EXONDYS 51® (ETEPLIRSEN)

Policy Number: PHARMACY 294.9 T2
Effective Date: April 1, 2019

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CONDITIONS OF COVERAGE

This policy applies to Oxford Commercial plan membership.

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<th>Applicable Lines of Business/Products</th>
<th>Benefit Type</th>
<th>Referral Required</th>
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<tr>
<td></td>
<td>Medical</td>
<td>No</td>
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<tr>
<th>Authorization Required</th>
<th>Precertification always required for inpatient admission</th>
<th>Precertification with Medical Director Review Required</th>
<th>Applicable Site(s) of Service</th>
<th>Special Considerations</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes&lt;sup&gt;1&lt;/sup&gt;</td>
<td>(If site of service is not listed, Medical Director review is required)</td>
<td>1&lt;sup&gt;1&lt;/sup&gt;Precertification through Oxford's Medical Management Department, with review by a Medical Director or their designee, is required. 2&lt;sup&gt;2&lt;/sup&gt;Requests for hospital outpatient facility infusion of Exondys 51 require additional precertification with review by a Medical Director or their designee; refer to the policy titled Provider Administered Drugs - Site of Care Review Guidelines.</td>
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COVERAGE RATIONALE

Exondys 51® (eteplirsen) may be covered for the treatment of Duchenne muscular dystrophy (DMD) in patients who meet ALL of the following criteria:<sup>1</sup>

- For initial therapy, all of the following:
  - Diagnosis of Duchenne muscular dystrophy by, or in consultation with, a neurologist with expertise in the diagnosis of DMD; and
  - Submission of medical records (e.g., chart notes, laboratory values) confirming the mutation of the DMD gene is amenable to exon 51 skipping;<sup>1,2</sup> and

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<sup>1</sup>Precertification through Oxford's Medical Management Department, with review by a Medical Director or their designee, is required.

<sup>2</sup>Requests for hospital outpatient facility infusion of Exondys 51 require additional precertification with review by a Medical Director or their designee; refer to the policy titled Provider Administered Drugs - Site of Care Review Guidelines.
Submission of medical records (e.g., chart notes, laboratory values) confirming patient has a 6-Minute Walk Time (6MWT) ≥ 300 meters while walking independently (e.g., **without** side-by-side assist, cane, walker, wheelchair, etc.) prior to beginning Exondys 51 therapy; **and**

- Exondys 51 is prescribed by, or in consultation with, a neurologist with expertise in the treatment of DMD; **and**

- Exondys 51 dosing for DMD is in accordance with the United States Food and Drug Administration approved labeling: maximum dosing of 30 mg/kg infused once weekly; **and**

- Initial authorization will be for no more than 8 weeks.

**For continuation therapy, all of the following:**

- Exondys 51 is prescribed by, or in consultation with, a neurologist with expertise in the treatment of DMD; **and**

- Submission of medical records (e.g., chart notes, laboratory values) demonstrating that the patient continues to have a 6-Minute Walk Time (6MWT) ≥ 300 meters while walking independently (e.g., **without** side-by-side assist, cane, walker, wheelchair, etc.). This must be measured no earlier than 4 weeks prior to a continuation request; **and**

- Exondys 51 dosing for DMD is in accordance with the United States Food and Drug Administration approved labeling: maximum dosing of 30 mg/kg infused once weekly; **and**

- Reauthorization will be for no more than 6 months.

**Exondys 51 will not be covered for other forms of muscular dystrophy.**

**DOCUMENTATION REQUIREMENTS**

Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The documentation requirements outlined below are used to assess whether the member meets the clinical criteria for coverage but do not guarantee coverage of the service requested.

