



CIGNA PHARMACY COVERAGE POLICY

The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.

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Coverage Policy Number 1010

Subject **Galsulfase (Naglazyme™)**

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Hyperlink to Related Coverage Policies

INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

CIGNA covers galsulfase (Naglazyme™) as medically necessary for Mucopolysaccharidosis VI (MPS VI).

When coverage is available and medically necessary, the dosage, frequency, site of administration, and duration of therapy should be reasonable, clinically appropriate, and supported by evidence-based literature and adjusted based upon severity, alternative available treatments, and previous response to galsulfase (Naglazyme™) therapy.

FDA Approved Indications

Naglazyme is indicated for patients with Mucopolysaccharidosis VI (MPS VI). Naglazyme has been shown to improve walking and stair-climbing capacity.

FDA Recommended Dosing

The recommended dosage regimen of Naglazyme is 1 mg/kg of body weight administered once weekly as an intravenous infusion. Pretreatment with antihistamines with or without antipyretics is recommended 30 to 60 minutes prior to the start of the infusion.

Drug Availability

Naglazyme is supplied as a sterile solution in clear Type I glass 5 mL vials (5 mg galsulfase [expressed as protein content] per 5 mL).

General Background

Disease Overview

Mucopolysaccharide storage disorders are caused by the deficiency of specific lysosomal enzymes required for the catabolism of glycosoaminoglycans (GAG). MPS VI is characterized by the absence or marked reduction in *N*-acetylgalactosamine 4-sulfatase. The sulfatase activity deficiency results in the accumulation of the GAG substrate, dermatan sulfate, throughout the body. This accumulation leads to widespread cellular, tissue, and organ dysfunction. Naglazyme is intended to provide an exogenous enzyme that will be taken up into lysosomes and increase the catabolism of GAG. Galsulfase uptake by cells into lysosomes is most likely mediated by the binding of mannose-6-phosphate-terminated oligosaccharide chains of galsulfase to specific mannose-6-phosphate receptors.

Pharmacology

Galsulfase provides an exogenous enzyme to increase the catabolism of dermatan sulfate. The pharmacokinetic parameters of galsulfase are: maximum plasma concentration 1.5 mcg/mL, area-under-the-curve 4.3 h-mcg/mL, clearance 3.7 mL/kg/min, half-life 26 minutes.

Clinical Efficacy

Galsulfase has been compared only with placebo, as no other enzyme replacement therapies are currently available for MPS VI. Galsulfase has been evaluated in 3 clinical trials enrolling 55 patients (only 35 patients that received the actual enzyme). These trials were 24 to 48 weeks long and enrolled both adults and children with MPS VI. All trials showed benefit in improving functional outcomes, increasing the distance walked in a 6 or 12 minute period, improving the ability to walk up stairs, and improving range of motion in 1 of 2 trials that evaluated this outcome. One trial reported benefit in decreasing pain and stiffness. The benefits detected were maintained during the entire clinical trials. Lung function did improve in some patients (forced vital capacity) although this outcome was difficult to assess. Height, weight, cardiac function, and bone density did not significantly change during the trials.

Adverse Reactions

Frequently reported side effects during galsulfase therapy were mostly related to the infusion. Severe infusion-related reactions reported are angioneurotic edema, hypotension, dyspnea, bronchospasm, respiratory distress, apnea, and urticaria (face and neck). These reactions can be managed by reducing the rate of administration, temporarily interrupting the infusion, and treating with antihistamines, antipyretics, and corticosteroids (severe reactions). In clinical trials, headache, fever, chills, rigors, vomiting, abdominal pain, diarrhea, arthralgia, headache, upper respiratory infections, cough, ear pain, and otitis media were commonly reported with galsulfase. No data are available on drug interactions with galsulfase.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary:

HCPCS Codes	Description
J1458	Injection, galsulfase, 1 mg

ICD-9-CM Diagnosis Codes	Description
277.5	Mucopolysaccharidosis

References

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3. Harmatz P, Ketteridge D, Giugliani R, et al. Direct comparison of measures of endurance, mobility, and joint function during enzyme-replacement therapy of mucopolysaccharidosis VI (Maroteaux-Lamy syndrome): results after 48 weeks in a phase 2 open-label clinical study of recombinant human N-acetylgalactosamine 4-sulfatase. *Pediatrics*. Jun 2005;115(6):e681-689.
4. Harmatz P, Whitley CB, Waber L, et al. Enzyme replacement therapy in mucopolysaccharidosis VI (Maroteaux-Lamy syndrome). *J Pediatr*. May 2004;144(5):574-580.
5. McEvoy GK, ed. AHFS 2010 Drug Information. Bethesda, MD: American Society of Health-Systems Pharmacists, Inc; 2010.
6. Vougioukas VI, Berlis A, Kopp MV, Korinthenberg R, Spreer J, van Velthoven V. Neurosurgical interventions in children with Maroteaux-Lamy syndrome. Case report and review of the literature. *Pediatr Neurosurg*. Jul 2001;35(1):35-38.
7. Yogalingam G. Aryplase (Biomarin). *Curr Opin Investig Drugs*. Oct 2004;5(10):1111-1120.

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Connecticut General Life Insurance Company has acquired the business of Great-West Healthcare from Great-West Life & Annuity Insurance Company (GWLA). Certain products continue to be provided by GWLA (Life, Accident and Disability, and Excess Loss). GWLA is not licensed to do business in New York. In New York, these products are sold by GWLA’s subsidiary, First Great-West Life & Annuity Insurance Company, White Plains, N.Y.