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Golodirsen

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Disclaimer

Medical policies are a set of written guidelines that support current standards of practice. They are based on current peer-reviewed scientific literature. A requested therapy must be proven effective for the relevant diagnosis or procedure. For drug therapy, the proposed dose, frequency and duration of therapy must be consistent with recommendations in at least one authoritative source. This medical policy is supported by FDA-approved labeling and/or nationally recognized authoritative references to major drug compendia, peer reviewed scientific literature and acceptable standards of medical practice. These references include, but are not limited to: MCG care guidelines, DrugDex (IIa level of evidence or higher), NCCN Guidelines (IIb level of evidence or higher), professional society guidelines, and CMS coverage policy.

Carefully check state regulations and/or the member contract.

Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.

Legislative Mandates

EXCEPTION: For Illinois only: Illinois Public Act 103-0458 [Insurance Code 215 ILCS 5/356z.61] (HB3809 Impaired Children) states all group or individual fully insured PPO, HMO, POS plans amended, delivered, issued, or renewed on or after January 1, 2025 shall provide coverage for therapy, diagnostic testing, and equipment necessary to increase quality of life for children who have been clinically or genetically diagnosed with any disease, syndrome, or disorder that includes low tone neuromuscular impairment, neurological impairment, or cognitive impairment.

EXCEPTION: For HCSC members residing in the state of Ohio, § 3923.60 requires any group or individual policy (Small, Mid-Market, Large Groups, Municipalities/Counties/Schools, State Employees, Fully-Insured, PPO, HMO, POS, EPO) that covers prescription drugs to provide for the coverage of any drug approved by the U. S. Food and Drug Administration (FDA) when it is prescribed for a use recognized as

safe and effective for the treatment of a given indication in one or more of the standard medical reference compendia adopted by the United States Department of Health and Human Services or in medical literature even if the FDA has not approved the drug for that indication. Medical literature support is only satisfied when safety and efficacy has been confirmed in two articles from major peer-reviewed professional medical journals that present data supporting the proposed off-label use or uses as generally safe and effective. Examples of accepted journals include, but are not limited to, Journal of American Medical Association (JAMA), New England Journal of Medicine (NEJM), and Lancet. Accepted study designs may include, but are not limited to, randomized, double blind, placebo controlled clinical trials. Evidence limited to case studies or case series is not sufficient to meet the standard of this criterion. Coverage is never required where the FDA has recognized a use to be contraindicated and coverage is not required for non-formulary drugs.

Coverage

Golodirsen (Vyondys 53^{m}) for the treatment of Duchenne muscular dystrophy is considered not medically necessary as a clinical benefit has not been established.

Golodirsen (Vyondys 53[™]) for the treatment of all other indications is considered experimental, investigational and/or unproven.

Policy Guidelines

None.

Description

Background

<u>Duchenne Muscular Dystrophyis slightly differenct</u>

Duchenne muscular dystrophy is an X-linked, recessive disorder that occurs in approximately 1 in every 3500 to 5000 males. (1) Although, it primarily affects males, a small number of females are also affected, but are usually asymptomatic. Even when symptomatic, most females typically only present with a mild form of the disease. According to U.S. epidemiologic data, the first signs or symptoms of Duchenne muscular dystrophy are noted at a mean age of 2.5 years (range, 0.2-1 year), and the mean age at definitive diagnosis is 4.9 years (range, 0.3-8.8 years). (2) Symptoms include motor difficulties such as running, jumping, walking upstairs, and an unusual waddling gait. Some improvement in symptoms may be seen from 3 to 6 years of age, though gradual deterioration resumes, and most patients lose ambulation by age 12 and require noninvasive ventilation by late teenage years. Patients progress from needing noninvasive ventilation only during night sleeping, followed by noninvasive ventilation during day and night over the course of 5 to 10 years.

Duchenne muscular dystrophy occurs as a result of variant(s) in the gene responsible for producing dystrophin, a cohesive protein that is essential for maintaining muscle support and

strength. *Duchenne muscular dystrophy* is the longest known human gene, and several variants can cause Duchenne muscular dystrophy. Most deletion variants disrupt the translational reading frame in the dystrophin messenger RNA resulting in an unstable, nonfunctional dystrophin molecule. As a result, there is progressive muscle degeneration leading to loss of independent ambulation, as well as other complications, including respiratory and cardiac complications. (3) Genetic testing is required to determine the specific *Duchenne muscular dystrophy gene* variant(s) for a definitive diagnosis, even when the absence of dystrophin protein expression has been confirmed by muscle biopsy. There are over 4700 variants in the Leiden Duchenne muscular dystrophy mutation database, and the most common variants are concentrated between exons 45 and 53.

