Exondys 51

**Description**

Exondys 51 (eteplirsen)

**Background**
Exondys 51 is indicated for patients with a diagnosis of Duchenne muscular dystrophy (DMD) who have a confirmed mutation of the DMD gene that is amenable to exon 51 skipping. DMD is a genetic disorder characterized by progressive muscle degeneration and weakness. DMD is caused by an exon mutation in a gene that codes for dystrophin, a protein that helps keep muscle intact. Exons are the sections of DNA that contain instructions for creating proteins; if an exon is mutated, a functional protein cannot be produced. Exondys 51 is designed to “skip over” a mutated exon and enable the synthesis of a shortened, functional form of dystrophin protein. Patients with DMD experience progressive loss of ambulation, followed by a need for assisted ventilation, and eventual death in mid-20s. (1-2).

**Regulatory Status**
FDA-approved indication: Exondys 51 is an antisense oligonucleotide 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 51 skipping (1).

Exondys clinical trials used a double-blind, placebo-controlled protocol to examine eteplirsen's ability to induce dystrophin production and improve distance walked on the 6-minute walk test (6MWT). Boys with DMD aged 7 to 13 years, with confirmed deletions correctable by skipping exon 51 and ability to walk 200 to 400 m on 6 MWT (2).

Dystrophin levels should be measured at baseline to evaluate pretreatment dystrophin-positive
fibers and sometime during therapy to evaluate the effect of Exondys dose (2).

**Related policies**
Emflaza

**Policy**
This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Exondys 51 may be considered medically necessary for patients 20 years of age or younger with Duchenne muscular dystrophy (DMD) and if the conditions indicated below are met.

Exondys 51 may be considered investigational in patients older than 20 years of age and for all other indications.

**Prior-Approval Requirements**

**Age** 20 years of age or younger

**Diagnosis**

Patient must have the following:

1. Duchenne muscular dystrophy
   a. Confirmed mutation of the DMD gene that is amenable to exon 51 skipping
   b. Prescribed by or in consultation with a neurologist specializing in DMD
   c. Obtain a baseline muscle strength score from ONE of the following:
      i. 6-minute walk test (6MWT)
      ii. North Star ambulatory assessment (NSAA)
      iii. Motor Function Measure (MFM)

**Prior – Approval Renewal Requirements**

**Age** 20 years of age or younger

**Diagnosis**
Patient must have the following:

1. Duchenne muscular dystrophy
   a. Patient has had an improvement from baseline in ONE of the following:
      i. 6-minute walk test (6MWT)
      ii. North Star ambulatory assessment (NSAA)
      iii. Motor Function Measure (MFM)

Policy Guidelines

Pre - PA Allowance
None

Prior - Approval Limits

Duration 12 months

Prior – Approval Renewal Limits

Duration 24 months

Rationale

Summary
Exondys 51 is an antisense oligonucleotide 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 51 skipping. Exondys 51 is approved under accelerated approval by the FDA based on an increase in dystrophin in skeletal muscle observed in some patients. A clinical benefit of Exondys 51 has not been established (1).

Prior approval is required to ensure the safe, clinically appropriate and cost effective use of Exondys while maintaining optimal therapeutic outcomes.

References
**Policy History**

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2016</td>
<td>Addition to PA</td>
</tr>
<tr>
<td>December 2016</td>
<td>Annual review</td>
</tr>
<tr>
<td>March 2017</td>
<td>Annual editorial review</td>
</tr>
<tr>
<td></td>
<td>Addition of obtain a baseline dystrophin level and patient has had an</td>
</tr>
<tr>
<td></td>
<td>improvement from baseline in dystrophin levels</td>
</tr>
<tr>
<td></td>
<td>Addition of obtain a baseline muscle strength score from one of the</td>
</tr>
<tr>
<td></td>
<td>following: 6-minute walk distance (6MWD), North Star ambulatory</td>
</tr>
<tr>
<td></td>
<td>assessment, or Motor Function Measure; and the patient has had an</td>
</tr>
<tr>
<td></td>
<td>improvement from baseline from one of the scoring tools</td>
</tr>
<tr>
<td></td>
<td>Addition of prescribed by or in consultation with a neurologist</td>
</tr>
<tr>
<td></td>
<td>specializing in DMD</td>
</tr>
<tr>
<td></td>
<td>Addition of the age 20 years of age or younger requirement</td>
</tr>
<tr>
<td>July 2017</td>
<td>Annual review</td>
</tr>
<tr>
<td>February 2018</td>
<td>Removal of the dystrophin level requirements</td>
</tr>
<tr>
<td>June 2018</td>
<td>Annual review and reference update</td>
</tr>
<tr>
<td>September 2019</td>
<td>Annual review and reference update</td>
</tr>
</tbody>
</table>

**Keywords**

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on September 13, 2019 and is effective on October 1, 2019.