Cigna Pharmacy Management® CLINICAL UPDATE

Zolgensma - New gene therapy for spinal muscular atrophy (SMA)

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Overview

Gene therapy is the treatment of a disease or condition through introduction or modification of genetic material. Gene replacement therapies replace missing or broken genes. Gene replacement therapies can be administered in several different ways, but require a "vector" (typically a virus that has been modified to not cause illness) to deliver the genetic material to target cells and tissues. In December, 2017, Luxturna™ became the first approved gene replacement therapy in the United States for the treatment of a rare condition causing blindness.

On May 24, 2019, AveXis, a biotechnology company owned by Novartis, announced that the U.S. Food and Drug Administration (FDA) approved Zolgensma® (onasemnogene abeparvovac-xioi) for the treatment of pediatric patients less than two years of age with spinal muscular atrophy (SMA) with bi-allelic mutations in the survival motor neuron 1 (SMN1) gene.[1]

What is spinal muscular atrophy?

Currently, SMA is the leading genetic cause of infant mortality, as it causes degeneration of skeletal muscles, including those used for breathing, swallowing and posture. Without treatment, the most severely affected infants with type I SMA never sit upright, and become unable to feed, move or breathe independently. Life expectancy for an untreated type I infant is only two years, as it is the most severe infantile form. Because SMA inheritance is genetic, more than one child in a family could be affected. Prenatal and newborn genetic screening tests are available for SMA; however, they are not always included in routine screening during pregnancy or after delivery of the baby. Testing can vary by state.[2]

What is Zolgensma?

Zolgensma is a gene replacement therapy approved to treat children less than two years of age with SMA, the most severe form of SMA and a leading genetic cause of infant mortality.[3] This gene replacement therapy uses a specially tailored, therapeutic virus, given intravenously through a one-time infusion, to deliver the missing Survival Motor Neuron-1 (SMN-1) gene into a patient's cells. The body can then use the new SMN-1 gene to make SMN protein to preserve muscle function.[4]

Does Cigna cover Zolgensma?

Zolgensma is eligible for coverage under a Cigna-administered medical plans. Zolgensma must be administered by a health care provider, and therefore is not covered under Cigna pharmacy plans.

AveXis/Novartis, the manufacturer of Zolgensma, determines the facilities in the United States that are authorized to administer the gene therapy. Customers should verify if a facility participates in their plan's Cigna network. If a customer receives treatment out-of-network, depending on their plan design, coverage may be excluded or subject to the plan's out-of-network cost-share requirements.

Zolgensma will be subject to prior authorization for all clients with Cigna Health Matters® Preferred (previously known as Personal Health Solutions Plus) and Cigna Health Matters Complete care management programs.

All newly approved drugs are reviewed by Cigna's Pharmacy and Therapeutics Committee, comprised primarily of external physicians and pharmacists. Following that review process, a Drug and Biologic Coverage Policy with medical necessity criteria for Zolgensma will be developed and posted on the Cigna for Health Care Professionals website. The Zolgensma Coverage Policy is currently under development; an update to this Cigna Pharmacy Management Clinical Update will be provided when this process is finalized and the policy is available on the website.

How Is Zolgensma distributed?

Zolgensma will be distributed by Accredo®, a Cigna specialty pharmacy.[5]
Note: Cigna will not reimburse facilities that purchase Zolgensma directly from Accredo and bill Cigna for the cost.

What is the cost of Zolgensma?

The wholesale acquisition cost of Zolgensma is $2,125,000.[6] AveXis is working with payers to offer pay-over-time options up to five years.[5]

How will the pay-over-time work?

Considering that this is a new market approach to payment for a high-cost, one-time treatment, many of the details are still being worked out. Cigna has been working with Novartis and AveXis to develop and potentially offer a pay-over-time option. Details on any such arrangements may be shared in the future.

Is there a patient support program available to assist families that have a child who may be a candidate for Zolgensma?

AveXis announced the availability of a patient support program, called OneGene Program. According to Zolgensma's website, this program includes answering questions about Zolgensma, verifying reimbursement assistance and coordinating financial assistance programs for eligible patients. For more information, caregivers and health care professionals can call 855.441.GENE (855.441.4363).[7]

How many people could be candidates for Zolgensma?

Approximately 450 to 500 infants are born with SMA in the United States annually.[8] Depending on their specific genetic and clinical characteristics, a subset of these infants will be candidates for treatment with Zolgensma.

What results have been demonstrated in initial clinical trials of Zolgensma?

Clinical studies of Zolgensma were conducted in pediatric patients less than two years of age with SMA, and with onset of clinical symptoms consistent with SMA before six months of age. By 24 months of age, following the gene therapy, all 12 patients who received the high-dose Zolgensma were alive without permanent ventilation. Nine of the 12 patients (75.0%) were able to sit without support for ≥ 30 seconds, and two patients (16.7%) were able to stand and walk without assistance. Based on the natural history of the disease, patients who met the study entry criteria would not be expected to attain the ability to sit without support, and only approximately 25% of these patients would be expected to survive (i.e., being alive without permanent ventilation) beyond 14 months old.[1]

Are there other treatment options available for SMA patients?

Spinraza is currently the only other FDA approved drug to treat all types of SMA with the ability for patients to start treatment at any age. Spinraza works differently than Zolgensma in that it is not a gene replacement therapy but instead targets the defect in a different gene that is also involved in SMA.[9]

What was the finding by ICER, relative to their value-based price benchmark for Zolgensma?

The Institute for Clinical and Economic Review (ICER) is an independent, nonprofit research institute that produces reports analyzing the evidence on the effectiveness and value of drugs and other medical services. ICER's reports include evidence-based calculations of prices for new drugs that accurately reflect the degree of improvement expected in long-term patient outcomes, while also highlighting price levels that might contribute to unaffordable short-term cost growth for the overall health care system.

Following a review of additional data from ongoing trials of Zolgensma, as well as the release of the final FDA label and pricing announcement, ICER published an addendum to its Final Evidence Report on treatments for SMA. To reach two commonly cited cost-effectiveness thresholds, ICER determined that a value-based price benchmark for Zolgensma would be between $1.1 million and $2.1 million per treatment.[10]

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