Regulatory Status

In December 2019, golodirsen (Vyondys 53™; Sarepta Therapeutics) was approved by the U. S. Food and Drug Administration (FDA) for treatment of Duchenne muscular dystrophy patients who have a confirmed variant of the *Duchenne muscular dystrophy* gene that is amenable to exon 53 skipping. This indication was approved under accelerated approval based on an increase in dystrophin in skeletal muscle observed in some patients treated with golodirsen.

The FDA, under the accelerated approval regulations (21 CFR 314.510), requires that Sarepta conduct a randomized, double-blind, placebo-controlled trial of 96 weeks with an open-label extension to 144 weeks to verify the clinical benefit of golodirsen with the primary endpoint of a 6-minute walk test. The expected date of trial completion is April 2024 and final report submission to the FDA by October 2024.

The recommended dose of golodirsen is 30 mg/kg of body weight administered once weekly as a 35- to 60-minute intravenous infusion. Golodirsen is supplied in single-dose vials containing 100 mg (50 mg/mL).

Rationale

Medical policies assess the clinical evidence to determine whether the use of technology improves the net health outcome. Broadly defined, health outcomes are the length of life, quality of life and ability to function - including benefits and harms. Every clinical condition has specific outcomes that are important to patients and managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms.

To assess whether the evidence is sufficient to draw conclusions about the net health outcome of technology, 2 domains are examined: the relevance, and quality and credibility. To be relevant, studies must represent 1 or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The

quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. RCTs are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

Antisense Oliogonucleotides for Treatment of Duchenne Muscular Dystrophy Clinical Context and Therapy Purpose

The purpose of antisense nucleotides such as golodirsen in individuals who have a confirmed variant of the *Duchenne muscular dystrophy* gene that is amenable to exon 53 skipping, is to provide a treatment option that is an alternative to or an improvement on existing therapies.

The following PICO was used to select literature to inform this policy.

Populations

The relevant population of interest is individuals with a confirmed variant of the *Duchenne muscular dystrophy* gene that is amenable to exon 53 skipping.

Interventions

The therapy being considered are antisense oligonucleotides such as golodirsen. Phosphorodiamidate morpholino oligomer are stable oligonucleotide analogues that selectively bind to ribonucleic acid (RNA) to alter gene expression. In the case of golodirsen, the phosphorodiamidate morpholino oligomer binds to exon 53 of the dystrophin pre-messenger RNA causing the exon to be skipped and prevents that part of the code from being read during messenger RNA processing, thereby partially repairing the mutated reading frame in the messenger RNA coding sequence. As a result, golodirsen enables the production of an internally truncated, yet functional, dystrophin protein.

Comparators

There is no cure for Duchenne muscular dystrophy (DMD). Treatment is aimed at controlling symptoms to improve quality of life.

The following practice is currently being used to treat patients with a confirmed variant of the *Duchenne muscular dystrophy* gene: standard multidisciplinary care including pharmacotherapy. Pharmacotherapy primarily involves corticosteroids (mainly prednisone or deflazacort) for all patients regardless of the genetic variant. Treatment is initiated once patients reach a plateau of motor skill development, generally at ages 4 to 6 years, but before the onset of motor decline. The goal of corticosteroid therapy is to preserve ambulation and minimize respiratory, cardiac, and orthopedic complications. In addition, muscle weakness and pain, cardiac, pulmonary, orthopedic, and endocrine symptoms should be managed. (1)

Outcomes

The general outcomes of interest are a change in disease status, functional outcomes, quality of life, treatment-related mortality and treatment-related morbidity. See Table 1 for the description and relevance of specific outcome measures considered in this policy.

