Original Effective Date: 01/01/2019
Current Effective Date: 10/12/2025
Last P&T Approval/Version: 07/30/2025
Next Review Due By: 07/2026
Policy Number: C16329-A

Revcovi (elapegademase)

PRODUCTS AFFECTED

Revcovi (elapegademase)

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:
Adenosine deaminase severe combined immune deficiency (ADA-SCID)

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. When the requested drug product for coverage is dosed by weight, body surface area or other member specific measurement, this data element is required as part of the medical necessity review. The Pharmacy and Therapeutics Committee has determined that the drug benefit shall be a mandatory generic and that generic drugs will be dispensed whenever available.

A. ADENOSINE DEAMINASE DEFICIENCY (ADA) WITH SEVERE COMBINED IMMUNODEFICIENCY

(SCID):

1. Documented diagnosis of adenosine deaminase deficiency (ADA) with Severe Combined Immunodeficiency (SCID) phenotype
   AND
2. Documentation diagnosis was confirmed by ONE of the following [DOCUMENTATION REQUIRED]:
   a. Absent ADA levels in lysed erythrocytes from fresh blood samples or dried blood spots
   b. Marked increase in deoxyadenosine triphosphate (dATP) levels in erythrocyte lysates (with levels that vary by laboratory)
   c. Decrease in ATP concentration in red blood cells
   d. Absent or extremely low levels of S-adenosylhomocysteine hydrolase in red blood cells
   e. Increase in 2'-deoxyadenosine in urine and plasma, as well as in dried blood spots
   f. Genetic testing showing biallelic variants in the ADA1 gene

   AND
3. Documentation of ONE of the following:
   a. Definitive therapy of gene therapy or unconditioned HCT from a human leukocyte antigen (HLA)-identical matched sibling donor (MSD) or matched family donor (MFD), consistent with the 2023 consensus guidelines for the management of ADA severe combined immunodeficiency (SCID), was unsuccessful or member was ineligible (HLA-matched sibling donor/HLA-matched family donor HSCT or HSC-GT are not available)
      OR
   b. Elapegademase is being used as a bridge to definitive therapy with HSCT or HSC-GT.

   AND
4. Member does not have severe thrombocytopenia (<50,000/microL)
   AND
5. Documentation of member's current ideal body weight or actual weight (whichever is greater) (within the last 30 days)

CONTINUATION OF THERAPY:

A. ADENOSINE DEAMINASE DEFICIENCY (ADA) WITH SEVERE COMBINED IMMUNODEFICIENCY (SCID):

1. (a) If previously approved as a bridge to definitive therapy with HSCT or HSC-GT: Provider attests member has not yet undergone HSCT or HSC-GT
   OR
   (b) Prescriber attests member is still not eligible candidate for HSCT or HSC-GT
   AND
2. Prescriber attests to or clinical reviewer has found no evidence of intolerable adverse effects or drug toxicity [e.g., of unacceptable toxicity include severe injection site reactions (e.g., bleeding), severe thrombocytopenia, etc.]
   AND
3. Documentation target trough plasma ADA activity is at least 30 mmol/hr/L and trough erythrocyte dAXP levels are maintained below 0.02 mmol/L [DOCUMENTATION REQUIRED]

DURATION OF APPROVAL:

Initial authorization: 12 months, Continuation of therapy: 12 months

In most patients, ERT should be used to "bridge" for no more than a few years prior to undergoing HSCT or HSC-GT (Grunebaum et al., 2023)

PRESCRIBER REQUIREMENTS:

Prescribed by or in consultation with a hematologist or a physician who specializes in the treatment of inherited metabolic disorders [If prescribed in consultation, consultation notes must be submitted with

initial request and reauthorization requests]

AGE RESTRICTIONS:
No restriction

QUANTITY:
0.2 mg/kg twice a week

Maximum Quantity Limits – Varies depending on trough ADA activity, trough dAXP concentration, and immune reconstitution.

