Approved Indication(s)
Adagen is indicated for enzyme replacement therapy for adenosine deaminase (ADA) deficiency in patients with severe combined immunodeficiency disease (SCID) who are not suitable candidates for, or who have failed, bone marrow transplantation.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with PA Health & Wellness® that Adagen is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Adenosine Deaminase Deficient Severe Combined Immunodeficiency Disease (must meet all)**:**

1. Diagnosis of ADA deficiency in SCID;
2. Prescribed by or in consultation with an immunologist;
3. Member has failed bone marrow transplantation or is not a candidate for bone marrow transplantation;
4. Dose does not exceed:
   a. Initial: 10 units/kg/week on Week 1, 15 units/kg/week on Week 2, and 20 units/kg/week on Week 3;
   b. Maintenance: 30 units/kg per week.

Approval duration: 6 months

B. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53.

II. Continued Therapy

A. Adenosine Deaminase Deficient Severe Combined Immunodeficiency Disease (must meet all)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy *(see Appendix D for examples)*;
3. If request is for a dose increase, new dose does not exceed 30 units/kg per week.

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53.

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policy – PA.CP.PMN.53 or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key
ADA: adenosine deaminase deficiency
FDA: Food and Drug Administration
SCID: severe combined immunodeficiency disease

Appendix B: Therapeutic Alternatives
Not applicable

Appendix C: Contraindications/Boxed Warnings
- Contraindication(s): use of Adagen as preparatory or support therapy for bone marrow transplantation, severe thrombocytopenia
- Boxed warning(s): none reported

Appendix D: General Information
- Examples of positive response to therapy may include, but are not limited to, improvement in immune function (T cell, B cell, and natural killer lymphocytes), reduction in frequency/severity of opportunistic infections, and decrease from baseline or maintenance of normal red cell dATP levels.
- Immune function, including the ability to produce antibodies generally improves after 2 to 6 months of therapy and matures over a longer period. The lag between the correction of metabolic abnormalities and improved immune function ranges from a few weeks to approximately 6 months.
- After 2 months of maintenance treatment with Adagen, red cell dATP levels should decrease to a range of ≤ 0.005 to 0.015 µmol/mL. Normal dATP levels are below 0.001 µmol/mL. Once the level of dATP levels has fallen adequately, it should be measured two to four times per year for the first year, and then two to three times a year thereafter assuming no interruption in therapy.
- Plasma ADA activity should be measured at the trough level pre-injection to ensure that plasma ADA level is maintained above the level of total erythrocyte ADA acitivity in the blood of normal individuals and to establish the effective dose of Adagen. Desirable

range of plasma ADA activity (trough level before maintenance injection): 15 to 35 µmol/hr/mL.

- Plasma ADA should be determined twice a month between 3 and 9 months, then monthly until after 18 to 24 months of treatment.
- If plasma ADA levels fall to < 10 µmol/hr/mL, antibody development should be suspected. However, other causes of decreasing plasma ADA levels may include improper storage of Adagen vials, or improper handling of plasma samples. A specific assay for antibody to ADA and Adagen should be performed.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
ADA in SCID	Administer IM every 7 days. Week 1: 10 units/kg Week 2: 15 units/kg Week 3: 20 units/kg Maintenance: 20 units/kg/week (dose may be adjusted by 5 units/kg/week)	30 units/kg/dose (1 dose/week)

VI. Product Availability

Single-use vial: 375 units/1.5 mL

VII. References

1. Adagen Prescribing Information. Indianapolis, IN: Exelead, Inc., November 2017. Available at: www.adagen.com. Accessed July 22, 2020.
2. Bonilla FA, Khan DA, Ballas ZK, et al. Practice parameter for the diagnosis and management of primary immunodeficiency. J Allergy Clin Immunol 2015; 136(5): 1186-1205.e78.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J2504	Injection, pegademase bovine, 25 IU

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	10/18	
4Q 2019 annual review: No changes per Statewide PDL implementation 01-01-2020	10/30/19	
4Q 2020 annual review: References reviewed and updates.	08/20	11/20