As per the U.S. Food and Drug Administration (FDA) guidance document for developing drugs for the treatment of dystrophinopathies, the FDA has no defined set of required or recommended clinical outcome measures to be used in clinical studies. The guidance states that manufacturers should propose and, if necessary, develop endpoints that can validly and reliably assess patients with a wide spectrum of symptoms and disease stages. Further, it states, "The sponsor should include an assessment of multiple efficacy endpoints, when feasible, to characterize the breadth of effects on dystrophin-related pathologies, including skeletal, respiratory, and cardiac muscle function, even if the primary endpoint is only one of these measures." (4)

Table 1. Health Outcome Measures That May Be Relevant to Muscular Dystrophinopathies

Outcome	Description	Scale	Clinically Meaningful
Measure			Difference/Comment
Griffiths	Comprehensive, child-	Consists of 2 sets of	Although used in
scale of	friendly developmental	scales, 1 for each	Duchenne muscular
mental	measure for continuous use	age group 0-2 yrs	dystrophy, this is a
development	from birth to 6 yrs (72 mos).	and 2-8 yrs.	non-specific measure
			and its appropriateness
			to measure clinical
			efficacy for Duchenne
			muscular dystrophy
			has not been
			established.
Bayley scales	Designed to assess	Composite scores	Although used in
of infant and	developmental functioning	are derived for	Duchenne muscular
toddler	from 1 mo to 42 mos of age.	cognitive, language,	dystrophy, this is a
development	Covers 5 domains: cognitive,	and motor	non-specific measure
(Third	language, motor, adaptive,	development and	and its appropriateness
edition)	and social-emotional	scaled to a metric,	to measure clinical
	development.	with a mean of 100,	efficacy for Duchenne
		standard deviation	muscular dystrophy
		of 15, and range of	has not been
North Star	Measures functional motor	40 to 160.	established.
		17-item scale that	Not reported.
Ambulatory Assessment	abilities. Appropriate for	grades each activity	
(NSAA) or an	ambulatory children ages ≥ 3 yrs of age with Duchenne	from 0 (unable to achieve	
,	muscular dystrophy.	independently) to 2	
age- appropriate	inusculai uystiopily.	(normal- no obvious	
appropriate		modification of	
		inounication of	

modified NSAA		activity). Scores can range from 0 to 34. Higher scores indicate improvement. Also includes recording timed items such as the 10-meter timed walk/run test and time to rise from the floor (Gower's test). These times are not included in the global score.	
6-minute walk test (6MWT) or shorter versions such as the 2- minute walk test	Measures strength and endurance, can be appropriate for patients as young as 5 - 6 yrs of age. Performance may increase with time in very young patients whereas performance tends to worsen with time in older patients. Floor effect of losing ambulation in older patients with more advanced disease and analyses of change in 6MWT can be strongly influenced by the inclusion or exclusion of patients who lose ambulation during the trial; such patients contribute zero values.	Assesses distance walked in 6 minutes.	Estimates of minimum clinically important difference for Duchenne muscular dystrophy patients of a change of 30 meters have been reported. (5, 6) Interpretation of 6MWT results is limited by the variability in testing procedures and patient motivation.
Myometric assessments	Appropriate to measure increase or preserve muscle strength, and it can be used to provide reliable measurements in children ages 5 yrs and older.		Clinical meaningfulness of differences in muscle strength should be supported by the magnitude of the effect observed or by the demonstration of a drug effect on an appropriate functional measure.

Specific clinical respiratory outcomes	Nocturnal desaturation, aspiration pneumonia, and progression to mechanically assisted ventilation.	Varied outcome measure (dichotomous or continuous).	Clinical meaningfulness of differences should be supported by the magnitude of the effect observed or by the demonstration of a drug effect on an appropriate functional measure.
Biomarker (such as dystrophin)	Deficiency of functional dystrophin appears to be the proximate cause of the symptomatic and functional consequences of dystrophinopathies, justifying interest in dystrophin as a biomarker and as a potential surrogate endpoint for accelerated approval.	Dystrophin levels are measured in muscle fibers by immuno-histochemical analysis to detect the presence or absence of dystrophin regardless of the actual quantity of dystrophin present while Western blot analysis quantifies the amount of dystrophin in the muscle tissue sample.	Dystrophin expression can only be viewed as supportive of the proof of principle. It is currently uncertain how predictive of sustained functional improvement the detected dystrophin level could be, and what levels may be required for a meaningful clinical improvement in Duchenne patients to be registered. Further, dystrophin produced by eteplirsen is an internally shortened protein and the clinical effect of the truncated dystrophin is still not fully known.

mos: month; yrs: years.

Study Selection Criteria

Methodologically credible studies were selected using the following principles:

- To assess efficacy outcomes, comparative controlled prospective trials were sought, with a preference for RCTs.
- In the absence of such trials, comparative observational studies were sought, with a preference for prospective studies.
- To assess long-term outcomes and adverse effects, single-arm studies that capture longer periods of follow-up and/or larger populations were sought.
- Studies with duplicative or overlapping populations were excluded.

