

Zolgensma® (onasemnogene abeparvovec-xioi) (Intravenous)

Document Number: IC-0468

Last Review Date: 08/01/2022

Date of Origin: 06/01/2019

Dates Reviewed: 06/2019, 08/2020, 08/2021, 08/2022

I. Length of Authorization

Coverage will be provided for one dose and may not be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- 1 kit (based on weight chart below)

B. Max Units (per dose and over time) [HCPCS Unit]:

- 1 kit (based on weight chart below)

III. Initial Approval Criteria ¹⁻¹¹

Submission of medical records related to the medical necessity criteria is **REQUIRED** on all requests for authorizations. Records will be reviewed at the time of submission. Please provide documentation via direct upload through the PA web portal or by fax. Zolgensma is exclusively distributed by Accredo Health Services, all requests from non-Accredo providers please contact Health New England directly.

Coverage is provided in the following conditions:

Spinal Muscular Atrophy (SMA) † Φ

- Patient must be less than 2 years of age; **AND**
- Patient has a diagnosis of 5q spinal muscular atrophy confirmed by either bi-allelic deletion or dysfunctional point mutation of the *SMN1* gene; **AND**
- Patient must have SMA phenotype 1 confirmed by one or more of the following:
 - Patient must have 1-2 copies of the *SMN2* gene; **OR**
 - Patient has 3 copies of the *SMN2* gene in the absence of the c.859G>C single base substitution modification in exon 7; **AND**
- Patient must have a baseline anti-AAV9 antibody titer of $\leq 1:50$ measured by ELISA; **AND**
- Patient will have baseline liver function assessed prior to and subsequent to therapy for at least 3 months; **AND**
- Used concomitantly with systemic corticosteroids (see dosage/administration below); **AND**

- Patient does not have advanced disease (complete limb paralysis, permanent ventilation support, etc.); **AND**
- Will not be used in combination with other agents for SMA (e.g., nusinersen, risdiplam, etc.)

† FDA Approved Indication(s); ‡ Compendium Recommended Indication(s); Ⓢ Orphan Drug

IV. Renewal Criteria

Coverage cannot be renewed.

V. Dosage/Administration

Indication	Dose
SMA1	<p><u>Preparing for Administration:</u></p> <ul style="list-style-type: none"> • One day prior to Zolgensma infusion, begin administration of systemic corticosteroids equivalent to oral prednisolone at 1 mg/kg of body weight per day for a total of 30 days <p><u>Zolgensma Infusion:</u></p> <ul style="list-style-type: none"> • Administer as a single-dose intravenous infusion through a venous catheter • Administer as a slow infusion over 60 minutes • The recommended dose of Zolgensma is 1.1×10^{14} vector genomes per kilogram (vg/kg) of body weight

- Zolgensma is shipped frozen at ≤ -60 °C. Store refrigerated, thaw prior to infusion. DO NOT RE-FREEZE. Must be used within 14 days of receipt.
- Zolgensma is an adeno-associated virus vector-based gene therapy. Follow precautions for viral vector shedding for one month after the infusion
- For single-dose intravenous infusion only.

VI. Billing Code/Availability Information

HCPCS code:

- J3399 – Injection, onasemnogene abeparvovec-xioi, per treatment, up to 5×10^{15} vector genomes; 1 billable unit = 1 treatment, up to 5×10^{15} vector genomes

NDC:

Zolgensma kit sizes:

Patient Weight (kg)	NDC	Patient Weight (kg)	NDC
2.6 – 3.0	71894-0120	8.1 – 8.5	71894-0131
3.1 – 3.5	71894-0121	8.6 – 9.0	71894-0132
3.6 – 4.0	71894-0122	9.1 – 9.5	71894-0133
4.1 – 4.5	71894-0123	9.6 – 10.0	71894-0134
4.6 – 5.0	71894-0124	10.1 – 10.5	71894-0135
5.1 – 5.5	71894-0125	10.6 – 11.0	71894-0136
5.6 – 6.0	71894-0126	11.1 – 11.5	71894-0137
6.1 – 6.5	71894-0127	11.6 – 12.0	71894-0138
6.6 – 7.0	71894-0128	12.1 – 12.5	71894-0139
7.1 – 7.5	71894-0129	12.6 – 13.0	71894-0140

VII. References

1. Zolgensma [package insert]. Bannockburn, IL: AveXis, Inc., October 2021. Accessed July 2022.
2. Mendell JR, Al-Zaidy S, Shell R. Single-dose gene-replacement therapy for spinal muscular atrophy. *N Engl J Med*. 2017;377(18):1713-1722. doi: 10.1056/NEJMoa1706198.
3. Wang CH, Finkel RS, Bertini ES, et al. Consensus statement for standard of care in spinal muscular atrophy. *J Child Neurol*. 2007 Aug;22(8):1027-49.
4. Prior TW, Finanger E. Spinal muscular atrophy. GeneReviews. www.ncbi.nlm.nih.gov/books/NBK1352/ (Accessed on June 10, 2019)
5. Dabbous O, Maru B, Jansen JP, et al. Survival, Motor Function, and Motor Milestones: Comparison of AVXS-101 Relative to Nusinersen for the Treatment of Infants with Spinal Muscular Atrophy Type 1. *Adv Ther*. 2019 May;36(5):1164-1176.
6. Al-Zaidy S, Pickard AS, Kotha K, et al. Health outcomes in spinal muscular atrophy type 1 following AVXS-101 gene replacement therapy. *Pediatr Pulmonol*. 2019 Feb;54(2):179-185.
7. Al-Zaidy SA, Kolb SJ, Lowes L, et al. AVXS-101 (Onasemnogene Abeparvovec) for SMA1: Comparative Study with a Prospective Natural History Cohort. *J Neuromuscul Dis*. 2019;6(3):307-317. doi: 10.3233/JND-190403.
8. Lowes LP, Alfano LN, Arnold WD, 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. *Pediatr Neurol*. 2019;98:39-45.
9. Day JW, Finkel RS, Chiriboga CA, et al. Onasemnogene abeparvovec gene therapy for symptomatic infantile-onset spinal muscular atrophy in patients with two copies of SMN2 (STRIVE): an open-label, single-arm, multicentre, phase 3 trial. *Lancet Neurol*. 2021 Apr;20(4):284-293. doi: 10.1016/S1474-4422(21)00001-6. Epub 2021 Mar 17.
10. Mendell JR, Al-Zaidy SA, Lehman KJ, et al. Five-Year Extension Results of the Phase 1 START Trial of Onasemnogene Abeparvovec in Spinal Muscular Atrophy. *JAMA Neurol*. 2021 May 17:e211272. doi: 10.1001/jamaneurol.2021.1272.
11. (ICER) IfCaER . Spinraza and Zolgensma for Spinal Muscular Atrophy: Effectiveness and Value. Final Evidence Report. April 3, 2019 (Updated May 24, 2019) 2019.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
G12.0	Infantile spinal muscular atrophy, type I [Werdnig-Hoffmann]

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Articles (LCAs) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCA/LCD): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC