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Medical benefit drug policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and therefore subject to change.

P&T Date: 02/12/2026

Onasemnogene abeparvovec Products
Itvisma® (onasemnogene abeparvovec-brve)
Zolgensma® (onasemnogene abeparvovec)

HCPCS: Itvisma: C9309; Zolgensma: J3399

Policy:

Requests must be supported by submission of chart notes and patient specific documentation.

- A. Coverage of the requested drug is provided when all the following are met:
 - a. FDA approved age
 - b. Prescribed by or in consultation with a neurologist or neuromuscular specialist with expertise in treating spinal muscle atrophy (SMA)
 - c. Diagnosis of spinal muscle atrophy with genetically-confirmed double-deletion of spinal motor neuron 1 (SMN1) gene and less than or equal to four copies of the SMN2 gene
 - d. Must not have antibodies against the viral vector, adeno-associated virus serotype 9 vector (AAV9), > 1:50
 - e. Must receive oral corticosteroids daily starting at least 24 hours prior to therapy and continuing 30 days after therapy with Zolgensma
 - f. The patient does not have advanced SMA (for example: complete paralysis of limbs, permanent ventilator dependence)
 - g. The member will not be taking concurrently with Spinraza® or Evrysdi™
 - h. The member has not received prior treatment with any gene therapy or are being considered for treatment with any other gene therapy for SMA
 - i. The requesting physician attests to providing clinical outcome information within the appropriate provider portal as requested by BCBSM
 - j. Trial and failure, contraindication, OR intolerance to the preferred drugs as listed in BCBSM/BCN's utilization management medical drug list
- B. Quantity Limitations, Authorization Period and Renewal Criteria
 - a. Quantity Limit: Align with FDA recommended dosing
 - b. Authorization Period: 3 months
 - c. Renewal Criteria: Not applicable as no further authorization will be provided.

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***Note: Coverage and approval duration may differ for Medicare Part B members based on any applicable criteria outlined in Local Coverage Determinations (LCD) or National Coverage Determinations (NCD) as determined by Center for Medicare and Medicaid Services (CMS). See the CMS website at <http://www.cms.hhs.gov/>. Determination of coverage of Part B drugs is based on medically accepted indications which have supported citations included or approved for inclusion determined by CMS approved compendia.

Background Information:

- Zolgensma is an AAV9 that works by replacing the missing or defective SMN1 gene with a functional copy that makes SMN protein and is indicated for the treatment of pediatric patients less than 2 years of age with SMA with bi-allelic mutations in the SMN1 gene.
- Itvisma is an AAV vector-based gene therapy indicated for the treatment of SMA in adult and pediatric patients 2 years of age and older with confirmed mutation in SMN1 gene.
- SMA is a severe, inherited progressive neuromuscular disease that causes devastating muscle atrophy and disease-related complications in approximately 4 to 10 per 100,000 live births. SMA is caused by a mutation in the SMN1 gene that results in a deficiency of SMN protein. People have a “backup” copy of this gene called SMN2 that produces low levels of SMN protein. SMA varies in severity with four different types that inversely correlates to the number of SMN2 copies a person has. The type of SMA a person has is based on function and age of onset. Type 1 is the most severe type of SMA and the most common, affecting 6 out of every 10 children with SMA. Those with Type 1 have the fewest number of SMN2 copies (usually 2 or fewer). Type 1 patients have an age of onset usually between 0-6 months, and as the natural history of those with Type 1 SMA progresses the children will never be able to sit unsupported. Untreated life expectancy of Type 1 patients is less than 2 years old. Type 2 patients usually present around 7-18 months of age and will have the ability to sit, but never stand. The majority of SMA Type 2 patients have 3 copies of SMN2. Type 3 SMA patients present after 18 months of age and usually are able to stand and walk. About 51% of the patients with SMA Type 3 have 3 copies of SMN2 while 46% have 4 copies of SMN2. Although there is an inverse correlation between severity of disease and number of SMN2 copies, diagnoses of type is not solely based on number of SMN2 copies.
- The diagnosis of SMA is based on molecular genetic testing. Genetic testing of SMN1/SMN2 is highly reliable and it is first line investigation when the condition is suspected in a typical case. In approximately 96% of patients, SMA is caused by homozygous absence of exons 7 and 8 of the SMN1 gene, or, in some cases, only of exon 7.
- SMA patients' motor function and ability are monitored in a variety of ways, including but not limited to Bayley Scales of Infant and Toddler development (BSID), Motor Function Measure 32 (MFM-32), Hammersmith Infant Neurological Exam (HINE), Hammersmith Functional Motor Scale Expanded (HFMSE), Revised Upper Limb Module (RULM) Test (non-ambulatory patients), Six-Minute Walk Test (6MWT) (ambulatory patients only) and Children's Hospital of Philadelphia Infant Test of Neuromuscular Disorders (CHOP INTEND).
- There is currently no data supporting co-administration of onasemnogene abeparvovec with other SMA therapies, or in patients with advanced SMA (e.g., complete paralysis of limbs, permanent ventilator dependence).
- CureSMA developed a treatment algorithm published in 2018. In September 2019, the working group reconvened to update its stance on infants with 4 copies of SMN2 on newborn screening. The working group has updated their stance and recommends immediate treatment for infants diagnosed with SMA via newborn screening with 4 copies of SMN2. Zolgensma's pivotal STR1VE trial included patients with SMA Type 1 who had 2 copies of SMN2. Zolgensma's SPR1NT trial, an ongoing Phase III, open-label, single-arm, multi-center trial in presymptomatic patients is being studied in patients with either 2 or 3 copies of SMN2, and included one patient with four copies of SMN2. The RESTORE registry is an ongoing, prospective, multicenter, multinational, non-interventional observation study that is evaluating long-term outcomes in patients with SMA. This study included 4 patients with 4 copies of SMN2