Review of Evidence

The clinical development program of golodirsen for individuals with Duchenne muscular dystrophy includes a 2-part multicenter study, which is summarized in Table 2.

Table 2. Summary of the Clinical Development Program for Golodirsen

			<u> </u>			
Trial	NCT	Phase	Description	N	Design	Status
SKIP-NMD	NCT02310906	1/2	Dose-finding	39	DBRCT (part 1)	Complete
(7, 8, 9)			(part 1) and		and open	and
			efficacy and		label (part 2)	unpublished
			safety (part 2)			

DBRCT: double-blind randomized controlled trial; SKIP-NMD: Safety, Tolerability, and Pharmacokinetics Study (Part 1) Followed by an Open-Label Efficacy and Safety Evaluation (Part 2) of SRP-4053 in PATIENTS With Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping.

Pivotal Trial

Trial characteristics and results of the pivotal SKIP-NMD trial are summarized in Tables 3 and 4 respectively. This trial consisted of 2 parts: part 1 of the trial was for 12 weeks with the primary intent to assess safety and tolerability while the primary intent of part 2 was to assess change from baseline in 6-minute walk test at 144 weeks and change in dystrophin protein levels at 48 weeks. Results are summarized in Table 4. (8, 9) Results included a pre-planned interim analysis of dystrophin levels, dystrophin intensity, and exon-skipping from paired muscle biopsies of the biceps brachii from 25 patients receiving weekly intravenous infusions of golodirsen 30 mg/kg at baseline and week 48. Biopsies were examined using Western blot method to quantify dystrophin production (primary biological endpoint). Exon 53 skipping was evaluated using reverse transcription-polymerase chain reaction. An automated image analysis (MuscleMap[™]) used immunohistochemistry to assess dystrophin localization and sarcolemma fiber intensity.

Table 3. Summary of Trial Characteristics of Key Randomized Trials of Golodirsen

					Description of In	terventions
Study	Countries	Sites	Dates	Participants	Active	Comparator
SKIP- NMD (7, 8, 9)	U.S., France, Italy, and U.K.	5	2015- 2019	 Males aged 6 to 15 yrs (n = 25). Diagnosed with DMD, confirmed by a genetic test. Stable cardiac and pulmonary function. Stable dose of corticosteroids for at least 6 m. 	Part 1 (12 wks): Golodirsen escalating dose (n = 8) Part 2 (up to 168 wks): (n = 25)	Part 1 (12 wks): Placebo (n=4) Part 2 (up to 168 wks): Untreated group not amenable to exon 53 skipping (n=24)

		• Ma	jor	
		exc	:lusions ^a	
		• Tw	o-part	
		stu	dy ^{b,c}	

DMD: Duchenne muscular dystrophy; SKIP-NMD: Safety, Tolerability, and Pharmacokinetics Study (Part 1) Followed by an Open-Label Efficacy and Safety Evaluation (Part 2) of SRP-4053 in Patients With Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping; wks: weeks; yrs: years.

Table 4. Summary of Efficacy Results of Key Randomized Trials of Golodirsen

Study	% Change in mean normal dystrophin protein	6 MWT	Pulmonary Function	Safety
SKIP-NMD (7, 8, 9)			
N	25	Not reported	Not reported	41
Golodirsen	Baseline: 0.095%	Not reported	Not reported	The most
	Week 48: 1.019%			common
	Change: +0.924% ^a			adverse
				reactions
				(incidence ≥20%
				and higher than
				placebo) were
				headache,
				pyrexia, fall,
				abdominal pain,
				nasopharyngitis,
				cough, vomiting,
		_	_	and nausea.
Untreated group	Not reported	Not reported	Not reported	Not reported
(non-exon 53)				
Diff (95% CI)	Cannot be assessed	Cannot be	Cannot be	-
		assessed	assessed	
p-value	Cannot be assessed	Cannot be	Cannot be	-
		assessed	assessed	

^a As per The Institute for Clinical and Economic Review Report, the absolute increase in mean dystrophin levels from 0.918% to just over 1% of normal in patients treated for 48 weeks.

^a Previous treatment with the experimental agents BMN-195 (SMT C1100) or PRO053; current or previous treatment with any other experimental treatments within 12 weeks prior to study entry; major surgery within the last 3 months; presence of other clinically significant illness; major change in physical therapy regime within the last 3 months.

^b Part 1 primarily assessed safety and tolerability.

