POLICY: Muscular Dystrophy – Amondys 45 Prior Authorization Policy
- Amondys 45™ (casimersen intravenous infusion – Sarepta)

EFFECTIVE DATE: 06/01/2021
LAST REVISION DATE: 02/15/2023

COVERAGE CRITERIA FOR: All Aspirus Medicare Plans

OVERVIEW

Amondys 45, an antisense oligonucleotide, 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.[1] This indication was granted accelerated approval based on an increase in dystrophin in skeletal muscle observed in patients treated with Amondys 45. The prescribing information notes that continued FDA-approval for this indication may be contingent upon verification of clinical benefit in a confirmatory trial.

Amondys 45 is an antisense oligonucleotide designed to bind to exon 45 of dystrophin pre-mRNA, resulting in exclusion of this exon during mRNA processing in patients with genetic mutations that are amenable to exon 45 skipping. These patients represent up to 8% of all patients with DMD.[2] This genetic manipulation intends to restore the reading frame of the resulting mRNA. The result would be production of a shortened, but partially functional dystrophin protein as seen in less severe forms of muscular dystrophy (e.g., Becker muscular dystrophy).

Guidelines

Amondys 45 is not addressed in guidelines for DMD. There are guidelines for the diagnosis and management of DMD available from the DMD Care Considerations Working Group (2018).[3] Genetic testing for a DMD mutation in a blood sample is always required. By fully characterizing the mutation, the predicted effect on the reading frame can be identified, which is the major determinant of phenotype and will determine eligibility for mutation-specific clinical trials. In patients with no mutation identified but with signs/symptoms of DMD, a muscle biopsy is clinically indicated. Glucocorticoids slow decline in muscle strength and function in DMD. Use of corticosteroids reduces the risk of scoliosis and stabilizes pulmonary function. Continued treatment after the patient loses ambulation provides a reduction in the risk of progressive scoliosis and stabilization of pulmonary function tests. Therefore, glucocorticoids should be considered for all patients with DMD. Exondys 51 (eteplirsen intravenous infusion) is mentioned as an emerging product, approved by an accelerated pathway for those with a mutation in the dystrophin gene amenable to exon 51 skipping.

POLICY STATEMENT

Prior authorization is recommended for medical benefit coverage of Amondys 45. Approval is recommended for those who meet the Criteria and Dosing for the listed indication(s). Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by an Express Scripts clinician (i.e., Medical Director or Pharmacist). Because of the specialized skills required for evaluation and diagnosis of patients treated with Amondys 45, as well as the monitoring required for

adverse events and long-term efficacy, initial approval requires Amondys 45 to be prescribed by or in consultation with a physician who specializes in the condition being treated. All approvals are provided for the durations noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

FDA-Approved Indications

1. **Duchenne Muscular Dystrophy (DMD).** Approve Amondys 45 if the patients meets the following criteria. (A or B).
   - **A)** Initial Therapy. Approve Amondys 45 for 6 months if the patient meets the following criteria (i, ii, iii, iv, and v).
     - **i.** Patient must have a diagnosis of Duchene muscular dystrophy (DMD) AND
     - **ii.** Patient must have a confirmed mutation of the DMD gene that is amenable to exon 45 skipping and provide documentation [documentation required] AND
     - **iii.** Must be prescribed by a physician specializing in genetics or neurology AND
     - **iv.** Provider's specialty must be provided at time of request AND
     - **v.** At time of request, prescriber must confirm whether or not the patient is currently enrolled in clinical trials for Amondys 45

   - **B)** Patients Continuing Amondys 45 Therapy. Approve Amondys 45 for 6 months if the patient meets the following criteria (i, ii, and iii).
     - **i.** Renewals must be prescribed by a physician specializing in genetics or neurology AND
     - **ii.** Provider's specialty must be provided at time of request AND
     - **iii.** Chart notes must be supplied at time of request showing patient is responsive to treatment defined as [documentation required]:
       - **a)** Maintain or increase in physical function from baseline OR
       - **b)** Progression has been slower than otherwise would have been expected in this patient population

Dosing in DMD. *Dosing must meet the following weight-based dosing*:

- **A)** 30 mg/kg once weekly - Patient's most current weight (rounded to the nearest kg) must be provided at time of request.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Amondys 45 has not been shown to be effective, or there are limited or preliminary data or potential safety concerns that are not supportive of general approval for the following conditions. (Note: This is not an exhaustive list of Conditions Not Recommended for Approval).

1. Patient is currently enrolled in clinical trials for Amondys 45.

2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Amondys 45 [prescribing information]. Cambridge, MA: Sarepta; February 2021.
2. CureDuchenne [Web site]. Available at: https://www.cureduchenne.org/. Accessed on February 25, 2021.
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(3):251-267.
4. Shimizu-Motohashi Y, Murakami T, Kimura E, et al. Exon skipping for Duchenne muscular dystrophy: a systematic review and meta-analysis. *Orphanet J Rare Dis*. 2018;13(1):93.
5. US National Institutes of Health. In: ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine (US). 2000- [cited 2021 Feb 25]. Available from: https://clinicaltrials.gov/ct2/show/NCT02500381. Search term: NCT02500381.

HISTORY

Type of Revision	Summary of Changes	Review Date
New Policy	--	02/26/2021
Annual Revision	No criteria changes.	02/16/2022
Annual Revision	No criteria changes.	02/15/2023