

Clinical Policy: Casimersen (Amondys 45)

Reference Number: CP.PHAR.470

Effective Date: 02.25.21

Last Review Date: 02.24

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

Casimersen (Amondys 45[™]) is an antisense oligonucleotide.

FDA Approved Indication(s)

Amondys 45 is indicated for the treatment of Duchenne muscular dystrophy (DMD) in patients who have a confirmed mutation of the DMD gene that is amenable to exon 45 skipping.

Limitation(s) of use: This indication is approved under accelerated approval based on an increase in dystrophin production in skeletal muscle observed in patients treated with Amondys 45. Continued approval for this indication may be contingent upon verification of a clinical benefit in confirmatory trials.

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.

All requests reviewed under this policy may **require medical director review**.

It is the policy of health plans affiliated with Centene Corporation[®] that Amondys 45 may be **medically necessary*** when the following criteria are met:

** Amondys 45 was FDA-approved based on an observed increase in dystrophin in skeletal muscle, but it is unknown if that increase is clinically significant. Continued FDA-approval for this indication may be contingent upon verification of a clinical benefit in confirmatory trials.*

I. Initial Approval Criteria

A. Duchenne Muscular Dystrophy (must meet all):

1. Diagnosis of DMD with mutation amenable to exon 45 skipping (*see Appendix D*) confirmed by genetic testing;
2. Age \leq 13 years at therapy initiation;
3. Prescribed by or in consultation with a neurologist;
4. Member has all of the following assessed within the last 30 days (a, b, and c):
 - a. Ambulatory function (e.g., ability to walk with or without assistive devices, not wheelchair dependent) with a 6-minute walk test (6MWT) distance \geq 300 m;
 - b. Stable cardiac function with left ventricular ejection fraction (LVEF) \geq 40%;
 - c. Stable pulmonary function with predicted forced vital capacity (FVC) \geq 50%;

5. Inadequate response (as evidenced by a significant decline in 6MWT, LVEF, or FVC) despite adherent use of an oral corticosteroid (e.g., prednisone, Emflaza[®], Agamree[®]) for ≥ 6 months, unless contraindicated or clinically significant adverse effects are experienced;

**Prior authorization is required for Emflaza and Agamree*

6. Amondys 45 is prescribed concurrently with an oral corticosteroid, unless contraindicated or clinically significant adverse effects are experienced;
7. Amondys 45 is not prescribed concurrently with other exon-skipping therapies (e.g., Exondys 51[®], Vyondys 53[™], Viltepso[®]);
8. Member has not previously received gene replacement therapy for DMD (e.g., Elevidys);
9. Dose does not exceed 30 mg/kg per week.

Approval duration: 6 months

II. Continued Therapy

A. Duchenne Muscular Dystrophy (must meet all):

1. Currently receiving medication for DMD with mutation amenable to exon 45 skipping or member has previously met initial approval criteria;
2. Member is responding positively to therapy as evidenced by one of the following (a or b):
 - a. All of the following assessed within the last 6 months (i, ii, and iii):
 - i. Ambulatory function (e.g., ability to walk with or without assistive devices, not wheelchair dependent) with a 6MWT distance ≥ 300 m;
 - ii. Stable cardiac function with LVEF $\geq 40\%$;
 - iii. Stable pulmonary function with predicted FVC $\geq 50\%$;
 - b. Member has received this medication via a healthcare insurer without meeting the requirements above (see criterion 2a), and medical record shows improved or stable LVEF and FVC, assessed within the last 6 months;
3. Member has been assessed by a neurologist within the last 6 months;
4. Amondys 45 is prescribed concurrently with an oral corticosteroid, unless contraindicated or clinically significant adverse effects are experienced;
5. Amondys 45 is not prescribed concurrently with other exon-skipping therapies (e.g., Exondys 51, Vyondys 53, Viltepso);
6. Member has not previously received gene replacement therapy for DMD (e.g., Elevidys);
7. If request is for a dose increase, new dose does not exceed 30 mg/kg per week.

Approval duration: 6 months

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

| | |
|-----------------------------------|--|
| 6MWT: 6-minute walk test | ICER: Institute for Clinical and Economic Review |
| DMD: Duchenne muscular dystrophy | LVEF: left ventricular ejection fraction |
| FDA: Food and Drug Administration | |
| FVC: forced vital capacity | |

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

| Drug Name | Dosing Regimen | Dose Limit/ Maximum Dose |
|---------------------------------------|--|-------------------------------------|
| prednisone* | 0.3-0.75 mg/kg/day or 10 mg/kg/weekend | Based on weight |
| Emflaza [®] (deflazacort) | 0.9 mg/kg/day orally once daily | Based on weight |
| Agamree [®] (vamorolone) | 6 mg/kg/day PO QD (up to a maximum of 300 mg/day) <ul style="list-style-type: none"> • If member has mild (Child-Pugh A) to moderate (Child-Pugh B) hepatic impairment: 2 mg/kg/day PO QD (up to a maximum of 100 mg/day) • If co-administered with strong CYP3A4 inhibitors (e.g., itraconazole): 4 mg/kg/day PO QD (up to a maximum of 200 mg/day) | See regimen |

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.

**Off-label*

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: General Information

- Common mutations amenable to exon 45 skipping include: 7-44, 12-44, 18-44, 44, 46, 46-47, 46-48, 46-49, 46-51, 46-53, 46-55, 46-57, 46-59, 46-60, 46-67, 46-69, 46-75, 46-78.
- Corticosteroids are routinely used in DMD management with established efficacy in slowing decline of muscle strength and function (including motor, respiratory, and cardiac). They are recommended for all DMD patients per the American Academy of Neurology (AAN) and DMD Care Considerations Working Group; in addition, the AAN guidelines have been endorsed by the American Academy of Pediatrics, the American Association of Neuromuscular & Electrodiagnostic Medicine, and the Child Neurology Society.
 - The DMD Care Considerations Working Group guidelines, which were updated in 2018, continue to recommend corticosteroids as the mainstay of therapy.

- In an evidence report published August 2019, the Institute for Clinical and Economic Review (ICER) states that current evidence is insufficient to conclude that other exon-skipping therapies (Exondys 51, Vyondys 53) have net clinical benefit when added to corticosteroids and supportive care versus corticosteroids and supportive care alone.
- Prednisone is the corticosteroid with the most available evidence. A second corticosteroid commonly used is deflazacort, which was FDA approved for DMD in February 2017. On October 2023, a third corticosteroid, vamorolone, was approved by the FDA for DMD.
- The inclusion criteria for the ESSENCE study (NCT02500381) used to support the FDA approval of casimersen enrolled male patients age 7-13 years old with a mean 6MWT distance of 300 m or more at screening and baseline visits and stable pulmonary function with %pFVC \geq 50%.
- Having an LVEF below 40% may indicate presence of cardiomyopathy or heart failure.

V. Dosage and Administration

| Indication | Dosing Regimen | Maximum Dose |
|------------|-------------------------|---------------|
| DMD | 30 mg/kg IV once weekly | 30 mg/kg/week |

VI. Product Availability

Single-dose vial: 100 mg/2 mL

VII. References

1. Amondys 45 Prescribing Information. Cambridge, MA: Sarepta Therapeutics, Inc.; March 2023. Available at: [https://amondys45.com/Amondys45_\(casimersen\)_Prescribing_Information.pdf](https://amondys45.com/Amondys45_(casimersen)_Prescribing_Information.pdf). Accessed October 13, 2023.
2. ClinicalTrials.gov. Study of SRP-4045 and SRP-4053 in DMD patients (ESSENCE). Available at: <https://clinicaltrials.gov/ct2/show/NCT02500381>. Accessed November 7, 2023.
3. Birnkrant DJ, Bushby K, Bann CM, et al. Diagnosis and management of Duchenne muscular dystrophy, part 1: diagnosis, and neuromuscular, rehabilitation, endocrine, and gastrointestinal and nutritional management. *Lancet Neurol*. 2018; 17: 251-267.
4. Gloss D, Moxley RT, Ashwal S, Oskoui M. Practice guideline update summary: corticosteroid treatment of Duchenne muscular dystrophy. *Neurology*. 2016; 86: 465-472. Reaffirmed on January 22, 2022.
5. Institute for Clinical and Economic Review. Deflazacort, eteplirsen, and golodirsen for Duchenne muscular dystrophy: Effectiveness and value. Published August 15, 2019. Available at: https://icer.org/wp-content/uploads/2020/10/Corrected_ICER_DMD-Final-Report_042222.pdf. Accessed November 7, 2023.
6. CureDuchenne. Exon skipping. Available at: <https://www.cureduchenne.org/cure/exon-skipping>. Accessed November 7, 2023.

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 |
|-------------|------------------------------|
| J1426 | Injection, casimersen, 10 mg |

| Reviews, Revisions, and Approvals | Date | P&T Approval Date |
|---|----------|-------------------|
| Policy created pre-emptively | 03.03.20 | 05.20 |
| 2Q 2021 annual review: drug is now FDA approved; added option for continuation of therapy for patients who have been receiving the medication through another healthcare insurer and/or has been responding positively to therapy with stable disease; modified time frame for positive response parameters from within the last 30 days to within the last 6 months; added requirement for neurologist assessment within the last 6 months; LVEF requirement revised from > to \geq 40%; references to HIM.PHAR.21 revised to HIM.PA.154; references reviewed and updated; added disclaimer under Policy/Criteria “All requests reviewed under this policy require medical director review.” | 02.26.21 | 05.21 |
| 1Q 2022 annual review: no significant changes; updated Coding Implications section; added that the review “may” require medical director review; references reviewed and updated. | 09.14.21 | 02.22 |
| 1Q 2023 annual review: no significant changes; updated Section III to match template; updated HCPCS code; references reviewed and updated. | 11.07.22 | 02.23 |
| 1Q 2024 annual review: added criteria, member has not previously received gene replacement therapy for DMD (e.g., Elevidys); added Agamree to list of corticosteroids in Appendix B; references reviewed and updated. | 10.13.23 | 02.24 |

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.

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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.

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