^c Part 2, the primary endpoints was change from baseline in 6MWT at 144 weeks and change in dystrophin protein levels at 48 weeks. Secondary endpoints include drug pharmacokinetics, change from baseline in forced vital capacity (FVC) percent predicted, and change from baseline in dystrophin intensity at 144 weeks.

CI: confidence interval; Diff: difference; 6MWT: 6-minute walk test; SKIP-NMD: Safety, Tolerability, and Pharmacokinetics Study (Part 1) Followed by an Open-Label Efficacy and Safety Evaluation (Part 2) of SRP-4053 in Patients with Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping.

The purpose of limitations tables (Tables 5 and 6) is to display notable limitations identified in each study. This information is synthesized as a summary of the body of evidence following each table and provides the conclusions on the sufficiency of the evidence supporting the position statement.

Table 5. Study Relevance Limitations

Study;	Population ^a	Intervention ^b	Comparator ^c	Outcomes ^d	Follow-
Trial					Up ^e
SKIP-				2. Primary endpoint was	
NMD				physiologic measure	
(7, 8,				(dystrophin level) and	
9)				correlation with clinical	
				benefit is unknown.	
				6. Clinical significant	
				difference not supported.	

The study limitations stated in this table are those notable in the current literature review; this is not a comprehensive gaps assessment.

SKIP-NMD: Safety, Tolerability, and Pharmacokinetics Study (Part 1) Followed by an Open-Label Efficacy and Safety Evaluation (Part 2) of SRP-4053 in Patients With Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping.

Table 6. Study Design and Conduct Limitations

Study	Allocationa	Blindingb	Selective	Data	Power ^e	Statistical ^f
			Reporting ^c	Completenessd		
SKIP-	3. No				1. Power	
NMD	description of				calculations	
(7, 8,	randomization				not	
9)	procedure or				reported	
	subsequent					
	concealment					

^a Population key: 1. Intended use population unclear; 2. Clinical context is unclear; 3. Study population is unclear; 4. Study population not representative of intended use.

^b Intervention key: 1. Not clearly defined; 2. Version used unclear; 3. Delivery not similar intensity as comparator; 4. Not the intervention of interest.

^c Comparator key: 1. Not clearly defined; 2. Not standard or optimal; 3. Delivery not similar intensity as intervention; 4. Not delivered effectively.

^d Outcomes key: 1. Key health outcomes not addressed; 2. Physiologic measures, not validated surrogates; 3. No CONSORT reporting of harms; 4. Not establish and validated measurements; 5. Clinical significant difference not prespecified; 6. Clinical significant difference not supported.

^e Follow-Up key: 1. Not sufficient duration for benefit; 2. Not sufficient duration for harms.

The study limitations stated in this table are those notable in the current review; this is not a comprehensive gaps assessment.

SKIP-NMD: Safety, Tolerability, and Pharmacokinetics Study (Part 1) Followed by an Open-Label Efficacy and Safety Evaluation (Part 2) of SRP-4053 in Patients With Duchenne Muscular Dystrophy Amenable to Exon 53 Skipping.

- ^a Allocation key: 1. Participants not randomly allocated; 2. Allocation not concealed; 3. Allocation concealment unclear; 4. Inadequate control for selection bias.
- ^b Blinding key: 1. Not blinded to treatment assignment; 2. Not blinded outcome assessment; 3. Outcome assessed by treating physician.
- ^c Selective Reporting key: 1. Not registered; 2. Evidence of selective reporting; 3. Evidence of selective publication.
- ^d Data Completeness key: 1. High loss to follow-up or missing data; 2. Inadequate handling of missing data; 3. High number of crossovers; 4. Inadequate handling of crossovers; 5. Inappropriate exclusions; 6. Not intent to treat analysis (per protocol for noninferiority trials).
- ^e Power key: 1. Power calculations not reported; 2. Power not calculated for primary outcome; 3. Power not based on clinically important difference.
- f Statistical key: 1. Analysis is not appropriate for outcome type: (a) continuous; (b) binary; (c) time to event; 2. Analysis is not appropriate for multiple observations per patient; 3. Confidence intervals and/or p values not reported; 4. Comparative treatment effects not calculated.

