Vyondys 53® (Golodirsen) (for Pennsylvania Only)

Policy Number: CSPA2026D0086H
Effective Date: June 1, 2026

➲ Instructions for Use

Table of Contents **Page**

Related Policies
None

Application

This Medical Benefit Drug Policy only applies to the state of Pennsylvania.

Coverage Rationale

Vyondys 53 may be covered for the treatment of Duchenne muscular dystrophy (DMD) in patients who meet all of the following criteria:

Initial Therapy

- 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 53 skipping; **and**
- Submission of medical records documenting a baseline evaluation, including a standardized assessment of motor function by a neurologist with experience in treating Duchenne muscular dystrophy, prior to beginning Vyondys 53 therapy; **and**
- **One** of the following:
  - Patient has not previously received gene therapy [e.g., Elevidys (delandistrogene moxparvovec-rokl)] for the treatment of DMD; **or**
  - **Both** of the following:
    - Patient has previously received gene therapy [e.g., Elevidys (delandistrogene moxparvovec-rokl)] for the treatment of DMD; **and**
    - Submission of medical records (e.g., chart notes, laboratory values) documenting a clinically meaningful functional decline resulting from loss of muscle strength/motor ability (e.g., loss of a motor milestone) since receiving gene replacement therapy [e.g., Elevidys (delandistrogene moxparvovec-rokl)]

  and
- Vyondys 53 will not be used concomitantly with **any** of the following:
  - Duvyzat (givinostat); **or**
  - Other exon skipping therapies for DMD [e.g., Amondys (casimersen), Exondys 51 (eteplirsen), Viltepso (viltolarsen)]

  and
- Prescribed by, or in consultation with, a neurologist with expertise in the treatment of DMD; **and**
- Dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**

- Initial authorization will be for 12 months

Continuation Therapy

- Documentation of continued clinical benefit based on prescriber's assessment, including an evaluation with a standardized assessment of motor function ability by a neurologist with experience in treating Duchenne muscular dystrophy; **and**
- Vyondys 53 will not be used concomitantly with **any** of the following:
    - Duvyzat (givinostat); **or**
    - Other exon skipping therapies for DMD [e.g., Amondys (casimersen), Exondys 51 (eteplirsen), Viltepso (viltolarsen)]

  and
- Prescribed by, or in consultation with, a neurologist with expertise in the treatment of DMD; **and**
- Dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**
- Reauthorization will be for no more than 12 months

Unproven

Vyondys 53 is unproven and not medically necessary for the treatment of other forms of muscular dystrophy (e.g., Becker muscular dystrophy).

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 federal, state, or contractual requirements 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 and Guidelines may apply.

HCPCS Code	Description
J1429	Injection, golodirsen, 10 mg

Diagnosis Code	Description
G71.01	Duchenne or Becker muscular dystrophy

Background

Duchenne muscular dystrophy (DMD) is an X-linked disease that affects 1 in 3,500 – 5,000 live male births. DMD occurs as a result of mutations (mainly deletions) in the dystrophin gene. These mutations lead to an absence or a defect of the protein, dystrophin, resulting in progressive muscle degeneration, leading to loss of ambulation by age 8-14 years, and ultimately life-threatening complications including cardiomyopathy and respiratory insufficiency.

Golodirsen is an antisense oligonucleotide designed to bind to exon 53 of dystrophin pre-mRNA, resulting in exclusion of this exon during mRNA processing in patients with genetic mutations that are amenable to exon 53 skipping. Approximately 8% of DMD patients have out-of-frame deletion mutations amenable to exon 53 skipping. Exon skipping is intended to allow for production of an internally truncated dystrophin protein.

Clinical Evidence

Vyondys 53 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 53 skipping.

In 2022, Servais et all published the results of the SKIP-NMD trial a Phase 1/2, multicenter, 2-part study evaluating the long-term safety and efficacy of golodirsen in male patients aged 6 to 15 years with a DMD diagnosis and DMD gene amenable to exon 53 skipping. Patients age 6 to 15 years with stable cardiac and pulmonary function, and on a stable dose of corticosteroids for at least six months were included. Additional inclusion criteria included a baseline six-minute walk test (6MWT) of greater than 250m, a North Star Ambulatory Assessment (NSAA) score of greater than 17 or a rise time of less than 7 seconds. Part 1 was a randomized, double-blind, placebo-controlled, dose-titration study to assess the safety, tolerability, and pharmacokinetics of four escalating doses of intravenous (IV) golodirsen over 12 weeks, followed

by a 9-week safety review. Part 2 was a long-term, 168-week, open-label evaluation of the biologic efficacy (at week 48), clinical efficacy (at week 144), and safety of golodirsen IV 30 mg/kg in patients with DMD amenable to exon 53 skipping. Primary endpoints were the change from baseline in 6MWT at 144 weeks and change in dystrophin protein levels at 48 weeks. Secondary endpoints included drug pharmacokinetics, change from baseline in FVC percent predicted, and change from baseline in dystrophin intensity at week 144. A total of 12 patients were included in Part 1 (golodirsen, n = 8; placebo, n = 4). All patients completed Part 1 and continued into Part 2. An additional 13 patients entered the trial at the start of Part 2, resulting in a final cohort of 25 patients receiving open-label golodirsen 30 mg/kg/week in Part 2.