**Required Clinical Information**

**Exondys 51® (Eteplirsen)**

For initial and continuation of therapy requests, medical notes documenting **all** of the following:

- Drug name and regimen
- Member’s current weight
- Name and tax ID number of the servicing provider/facility (the entity that will be submitting the claim for this service)
- The drug is being prescribed by or in consultation with a neurologist with expertise in diagnosis of Duchenne Muscular Dystrophy (DMD)
- Location where the drug will be administered (e.g., infusion center, physician office, self-administered, home health nurse); if the location is in a facility, provide office notes for at least one of the following:
  - Medically unstable based upon submitted clinical history
  - Initial medication infusion of or re-initiation after more than 6 months following discontinuation of therapy
  - Previous experience of a severe adverse event following infusion
  - Continuing experience of adverse events that cannot be mitigated by pre-medications or infusion rate adjustments
  - Physically and/or cognitively impaired and no home caregiver available
  - Difficulty establishing and maintaining patent vascular access
  - Homecare or infusion provider has deemed that the member, home caregiver, or home environment is not suitable for home infusion therapy

In addition to the above, include medical notes documenting:

- For the **initial therapy request**:  
  - Results of 6-Minute Walk Time (6MWT) while walking independently
  - Genetic testing to confirm mutation of DMD gene that is amenable to Exon- 51 skipping

- For the **continuation of therapy request**:  
  - Results of 6-Minute Walk Time (6MWT), while walking independently, completed within past 4 weeks

**APPLICABLE CODES**

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies may apply.
Exondys 51® (eteplirsen) is an antisense oligonucleotide of the phosphorodiimidate morpholino oligomer (PMO) subclass. PMOs are synthetic molecules in which the five-membered ribofuransyl rings found in natural DNA and RNA are replaced by a six-membered morpholino ring. Each morpholino ring is linked through an uncharged phosphorodiimidate moiety rather than the negatively charged phosphate linkage that is present in natural DNA and RNA. Each phosphorodiimidate morpholino subunit contains one of the heterocyclic bases found in DNA (adenine, cytosine, guanine, or thymine). Eteplirsen contains 30 linked subunits.1

Eteplirsen is designed to bind to exon 51 of dystrophin pre-mRNA, resulting in exclusion of this exon during mRNA processing in patients with genetic mutations that are amenable to exon 51 skipping. Exon skipping is intended to allow for production of an internally truncated dystrophin protein.1

**Benefit Considerations**

Some Certificates of Coverage allow for coverage of experimental/investigational/unproven treatments for life-threatening illnesses when certain conditions are met. The member-specific benefit plan document must be consulted to make coverage decisions for this service. Some states mandate benefit coverage for off-label use of medications for some diagnoses or under some circumstances when certain conditions are met. Where such mandates apply, they supersede language in the benefit document or in the medical or drug policy. Benefit coverage for an otherwise unproven service for the treatment of serious rare diseases may occur when certain conditions are met. Refer to the policy titled Acquired Rare Disease Drug Therapy Exception Process.

**Clinical Evidence**

Eteplirsen 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 51 skipping.1

Kinane et al (2018) evaluated eteplirsen on its impact on the lung function of DMD patients who received treatment in the eteplirsen studies 201 and 202. Studies 201/202 included 12 patients treated with eteplirsen over 5 years.9 These studies did not have an active placebo control and relied on a natural history control from the United Dystrophinopathy Project (UDP) and published natural history. The investigators measured forced vital capacity (FVC), maximum expiratory pressure (MEP), and maximum inspiratory pressure (MIP). The experimental patient FVC values were compared to the UDP data, however MEP and MIP were compared to published natural history. Pulmonary function tests (PFTs) were performed by experienced physical therapists who were trained in performing spirometry in compliance with ATS/ERS guidelines. This data was compared to patient-level data from 34 patients who participated in the UDP, whose age range was similar to that of the experimental group. Prospective spirometry data was collected by the UDP in compliance with ATS/ERS guidelines. Only FVC and FVC% predicted were assessed, while MEP and MIP were not. An age-adjusted mixed-effects analysis was used to evaluate the experimental group against the natural history cohort from the UDP. The investigators plotted the datapoints of FVC and FVC%p of the eteplirsen-treated patients and compared to the natural history cohorts. The data showed the slope of the decline in FVC%p was -4.1 for the natural history cohort vs. -2.3 for the eteplirsen-treated group. There were no comparisons of MEP and MIP between the two groups. The authors suggest, comparing to published literature that the annual decline in MEP%p for eteplirsen-treated patients of 2.6% is comparable to slightly lower than the decline of 2.7% to 3.6% observed in published reports of DMD patients. The annual increase in MIP%p of 0.6% per year compares favorably to what has been observed and published historically (3.8% to 3.9%). The investigators concluded that with eteplirsen treatment, deterioration of respiratory muscle function, based on PFTs, was less than that seen in the UDP group or compared favorably with natural history. The 201/202 studies did not take into consideration inrasubject variability and did not include a placebo group for direct comparison, relying soley on natural history or historical cohort control, which occurred as late as a decade prior (2005) to these studies. Robust clinical information regarding...
the historical controls was not disclosed, which could include: genetics, age, time to first treatment, standard of care, etc. According to the prescribing information, however, the 201/202 studies failed to provide evidence of a clinical benefit of eteplirsen.

