

PHARMACY POLICY STATEMENT

Georgia Medicaid

DRUG NAME	Zolgensma (onasemnogene abeparvovec-xioi)
BILLING CODE	J3399
BENEFIT TYPE	Medical
SITE OF SERVICE ALLOWED	Outpatient
STATUS	Prior Authorization Required

Zolgensma is an adeno-associated virus (AAV) vector gene therapy initially approved by the FDA in 2019. It is indicated for the treatment of pediatric patients less than 2 years of age with spinal muscular atrophy (SMA) with bi-allelic mutations in the survival motor neuron (SMN1) gene. Spinal muscular atrophy (SMA) is a genetic, autosomal recessive neuromuscular disorder caused by a defect in the survival of the motor neuron 1 (SMN1) gene. SMA is the leading genetic cause of infant mortality and affects approximately 1 in every 10,000 infants. There are multiple types of SMA, and the age of onset and severity of the disease varies with each type.

Zolgensma (onasemnogene abeparvovec-xioi) will be considered for coverage when the following criteria are met:

Spinal Muscular Atrophy (SMA)

For **initial** authorization:

1. Member is less than two years of age;
2. Medication must be prescribed by or in consultation with a neurologist; AND
3. Member has a diagnosis of SMA confirmed by genetic/newborn testing showing any of the following:
 - a) Homozygous gene deletion of the survival motor neuron 1 (SMN1) gene (e.g., absence of SMN1 gene)
 - b) Homozygous mutation of the SMN1 gene (e.g., biallelic mutation of exon 7)
 - c) Compound heterozygous mutation in the SMN1 gene (e.g., deletion of SMN1 exon 7 [allele 1] and mutation of SMN1 [allele 2])
4. Member has 2 to 4 copies of SMN2; AND
5. Member has documentation of ALL of the following in chart notes:
 - a) Liver function tests (clinical exam, AST, ALT, total bilirubin, prothrombin time);
 - b) Platelet counts and troponin-I;
 - c) Baseline testing for the presence of anti-AAV9 antibodies (titer must be $\leq 1:50$); AND
6. Member's gestational age is ≥ 35 weeks if premature neonate; AND
7. Medication must **not** be concomitantly used with Spinraza or Evrysdi (discontinuation of Spinraza and Evrysdi prior to Zolgensma therapy is required); AND
8. Member has **not** have any of the following:
 - a) Signs of aspiration;
 - b) Active viral infection;
 - c) Advanced SMA (e.g., complete paralysis of limbs, permanent ventilator dependence)
 - d) Prior treatment with Zolgensma.
9. **Dosage allowed:** 1.1×10^{14} vector genomes (vg) per kg of body weight.

If all the above requirements are met, the medication will be approved for 1 month.

For **reauthorization**:

1. Zolgensma will not be reauthorized for continuous use.

CareSource considers Zolgensma (onasemnogene abeparvovec-xioi) not medically necessary for the treatment of conditions that are not listed in this document. For any other indication, please refer to the Off-Label policy.

DATE	ACTION/DESCRIPTION
05/31/2019	New policy for Zolgensma created.
06/29/2020	J code updated.
05/24/2022	Transferred to a new template. Updated references. Updated age to 2 years old and younger. Updated the copy numbers to 2 to 4 copies of SMN2. Clarified SMA diagnosis. Removed childhood vaccination requirement. Added exclusion for previous Zolgensma administration and concomitant Evrysdi use. Removed baseline symptom measurement.

References:

1. Zolgensma [prescribing information]. Bannockburn, IL: AveXis, Inc; October 2021.
2. AveXis, Inc. Gene Transfer Clinical Trial for Spinal Muscular Atrophy Type 1. In: ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine (US). Available from: <https://clinicaltrials.gov/ct2/show/NCT02122952?term=ZOLGENSMA&rank=8>. Identifier: NCT02122952.
3. Mendell JR, Al-Zaidy S, Shell R, et al. Single-Dose Gene-Replacement Therapy for Spinal Muscular Atrophy. *N Engl J Med* 2017;377:1713-22.
4. Kolb SJ, Coffey CS, Yankey JW, et al. Natural history of infantile-onset spinal muscular atrophy. *Ann Neurol*. 2017;82(6):883-891.
5. Govoni A, Gagliardi D, Comi GP, Corti S. Time is motor neuron: therapeutic window and its correlation with pathogenic mechanisms in spinal muscular atrophy. *Mol Neurobiol*. 2018;55(8):6307-6318.
6. Stifani N. Motor neurons and the generation of spinal motor neuron diversity. *Front Cell Neurosci*. 2014;8:293.
7. Prior TW. Perspectives and diagnostic considerations in spinal muscular atrophy. *Genet Med*. 2010;12(3):145-152.
8. Farrar MA, et al. Emerging therapies and challenges in spinal muscular atrophy. *Ann Neurol* 2017;81(3):355–368.
9. De Sanctis R, et al. Developmental milestones in type I spinal muscular atrophy. *Neuromusc Disord* 2016;26(11):754–759.
10. Lowes LP, et al. Impact of age and motor function in a phase 1/2A study of infants with SMA Type 1 receiving single-dose gene replacement therapy. *Pediatric Neurology* (2019).
11. Waldrop MA, et al. Current Treatment Options in Neurology—SMA Therapeutics. *Curr Treatment Options Neurology*. 2019;21(6):25.
12. Glascock, Jacqueline et al. Revised Recommendations for the Treatment of Infants Diagnosed with Spinal Muscular Atrophy via Newborn Screening Who have 4 Copies of SMN2. *Journal of Neuro Dis.* (2020) 97–100.
13. Novartis Gene Therapies, Inc. Pre-Symptomatic Study of Intravenous Onasemnogene Abeparvovec-xioi in Spinal Muscular Atrophy (SMA) for Patients with Multiple Copies of SMN2 (SPR1NT). Jan 2022. Available from: <https://clinicaltrials.gov/ct2/show/NCT03505099>
14. Strauss KA, et al. Onasemnogene abeparvovec for presymptomatic infants with two copies of SMN2 at risk for spinal muscular atrophy type 1: the Phase III SPR1NT trial. *Nat Med*. 2022. <https://doi.org/10.1038/s41591-022-01866-4>.
15. Strauss KA, et al. Onasemnogene abeparvovec for presymptomatic infants with three copies of SMN2 at risk for spinal muscular atrophy: the Phase III SPR1NT trial. *Nat Med*. 2022. <https://doi.org/10.1038/s41591-022-01867-3>.

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Revised date: 05/24/2022