Clinical Policy: Elapegademase-lvlr (Revcovi)

Reference Number: CP.PHAR.419
Effective Date: 04.23.19
Last Review Date: 05.25
Line of Business: Commercial, HIM, Medicaid

Coding Implications
Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Elapegademase-lvlr (Revcovi®) is a recombinant adenosine deaminase.

FDA Approved Indication(s)

Revcovi is indicated for the treatment of adenosine deaminase severe combined immune deficiency disease (ADA-SCID) in pediatric and adult patients.

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 Centene Corporation® that Revcovi is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Adenosine Deaminase Severe Combined Immune Deficiency Disease (must meet all)**:**

1. Diagnosis of ADA-SCID confirmed by one of the following (a or b):
   a. Genetic testing;
   b. Both of the following (i and ii):
      i. Deficient ADA catalytic activity (< 1% of normal);
      ii. Increase of adenosine or deoxyadenosine nucleotide (dATP/dAXP) levels;
2. Prescribed by or in consultation with an immunologist or hematologist;
3. Member has failed bone marrow transplantation or is not a candidate for bone marrow transplantation;
4. Dose does not exceed 0.4 mg/kg per week.

Approval duration:
Medicaid/HIM – 6 months
Commercial – 6 months or to the member's renewal date, whichever is longer

B. Other diagnoses/indications (must meet 1 or 2)**:**

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
   a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or

b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or

2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

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

1. Member meets one of the following (a or b):
   a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
   b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (*refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B);*
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 0.4 mg/kg per week.

Approval duration:
Medicaid/HIM – 12 months
Commercial – 6 months or to the member's renewal date, whichever is longer

B. Other diagnoses/indications (must meet 1 or 2)**:**

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
   a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
   b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

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 policies –

CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

ADA-SCID: adenosine deaminase severe combined immune deficiency disease
dATP: deoxyadenosine triphosphate
dAXP: deoxyadenosine nucleotides
FDA: Food and Drug Administration

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: General Information

- Examples of positive response to therapy include 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.
- 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 patients and every 4 weeks for patients previously receiving Adagen therapy, during the first 8 - 12 weeks of treatment, and every 3 - 6 months thereafter. A decrease of ADA activity below this level suggests noncompliance to treatment or a development of antibodies (anti-drug, anti-PEG, and neutralizing antibodies). Antibodies to Revcovi should be suspected if a persistent fall in pre-injection levels of trough plasma ADA activity below 15 mmol/hr/L occurs. In such patients, testing for antibodies to Revcovi should be performed. If a persistent decline in trough plasma ADA activity occurs, immune function and clinical status should be monitored closely and precautions should be taken to minimize the risk of infection. If antibodies to Revcovi are found to be the cause of a persistent fall in trough plasma ADA activity, then adjustment in the dosage of Revcovi and other measures may be taken to induce tolerance and restore adequate ADA activity.
- Two months after starting Revcovi treatment, trough erythrocyte deoxyadenosine nucleotide (dAXP) levels should be maintained below 0.02 mmol/L, and monitored at least twice a year.
- The degree of immune function may vary from patient to patient. Each patient will require appropriate monitoring consistent with immunologic status. Total and subset lymphocytes should be monitored periodically as follows:
  - Adagen-naïve patients: every 4 - 8 weeks for up to 1 year, and every 3 - 6 months thereafter
  - Other patients: every 3 - 6 months
- Immune function, including the ability to produce antibodies, generally improves after 2 - 6 months of therapy, and matures over a longer period. In general, there is a lag between the correction of the metabolic abnormalities and improved immune function. Improvement in the general clinical status of the patient may be gradual (as evidenced by

improvement in various clinical parameters) but should be apparent by the end of the first year of therapy.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
ADA-SCID	Patients transitioning from Adagen® to Revcovi: If the weekly Adagen dose is unknown, or if the weekly Adagen dose is at or lower than 30 U/kg, use Revcovi 0.2 mg/kg IM weekly. If the weekly Adagen dose is > 30 U/kg, an equivalent weekly Revcovi dose (mg/kg) should be calculated by dividing the Adagen dose in U/kg by 150. Subsequent doses may be increased by increments of 0.033 mg/kg weekly if trough ADA activity is under 30 mmol/hr/L, trough dAXPs are above 0.02 mmol/L, and/or the immune reconstitution is inadequate based on the clinical assessment of the patient. The total weekly dose may be divided into multiple IM administrations during a week. Adagen-naïve patients: 0.2 mg/kg IM twice a week based on ideal body weight or actual weight whichever is greater for at least 12-24 weeks until immune reconstitution is achieved. Dose may be gradually adjusted down to maintain trough ADA activity over 30 mmol/hr/L, trough dAXP level under 0.02 mmol/L, and/or to maintain adequate immune reconstitution based on clinical assessment of the patient.	0.4 mg/kg/week

VI. Product Availability

Single-dose vial: 2.4 mg/1.5 mL (1.6 mg/mL)

VII. References

1. Revcovi Prescribing Information. Gaithersburg, MD: Leadiant Biosciences Inc.; December 2020. Available at: www.revcovi.com. Accessed January 15, 2025.
2. Kohn DB, Hershfield MS, Puck JM, et al. Consensus approach for the management of severe combined immune deficiency caused by adenosine deaminase deficiency. J Allergy Clin Immunol 2019;143:852-63.
3. Grunebaum E, Booth C, Cuvelier GDE, Loves R, Aiuti A, Kohn DB. Updated Management Guidelines for Adenosine Deaminase Deficiency. J Allergy Clin Immunol Pract. 2023;11(6):1665-1675.

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
J3590	Unclassified biologics
C9399	Unclassified drugs or biologicals

Reviews, Revisions, and Approvals	Date	P&T Approval Date
2Q 2021 annual review: added a requirement for a prior failure or non-candidacy for BMT to align with previously Corporate P&T-approved approach for Adagen for the same indication; revised HIM.PHAR.21 to HIM.PA.154; references reviewed and updated.	02.23.21	05.21
2Q 2022 annual review: no significant changes; references reviewed and updated.	02.27.22	05.22
Template changes applied to other diagnoses/indications and continued therapy section.	09.23.22	
2Q 2023 annual review: added hematologist specialty option to criteria; references reviewed and updated.	02.05.23	05.23
2Q 2024 annual review: no significant changes; references reviewed and updated.	01.11.24	05.24
2Q 2025 annual review: added an additional diagnostic option to genetic testing of both deficient ADA catalytic activity and increase in adenosine or deoxyadenosine nucleotide levels; added HCPCS code section; references reviewed and updated.	03.05.25	05.25

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy,

contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note:
For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.