At week 48, exon skipping and dystrophin expression were both significantly increased (all $p < 0.001$) among patients treated with golodirsen, and positive correlation was observed between exon 53 skipping and dystrophin production (Spearman's correlation coefficient: 0.50; $p < 0.02$). Treatment with golodirsen (Parts 1 and 2 combined) resulted in a significant, 16.0-fold mean increase in dystrophin protein levels detected by western blot, from a baseline mean of 0.095% of normal levels, to 1.019% of normal at week 48 ($p < 0.001$). Level of exon 53-skipped DMD gene expression was found to be increased by 28.9-fold ($p < 0.001$), the percentage of dystrophin-positive fibers was increased by 13.5-fold ($p < 0.001$), and myofiber regeneration decreased after golodirsen treatment, indicated by fewer fibers positive for fetal/developmental myosin at week 48 compared with baseline. Mean 6MWT distance at baseline was 405.8 m for golodirsen-treated patients and declined by 26.1, 64.6, and 99.0 m at weeks 48, 96, and 144, respectively. Two of 25 patients lost ambulation. Among golodirsen-treated patients, FVC%p declined by 8.4% over 3 years of treatment, from a mean FVC%p of 92.7% at baseline to 83.8% at week 144. Control patients' 6MWT distance declined by a mean of 181.4 m [standard deviation (SD), 151.6; range, −401 to 56] after 3 years compared with baseline. In contrast, golodirsen-treated patients declined by a mean of 99.0 m (SD, 123.8; range, −368 to 144) after 3 years ($p = 0.067$ between groups). This difference emerged over time, as no difference between treated and untreated patients was observed at the time points before year 3. Among natural history controls, 5 of 19 patients (26%) had lost ambulation over 3 years, compared with 2 of 25 (9%) of those who received golodirsen ($p = 0.21$).

ESSENCE is an ongoing 96-week, Phase 3, double-blind, placebo controlled, randomized clinical trial evaluating the efficacy of golodirsen in ambulatory, corticosteroid-treated, male patients with DMD amenable to exon 53 skipping. Eligible patients included those aged 6 to 13 years with a baseline 6MWT distance ≥ 300 and 450 m, stale pulmonary function, and on a stable dose of oral corticosteroids for at least 6 months. The primary endpoint is the 6MWT change from baseline to week 96. Secondary endpoints include 6MWT change from baseline at week 144, dystrophin protein change from baseline at weeks 48 and 96, ambulation assessments at weeks 96 and 144, and FVC%p change from baseline to weeks 96 and 144.

Golodirsen has not been studied in DMD that is not amenable to exon 53 skipping, nor in other forms of muscular dystrophy (e.g., Becker muscular dystrophy).

Institute for Clinical and Economic Review (ICER)

On April 22, 2022, the Institute for Clinical and Economic Review (ICER) released a clinical report entitled, “Deflazacort, eteplirsen, and golodirsen for Duchenne muscular dystrophy: effectiveness and value.” In this report, ICER concluded that data for eteplirsen and golodirsen to be insufficient. Data on the exon-skipping drugs is extremely limited and randomized trial benefits are limited to the surrogate outcome of dystrophin levels. The small increases in dystrophin levels seen in the random controlled trials are of uncertain clinical significance. Observational studies comparing outcomes with historical controls have suggested potential functional benefits with eteplirsen, but these data may be confounded and effort dependent. Based on the current evidence, there are no particularly concerning safety issues with either drug, but given the small numbers of patients and limited follow-up, harms could be missed.

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Vyondys 53 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 53 skipping. This indication is approved under accelerated approval based on an increase in dystrophin in skeletal muscle observed in some patients treated with Vyondys 53. Continued approval for this indication may be contingent upon verification of a clinical benefit in confirmatory trials.

References

1. Vyondys 53 [package insert]. Cambridge, MA: Sarepta Therapeutics, Inc.; June 2024.

2. Frank DE, Schnell FJ, Akana C, et al. Increased dystrophin production with golodirsen in patients with Duchenne muscular dystrophy [published correction appears in Neurology. 2023 May 9;100(19):936]. *Neurology*. 2020;94(21):e2270-e2282.
3. Servais L, Mercuri E, Straub V, et al. Long-Term Safety and Efficacy Data of Golodirsen in Ambulatory Patients with Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping: A First-in-human, Multicenter, Two-Part, Open-Label, Phase 1/2 Trial. Nucleic Acid Ther. 2022;32(1):29-39. doi:10.1089/nat.2021.0043.
4. Study of SRP-4045 and SRP-4053 in DMD Patients (ESSENCE). https://clinicaltrials.gov/ct2/show/NCT02500381?term=golodirsen&cond=Duchenne+Muscular+Dystrophy&rank=3. Accessed January 23, 2026.
5. Institute for Clinical and Economic Review (ICER). Deflazacort, eteplirsen, and golodirsen for Duchenne muscular dystrophy: Effectiveness and value: Evidence Report. ICER_DMD-Final-Report_081519-2.pdf. July 11, 2019. Accessed January 23, 2026.

Policy History/Revision Information

Date	Summary of Changes

06/01/2026	**Coverage Rationale**
	• Revised coverage criteria:
	  ○ Added criterion requiring Vyondys 53 will not be used concomitantly with Duvyzat (givinostat)
	  ○ Replaced criterion for continuation of therapy requiring "documentation of an evaluation with an assessment of motor function ability by a neurologist with experience in treating Duchenne muscular dystrophy" with "documentation *of continued clinical benefit based on prescriber's* assessment*, including* an evaluation with a *standardized* assessment of motor function ability by a neurologist with experience in treating Duchenne muscular dystrophy"
	Supporting Information
	Archived previous policy version CSPA2025D0086G

Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Benefit Drug 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.