and 5 patients with 4+ copies of SMN2 who received Zolgensma. The CHOP INTEND scores showed improvement from baseline in this subset of patients.

- The approval of Ivvisma was based on efficacy results from the Phase III, randomized, double-blind STEER study, which included 136 patients aged 2 to 17 years old with SMA who were treatment-naïve and able to sit but never able to walk independently. Patients with elevated (reference to > 1:50) baseline serum anti-AAV9 antibody titer were excluded.
 - The primary endpoint was the change from baseline in Hammersmith Functional Motor Scale –Expanded (HFMSE) total score, which evaluates motor function in patients with SMA who have limited ambulation, comprising of 33 graded items that assess various motor skills ranging from sitting to using the stairs, at the end of follow-up, defined as the average of the Week 48 and Week 52 assessment, in Ivvisma compared to sham.
 - Patients in the Ivvisma group saw a mean change of 2.39 points in the HFMSE total score compared to 0.51 points in the sham group, a treatment difference of 1.88 points (p-value = 0.0074).
 - The Phase IIIb STRENGTH trial enrolled 27 patients 2 to 17 years of age who have discontinued treatment with Spinraza® and/or Evrysdi® (mean duration of prior treatment 4.32 years and 2.98 years, respectively). The findings in this trial demonstrated stabilization of SMA based on the HFMSE score for the overall study population over 52 weeks.
- In the clinical trials patients were required to have baseline anti-AAV9 antibody titers of ≤ 1:50, measured using an enzyme-linked immunosorbent assay (ELISA). Evidence of prior exposure to AAV9 was uncommon. The safety and efficacy of onasemnogene abeparvovec in patients with anti-AAV9 antibody titers above 1:50 have not been evaluated. Antibodies titers above 1:50 may inhibit the efficacy of gene therapy.
- Bridging therapy with either Evrysdi or Spinraza prior to the use of onasemnogene abeparvovec can be appropriate in young patients with elevated anti-AAV9 antibodies. Elevated titers are not common (~13%) in SMA patients. Those that do have titers can get it from the placenta at birth from mothers who have acquired them. Just like other maternal antibodies passed on to children, these antibodies diminish over time. Bridging therapy allows patients to start therapy without delay, and waits for the titers to naturally diminish. Scientists have stressed the importance of treating SMA as early as possible, and suggested that patients with elevated antibodies be given disease-modifying therapies that work through different mechanisms — Spinraza (nusinersen) or Evrysdi (risdiplam) — as “bridge treatments” until able to receive onasemnogene abeparvovec.
- Onasemnogene abeparvovec can increase liver enzyme levels and cause acute serious liver injury. Oral corticosteroid medication should be given one day before and for 30 days after infusion with onasemnogene abeparvovec to avoid liver injury.
- Provider portals are used to capture clinical outcome information for patients on select high-cost treatments, such as gene and cellular therapies. If a patient meets medical necessity as defined by this policy and is approved for treatment, the requesting physician must attest to providing clinical outcome information within the appropriate provider portal at the requested cadence.

References:

1. Zolgensma [prescribing information]. Bannockburn, IL: Novartis Gene Therapies. Inc.; February 2025
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3. SMA Overview. SMA Foundation. <http://www.smafoundation.org/wp-content/uploads/2012/03/SMA-Overview.pdf> Accessed September 4, 2020
4. Mercuri E, Bertini E, Iannaccone ST. Childhood spinal muscular atrophy: controversies and challenges. *Lancet Neurol.* 2012; 11(5): 443-52.
5. Lally C, Jones C, Farwell W, et al. Indirect estimation of the prevalence of spinal muscular atrophy Type I, II, and III in the United States. *Orphanet J Rare Dis.* 2017; 12(1): 175.
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13. Finkel RS, Mercuri E, Meyers OH, et al. Diagnosis and management of spinal muscular atrophy: Part 2: pulmonary and acute care; medications, supplements and immunizations; other organ systems; and ethics. *Neuromuscular Disorders.* March 2018; 28(3): 197 – 207.
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Policy History		
#	Date	Change Description
2.5	Effective Date: 02/12/2026	Updated title from Zolgensma (onasemnogene abeparvovec-xioi) to Onasemnogene abeparvovec Products. Added Itvisma to policy Added criteria that the member has not received prior treatment with any gene therapy or are being considered for treatment with any other gene therapy for SMA
2.4	Effective Date: 01/15/2026	UM medical management system update for MAPPO and BCNA for Itvisma
2.3	Effective Date: 12/08/2025	UM medical management system update for BCBS and BCN for Itvisma
2.2	Effective Date: 08/07/2025	Annual review of criteria was performed, no changes were made
2.1	Effective Date: 08/08/2024	Updated criteria to specify that Zolgensma will not be used concurrently with Evrysdi/Spinraza due to a bridging scenario
2.0	Effective Date: 06/06/2024	Annual review of criteria was performed, no changes were made
1.9	Effective Date: 06/08/2023	Annual review of criteria was performed, no changes were made
1.8	Effective Date: 06/09/2022	Updated criteria to allow for Zolgensma use in those with 4 or fewer copies of SMN2 to align with CureSMA guidelines
1.7	Effective Date: 04/14/2022	Update to include Audaire Health™ requirements
1.6	Effective Date: 04/08/2021	This policy replaces previously approved criteria that was embedded in a drug review which will be retired.
1.5	Effective Date: 08/13/2020	Annual review of criteria was performed, no changes were made.
1.4	Effective Date: 02/03/2020	UM medical management system update for MAPPO and BCNA for Zolgensma
1.3	Effective Date: 08/15/2019	New full drug review
1.2	Effective Date: 08/01/2019	UM medical management system update for BCBSM for Zolgensma
1.1	Effective Date: 06/01/2019	UM medical management system update for BCN for Zolgensma
1.0	Effective Date: 02/14/2019	New Policy

* The prescribing information for a drug is subject to change. To ensure you are reading the most current information it is advised that you reference the most updated prescribing information by visiting the drug or manufacturer website or <http://dailymed.nlm.nih.gov/dailymed/index.cfm>.

Blue Cross Blue Shield/Blue Care Network of Michigan

Medication Authorization Request Form



This form is to be used by participating physicians to obtain coverage for **drugs covered under the medical benefit**. For commercial members only, please complete this form and submit via fax to 1-877-325-5979. If you have any questions regarding this process, please contact BCBSM Provider Relations and Servicing or the Medical Drug Helpdesk at 1-800-437-3803 for assistance.

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PATIENT INFORMATION	PHYSICIAN INFORMATION
Name	Name
ID Number	Specialty
D.O.B. ☐ Male ☐ Female	Address
Diagnosis	City /State/Zip
Drug Name	Phone/Fax: P: () - F: () -
Dose and Quantity	NPI
Directions	Contact Person
Date of Service(s)	Contact Person Phone / Ext.

STEP 1: DISEASE STATE INFORMATION

- Is this request for: ☐ Initiation ☐ Continuation Date patient started therapy: _____
- Administered by patient or a medical professional? ☐ patient (self) ☐ health care professional (physician, nurse, etc.)
- Site of administration? ☐ Provider office/Home infusion ☐ Other: _____
☐ Hospital outpatient facility (go to #4) Reason for Hospital Outpatient administration: _____
☐ Hospital inpatient facility for Car-T therapy only (for example: Kymriah, Yescarta, or Tecartus) (go to #5)
- Please specify location of administration if hospital outpatient infusion: _____
- Please specify location of administration if hospital inpatient infusion: _____
- Please provide the NPI number for the place of administration: _____
- Initiation AND Continuation of therapy:**
 - What is the patient's diagnosis? _____
 - What other medication has the patient received for their condition? Please list _____
 - Please describe the response to previous therapies: _____
 - Will the patient be receiving any other treatment for the listed condition while on this medication? Please list: _____
 - Please list any labs values important for diagnosing or monitoring this patient's condition: _____
- Continuation of therapy:**
 - Has the patient progressed while on this medication? ☐ yes ☐ no
 - How has the patient's condition changed while on this medication?

☐ Improved: Please describe: _____
☐ Stable: please describe: _____
☐ Worsened; Please describe: _____
☐ Other; Please describe: _____

Chart notes are required for the processing of all requests. Please add any other supporting medical information necessary for our review (required)

Coverage will not be provided if the prescribing physician's signature and date are not reflected on this document.

☐ Request for expedited review: I certify that applying the standard review time frame may seriously jeopardize the life or health of the member or the member's ability to regain maximum function

Physician's Name	Physician Signature	Date
Step 2: Checklist	☐ Form Completely Filled Out ☐ Provide chart notes	☐ Attach test results
Step 3: Submit	By Fax: BCBSM Specialty Pharmacy Mailbox 1-877-325-5979	By Mail: BCBSM Specialty Pharmacy Program P.O. Box 312320, Detroit, MI 48231-2320

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7/26/2018, 9/18/2018; 1/31/2020; 3/17/2020; 8/9/2021