PLACE OF ADMINISTRATION:
The recommendation is that injectable medications in this policy will be for pharmacy or medical benefit coverage and the intramuscular injectable products administered in a place of service that is a non-hospital facility-based location.

DRUG INFORMATION

ROUTE OF ADMINISTRATION:
Intramuscular

DRUG CLASS:
Adenosine Deaminase SCID Treatment - Agents

FDA-APPROVED USES:
Indicated for the treatment of adenosine deaminase severe combined immune deficiency (ADA-SCID) in pediatric and adult patients.

D81.3 Adenosine deaminase (ADA) deficiency

COMPENDIAL APPROVED OFF-LABELED USES:
None

APPENDIX

APPENDIX:
None

BACKGROUND AND OTHER CONSIDERATIONS

BACKGROUND:
Disease State
Adenosine deaminase (ADA) deficiency is an autosomal recessive genetic disorder typically leads to a severe combined immunodeficiency (SCID) with dysfunction of T, B, and natural killer (NK) cells (T-B-NK-SCID) that presents in the first few months of life. However, there are also a few members with a later onset and relatively milder disease. The wide spectrum of the ADA deficiency phenotype is largely related to the variability in genetic mutations. The clinical spectrum of ADA deficiency has broadened over time as members with atypical or milder forms have been identified due to the variability of specific genetic mutations. Approximately 90 percent of ADA- deficient individuals have a classic severe combined immunodeficiency (SCID) phenotype in which the disease presents in the first months of life. Most of the remainder may have a "delayed" (6 to 24 months) or "late" (four years to adulthood) onset form. Such members may initially have variable numbers of circulating lymphocytes and some humoral immunity that quickly wanes. As little as 3 percent of residual enzyme activity can maintain nearly functional immunity

into adulthood. Thus, a few members have maintained normal immune function until immunologic decompensation occurs in adulthood and infectious complications bring attention to the diagnosis. Members with "partial" ADA deficiency, who have enzyme activity ranging from 5 to 80 percent of normal, have also been described. In some cases, somatic mutations may even lead to a spontaneous cure. Members with ADA-SCID experience severe, recurrent opportunistic infections, failure to thrive, extreme lymphopenia with nonexistent or profoundly impaired immune function, and metabolic abnormalities (such as an abnormally elevated intracellular buildup of purine nucleotides). When undiagnosed, children usually die of infections before age 2 years ADA deficiency has an overall incidence of 1 in200,000 livebirths. It accounts for approximately one- third of all cases of autosomal recessive severe combined immunodeficiency (SCID)
and approximately 15 percent of all cases of SCID. About 40- 100 members are diagnosed with it in the United States each year.

Therapy- Stem Cell Transplantation
The definitive treatment of choice is hematopoietic cell transplantation (HCT) from a human leukocyte antigen (HLA)-identical sibling donor (matched sibling donor [MSD]) or matched family donor (MFD). Because of the greater risks involved in haploidentical grafts, other treatment avenues, including enzyme replacement therapy (ERT), have been explored for members who do not have a histoidentical donor.

Therapy- Medication Therapy First Generation ADA Replacement Therapy
Adagen (pegademase bovine) Injection is a modified enzyme used for enzyme replacement therapy for the treatment of severe combined immunodeficiency disease (SCID) associated with a deficiency of adenosine deaminase. It is a conjugate of numerous strands of monomethoxy polyethylene glycol (PEG), covalently attached to the enzyme adenosine deaminase (ADA). ADA Injection is derived from bovine intestine. Second Generation ADA Replacement Therapy Revcovi is a recombinant adenosine deaminase (ADA) indicated for the treatment of adenosine deaminase severe combined immune deficiency (ADA-SCID) in pediatric and adult members. It is not sourced from animals.
Therapeutic Monitoring: The treatment of ADA-SCID with Revcovi should be monitored by measuring trough plasma ADA activity, trough dAXP levels, and/or total lymphocyte counts. Monitoring should be more frequent if therapy was interrupted or if an enhanced rate of clearance of plasma ADA activity develops.
ADA Activity: Once treatment with Revcovi has been initiated, a target trough plasma ADA activity should be at least 30 mmol/hr/L. In order to determine an effective dose of Revcovi, trough plasma ADA activity (pre-injection) should be determined every 2 weeks for Adagen- naïve members and every 4 weeks for members previously receiving Adagen therapy, during the first 8 - 12 weeks of treatment, and every 3 - 6 months thereafter. Erythrocyte dAXP: Two months after starting Revcovi treatment, trough erythrocyte dAXP levels should be maintained below 0.02 mmol/L and monitored at least twice a year. Immune Function The degree of immune function may vary from member to member. Each member will require appropriate monitoring consistent with immunologic status. Total and subset lymphocytes should be monitored periodically as follows: Adagen- naïve members: every 4 – 8 weeks for up to 1 year, and every 3 – 6 months thereafter, Other members: every 3 - 6 months Immune Deficiency Foundation Diagnostic & Clinical Care Guidelines for Primary Immunodeficiency Diseases https://primaryimmune.org/wp-content/uploads/2015/03/2015-Diagnostic-and-Clinical-Care-Guidelines- for-PI.pdf

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:
All other uses of Revcovi (elapegademase-lvir) are considered experimental/investigational and therefore, will follow Molina's Off- Label policy. Contraindications to Revcovi (elapegademase-lvir) include: No labeled contraindications.

OTHER SPECIAL CONSIDERATIONS:

CODING/BILLING INFORMATION

CODING DISCLAIMER. *Codes listed in this policy are for reference purposes only and may not be all-inclusive or applicable for every state or line of business. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry-standard coding practices for all submissions. Molina has the right to reject/deny the claim and recover claim payment(s) if it is determined it is not billed appropriately or not a covered benefit. Molina reserves the right to revise this policy as needed.*

HCPCS CODE	DESCRIPTION
J3590	Unclassified biologics

AVAILABLE DOSAGE FORMS:
Revcovi SOLN 2.4MG/1.5ML (1.6 mg/mL), single-dose vial

REFERENCES

1. Revcovi (elapegademase-lvlr) injection, for intramuscular use [prescribing information]. Gaithersburg, MD: Leadiant Biosciences Inc; December 2020.
2. Adenosine Deaminase Deficiency-genetic and Rare Diseases Information Center. US Department of health and human services-NIH. Available at: https://rarediseases.info.nih.gov/diseases/5748/adenosine-deaminase-deficiency
3. Kohn DB, Hershfield MS, Puck JM, et al. Consensus approach for the management of severe combined immune deficiency caused by adenosine deaminase deficiency. J AllergyClin Immunol2019; 143:852-863. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6688493/ Accessed May 2021.
4. Grunebaum, E., Booth, C., Cuvelier, G. D. E., Loves, R., Aiuti, A., & Kohn, D. B. (2023). Updated Management Guidelines for Adenosine Deaminase Deficiency. The Journal of Allergy and Clinical Immunology: In Practice, 11(6), 1665–1675. https://doi.org/10.1016/j.jaip.2023.01.032

SUMMARY OF REVIEW/REVISIONS	DATE
REVISION- Notable revisions: Required Medical Information Continuation of Therapy Duration of Approval Quantity	Q3 2025
REVISION- Notable revisions: Required Medical Information Duration of Approval References	Q3 2024
REVISION- Notable revisions: Diagnosis Required Medical Information Continuation of Therapy Contraindications/Exclusions/Discontinuation	Q3 2023

REVISION- Notable revisions: Required Medical Information Continuation of Therapy Prescriber Requirements Background References	Q3 2022
Q2 2022 Established tracking in new format	Historical changes on file