Summary of Evidence

For individuals with a confirmed variant of the *Duchenne muscular dystrophy* gene that is amenable to exon 53 skipping who receive golodirsen, the evidence includes a 2-part multicenter study which consists of a part 1 randomized, double-blind safety and tolerability study and a part 2 open-label efficacy and safety study. Relevant outcomes are disease-specific survival, change in disease status, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. Results of interim analysis were based on 25 patients who received a weekly intravenous infusion of golodirsen 30 mg/kg. At week 48, the mean change in dystrophin protein levels was 0.924% increase from the baseline (1.019% vs. 0.095%; P < 0.001). There are no satisfactory data, clearly establishing the effectiveness of the truncated dystrophin. Further, the minimum beneficial amount of dystrophin expression to be translated into a clinical benefit has yet to be established. In the absence of clinical data convincingly demonstrating a clinical effect, it cannot be concluded that the amount of dystrophin expressed with golodirsen will translate into a clinical benefit to patients. A confirmatory prospective and adequately powered trial is necessary to assess the net health benefit in patients with Duchenne muscular dystrophy amenable to 53 skipping. The evidence is insufficient to determine the effects of the technology on health outcomes.

Ongoing and Unpublished Clinical Trials

Some currently ongoing and unpublished trials that might influence this policy are listed in Table 7.

Table 7. Summary of Key Trials

NCT No.	Trial Name	Planned	Completion
		Enrollment	Date

Ongoing			
NCT02500381	Study of SRP-4045 and SRP-4053 in DMD	229	Oct 2025
	PATIENTS (ESSENCE)		
Unpublished			
NCT03532542	An Extension Study to Evaluate Casimersen or	171	Jul 2023
	Golodirsen in PATIENTS With Duchenne		
	Muscular Dystrophy		

NCT: national clinical trial; No.: number.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	96365
HCPCS Codes	J1429

^{*}Current Procedural Terminology (CPT®) ©2023 American Medical Association: Chicago, IL.

References

- 1. Bushby K, Finkel R, Birnkrant DJ, et al. Diagnosis and management of Duchenne muscular dystrophy, part 1: diagnosis, and pharmacological and psychosocial management. Lancet Neurol. Jan 2010; 9(1):177-193. PMID 19945913
- 2. Center for Disease Control and Prevention. Muscular Dystrophy: MD STARnet Data and Statistics (2016). Available at: https://www.cdc.gov> (accessed April 26, 2024).
- 3. Falzarano MS, Scotton C, Passarelli C, et al. Duchenne muscular dystrophy: from diagnosis to therapy. Molecules. Oct 07, 2015; 20(10):18168-18184. PMID 26457695
- 4. Duchenne muscular dystrophy and related dystrophinopathies: Developing drugs for treatment guidance for industry. Published Feb 2018. Available at: https://www.fda.gov (accessed April 26, 2024).
- 5. McDonald CM, Henricson EK, Abresch RT, et al. The 6-minute walk test and other endpoints in Duchenne muscular dystrophy: longitudinal natural history observations over 48 weeks from a multicenter study. Muscle Nerve. Sep 2013; 48(3):343-356. PMID 23681930
- Henricson E, Abresch R, Han JJ, et al. The 6-minute walk test and person-reported outcomes in boys with Duchenne muscular dystrophy and typically developing controls: Longitudinal comparisons and clinically-meaningful changes over one year. PLoS Curr. Jul 2013; 5. PMID 23867975

- 7. Center for Drug Evaluation and Research. Application Number: 206488orig1s000. Summary Review (2016). Available at: https://www.accessdata.fda (accessed April 26,2024).
- 8. Prescribing Label: VYONDYS 53 (golodirsen) injection, for intravenous use. Available at: https://www.accessdata.fda.gov (accessed April 26,2024).
- 9. Frank DE, Schnell FJ, Akana C, et al. Increased dystrophin production with golodirsen in patients with Duchenne muscular dystrophy. Neurology. May 26, 2020; 94(21):e2270-e2282. PMID 32139505

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at https://www.cms.hhs.gov.

Policy History/Revision		
Date	Description of Change	
12/15/2024	Document updated with literature review. Coverage unchanged. No new	
	references added; one removed.	
10/15/2023	Reviewed. No changes.	
08/15/2022	Document updated with literature review. Coverage unchanged. Reference 9	
	added, others updated.	
07/01/2021	Reviewed. No changes.	
11/01/2020	New medical document. Golodirsen (Vyondys 53™) for the treatment of Duchenne	
	muscular dystrophy is considered not medically necessary as a clinical benefit has	
	not been established. Golodirsen (Vyondys 53™) for the treatment of all other	
	indications is considered experimental, investigational and/or unproven.	