The following clinical reprints may potentially help you support access for ZOLGENSMA® (onasemnogene abeparvovec-xioi).

  
  **Overview:** This study details the Phase I clinical trial result of a single dose of AVXS-101 in 15 patients with SMA Type 1. Patients were enrolled in two cohorts: Cohort 1 received a low dose and Cohort 2 received a high dose. The primary outcome was safety and the secondary outcome was the time until death or the need for permanent ventilatory assistance. Motor function of patients was measured using the CHOP INTEND, and scores were compared with scores recorded in natural-history studies.

  Please note, the efficacy of ZOLGENSMA in pediatric patients less than 2 years of age with SMA with bi-allelic mutations in the survival motor neuron 1 (SMN1) gene was evaluated in an open-label, single-arm Phase 3 clinical trial (ongoing) and an open-label, single-arm, ascending-dose Phase 1 clinical trial (completed).

  
  **Overview:** This prospective cohort study describes the progression of SMA Type I without treatment. Infants with SMA Type I were followed for up to 36 months with serial clinical, motor function, laboratory, and electrophysiologic outcome assessments. Of the 34 infants with SMA Type I who were enrolled in the study, 50% completed at least 12 months of follow-up. The median age at reaching the combined endpoint of death or requiring at least 16 hours/day of ventilation support was 13.5 months (interquartile range 8.1-22.0 months).

- **Finkel RS, Mercuri E, Meyer OH, et al; for the SMA Care group.** Diagnosis and management of spinal muscular atrophy: Part 2: Pulmonary and acute care; medications, supplements and immunizations; other organ systems; and ethics. *Neuromuscul Disord.* 2018;28(3):197-207.
  
  **Overview:** This second part of a 2-part series provides standard-of-care recommendations for SMA on pulmonary management and acute care issues. It also addresses other organ involvement in the severe forms of spinal muscular atrophy, the role of medications, and ethical issues.

  
  **Overview:** The aim of this longitudinal, multicenter, prospective natural history was to understand disease progression in infantile-onset SMA as compared to age-matched control of healthy infants and identify meaningful biomarkers. Twenty-six infants with SMA and 27 control infants aged <6 months were studied at 14 centers over 21 months within the NeuroNEXT (National Network for Excellence in Neuroscience Clinical Trials) Network. The CHOP INTEND (Children’s Hospital of Philadelphia Infant Test of Neuromuscular Disorders) was used to measure motor functioning of natural-history patients. The study developed definitive controlled data sets on the natural history of infantile-onset SMA.

  
  **Overview:** This article reviews clinical and experimental reports that link the loss of survival motor neuron (SMN) protein with peripheral organ deficiency and malfunction.

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**Call your AveXis Field Reimbursement Manager for questions related to reimbursement. You may also contact the OneGene Program™ at 855-441-GENE (4363) at any time to be connected with a Field Reimbursement Manager for additional assistance.**

Please see Indication and Important Safety Information, including Boxed Warning for Acute Serious Liver Injury, on the next page and the accompanying Full Prescribing Information.
Indication and Important Safety Information

Indication
ZOLGENSMA is an adeno-associated virus vector-based gene therapy 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 1 (SMN1) gene.

Limitations of Use
The safety and effectiveness of repeat administration or the use in patients with advanced SMA (e.g., complete paralysis of limbs, permanent ventilator dependence) has not been evaluated with ZOLGENSMA.

Important Safety Information

BOXED WARNING: Acute Serious Liver Injury
Acute serious liver injury and elevated aminotransferases can occur with ZOLGENSMA. Patients with pre-existing liver impairment may be at higher risk. Prior to infusion, assess liver function of all patients by clinical examination and laboratory testing (e.g., hepatic aminotransferases [aspartate aminotransferase (AST) and alanine aminotransferase (ALT)], total bilirubin, and prothrombin time). Administer a systemic corticosteroid to all patients before and after ZOLGENSMA infusion. Continue to monitor liver function for at least 3 months after infusion.

WARNINGS AND PRECAUTIONS

Thrombocytopenia
Transient decreases in platelet counts, some of which met the criteria for thrombocytopenia, were observed at different time points after ZOLGENSMA infusion. Monitor platelet counts before ZOLGENSMA infusion and on a regular basis for at least 3 months afterwards.

Elevated Troponin-I
Transient increases in cardiac troponin-I levels were observed following ZOLGENSMA infusion. Monitor troponin-I before ZOLGENSMA infusion and on a regular basis for at least 3 months afterwards.

ADVERSE REACTIONS

The most commonly observed adverse reactions (incidence ≥5%) in clinical studies were elevated aminotransferases and vomiting.

Please see accompanying Full Prescribing Information.