Mendell et al. (2013) evaluated eteplirsen for the treatment of DMD in a small (n=12), randomized, multi-center, double-blind, placebo-controlled study, receiving weekly infusions of either placebo, eteplirsen 30 mg/kg or eteplirsen 50 mg/kg for 24 weeks. Following the 24-week study, placebo/delayed patients switched to an open-label extension treatment (Mendell 2016) with either dosing of eteplirsen regimen. Outcome measures assessed the primary outcome of eteplirsen-induced dystrophin production, as well as the 6-minute walk test (6MWT, reported as 6-minute walk distance, 6MWD). Patients had a mean age of 9.4 years, and a mean 6MWD at baseline of 363 meters, and were on a stable dose of corticosteroids for at least 6 months. The patients participating in the extension study were compared to an external control group. At 180 weeks of treatment, eleven patients underwent a muscle biopsy to analyze for dystrophin protein. The average dystrophin protein level after 180 weeks of treatment was 0.93% of the dystrophin level in healthy subjects. At week 24, the 30 mg/kg eteplirsen patients were biopsied, and percentage of dystrophin-positive fibers increased to 23% of normal vs. placebo (p≤0.002). At week 48, there was a 52% and 43% (in the 30 and 50 mg/kg/wk cohorts, respectively), which suggests that dystrophin increases with longer treatment. Restoration of function dystrophin was confirmed by detection of sarcoglycans and neuronal nitric oxide synthase at the sarcolemma. Ambulation-evaluable eteplirsen-treated patients experienced a 67.3 meter benefit compared to placebo patients (p≤0.001). The investigators concluded that eteplirsen restored dystrophin in the 30 and 50 mg/kg/wk cohorts, and in subsequently treated placebo subjects. According to the prescribing information, however, this study failed to provide evidence of a clinical benefit of eteplirsen.

Eteplirsen has not been studied in DMD that is not amenable to exon 51 skipping, nor in other forms of muscular dystrophy (e.g., Becker muscular dystrophy).

The foregoing Oxford policy has been adapted from an existing UnitedHealthcare Pharmacy, Clinical Pharmacy Program that was researched, developed and approved by the UnitedHealth Group National Pharmacy & Therapeutics Committee. [2019D0058G]

POLICY HISTORY/REVISION INFORMATION

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<td>08/01/2019</td>
<td><strong>Template Update</strong>&lt;br&gt;• Reorganized policy template; relocated Background and FDA sections&lt;br&gt;• Added Documentation Requirements section</td>
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<tr>
<td>04/01/2019</td>
<td>• Updated supporting information to reflect the most current clinical evidence and references; no change to coverage rationale or lists of applicable codes&lt;br&gt;• Archived previous policy version PHARMACY 294.8 T2</td>
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INSTRUCTIONS FOR USE

This Clinical Policy provides assistance in interpreting UnitedHealthcare Oxford standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare Oxford reserves the right to modify its Policies as necessary. This Clinical Policy is provided for informational purposes. It does not constitute medical advice.

The term Oxford includes Oxford Health Plans, LLC and all of its subsidiaries as appropriate for these policies. Unless otherwise stated, Oxford policies do not apply to Medicare Advantage members.

UnitedHealthcare may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. UnitedHealthcare Oxford Clinical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.