Drug Coverage Policy

Effective Date.....10/15/2024
Coverage Policy Number.....IP0164
Policy Title..... Vpriv

Gaucher Disease – Enzyme Replacement Therapy – Vpriv

- Vpriv® (velaglucerase intravenous infusion – Shire Human Genetic Therapies)

INSTRUCTIONS FOR USE
The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, 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 customer'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 customer's benefit plan document always supersedes 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 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. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment and have discretion in making individual coverage determinations. 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. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Cigna Healthcare Coverage Policy

OVERVIEW
Vpriv, an analogue of β-glucocerebrosidase, is indicated for long-term enzyme replacement therapy for **Type 1 Gaucher disease**.[1]

The efficacy and safety of Vpriv have not been established in pediatric patients younger than 4 years of age.[1]

Disease Overview

Gaucher disease is a rare autosomal recessive, inherited, lysosomal storage disorder caused by a deficiency of the lysosomal enzyme β-glucocerebrosidase.[2-4] Glucocerebrosidase is responsible for the breakdown of glucosylcerebroside (GluCer) into glucose and ceramide. A deficiency of this enzyme is characterized by an excessive accumulation of GluCer in the visceral organs such as the liver, spleen, and bone marrow. GluCer remains stored within lysosomes causing enlarged lipid-laden macrophages called "Gaucher cells."

Gaucher disease is classified into three phenotypes (Types 1 through 3).[2-5] Type 1 is a non-neuronopathic variant with asymptomatic or symptomatic clinical manifestations of splenomegaly, hepatomegaly, anemia, thrombocytopenia, skeletal complications, and occasional lung involvement. Type 2 is an acute neuronopathic form characterized by an early onset (3 to 6 months of age) of rapidly progressive neurological disease with visceral manifestations; death generally occurs by the time patients reach 1 to 2 years of age. Type 3 is referred to as a chronic neuronopathic form and characterized by a later onset. Patients present with neurological, hematological, and visceral symptoms. Type 1 is most prevalent in the Western world, accounting for an estimated 94% of patients with Gaucher disease.[2,6] Types 2 and 3 represent < 1% and 5%, respectively, in Europe, North America, and Israel.[2,5] The diagnosis of Gaucher disease is established by demonstrating deficient β-glucocerebrosidase activity in leukocytes or fibroblasts, or mutations in the glucocerebrosidase gene.[7,8]

Guidelines
Treatment guidelines for Type 1 Gaucher disease (non-neuronopathic form) recommend initiating enzyme replacement therapy (ERT) in patients with significant and/or progressive disease.[9,10] Additionally, ERT should be initiated immediately in all patients with Type 3 Gaucher disease (chronic neuronopathic form).[11] Guidelines note that there is no evidence that ERT has reversed, stabilized, or slowed the progression of neurological involvement. However, ERT ameliorates systemic involvement (skeletal deterioration, visceromegaly, hematological abnormalities) in non-neuronopathic as well as chronic neuronopathic disease, ultimately enhancing the quality of life. Additionally, it is noted that higher doses may be needed to control visceral symptoms associated with chronic neuronopathic disease.

Medical Necessity Criteria

Vpriv is considered medically necessary when the following criteria are met:

FDA-Approved Indication

1. **Gaucher Disease – Type 1.** Approve for 1 year if the patient meets ALL the following (A, B, and C):
   Note: Type 1 Gaucher disease is also known as non-neuronopathic Gaucher disease.
   A) Patient is ≥ 4 years of age ; AND
   B) The diagnosis is established by ONE of the following (i or ii):
      i. Demonstration of deficient β-glucocerebrosidase activity in leukocytes or fibroblasts; OR
      ii. Molecular genetic testing documenting biallelic pathogenic variants in the glucocerebrosidase *(GBA)* gene; AND
   C) Vpriv is prescribed by or in consultation with a geneticist, endocrinologist, a metabolic disorder sub-specialist, or a physician who specializes in the treatment of lysosomal storage disorders.

   Dosing. Each individual dose must not exceed 60 U/kg administered intravenously no more frequently than once every 2 weeks.

Other Uses with Supportive Evidence

2. **Gaucher Disease – Type 3.** Approve for 1 year if the patient meets ALL of the following (A, B, C, and D):
   Note: Type 3 Gaucher disease is also known as chronic neuronopathic Gaucher disease.
   A) Patient is ≥ 4 years of age; AND
   B) The diagnosis is established by ONE of the following (i or ii):
      i. Demonstration of deficient β-glucocerebrosidase activity in leukocytes or fibroblasts; OR
      ii. Molecular genetic testing documenting biallelic pathogenic variants in the glucocerebrosidase (*GBA*) gene; AND
   C) The patient meets BOTH of the following (i and ii):
      i. Medication is not being used for the management of neurological manifestations; AND
      Note: Examples of neurological manifestations may include abnormal ocular movement, auditory impairment, cognitive impairment, and seizures.
      ii. Medication is being used for the management of impaired growth, hematologic, or visceral symptoms; AND
      Note: Examples of visceral symptoms include splenomegaly and hepatomegaly. Examples of hematologic symptoms include anemia and thrombocytopenia.
   D) Vpriv is prescribed by or in consultation with a geneticist, endocrinologist, a metabolic disorder sub-specialist, or a physician who specializes in the treatment of lysosomal storage disorders.

   Dosing. Each individual dose must not exceed 120 U/kg administered intravenously no more frequently than once every 2 weeks.

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

Receipt of sample product does not satisfy any criteria requirements for coverage.

Conditions Not Covered

Any other use is considered experimental, investigational, or unproven including the following (this list may not be all inclusive; criteria will be updated as new published data are available):

1. **Concomitant Use with Other Approved Therapies for Gaucher Disease.** Concomitant use with other treatments approved for Gaucher disease has not been evaluated. Of note, examples of medications approved for Gaucher disease include Cerdelga (eliglustat capsules), Elelyso (taliglucerase alfa intravenous infusion), Cerezyme (imiglucerase intravenous infusion), and Zavesca (miglustat capsules).

Coding Information

1) This list of codes may not be all-inclusive.
2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

HCPCS Codes	Description
J3385	Injection, velaglucerase alfa, 100 units

References

1. Vpriv® intravenous infusion [prescribing information]. Lexington, MA: Shire Human Genetic Therapies; September 2021.
2. Burrow TA, Barnes S, and Grabowski GA. Prevalence and management of Gaucher disease. Pediatric Health Med Ther. 2011;2:59-73.
3. Cox T. Gaucher disease: clinical profile and therapeutic development. Biologics. 2010;4:299-313.
4. Jmoudiak, M and Futerman, AH. Gaucher disease: Pathological mechanisms and modern management. Br J Haematol. 2005;129(2):178–188.
5. Grabowski GA. Lysosomal storage disease 1- phenotype, diagnosis, and treatment of Gaucher's disease. Lancet. 2008;372:1263-1271.
6. Zimran A. How I treat Gaucher disease. Blood. 2011;118:1463-1471.
7. Stirnemann J, Belmatoug N, Camou F, et al. A review of Gaucher disease pathophysiology, clinical presentation and treatments. Int J Mol Sci. 2017;18:441.
8. Baris HN, Cohen IJ, Mistry PK. Gaucher disease: The metabolic defect, pathophysiology, phenotypes and natural history. Pediatr Endocrinol Rev. 2014;12:72-81.
9. Kishnani PS, Al-Hertani W, Balwani M, et al. Screening, patient identification, evaluation, and treatment in patients with Gaucher disease: Results from a Delphi consensus. Mol Genet Metab. 2022 Feb;135(2):154-162.
10. Kaplan P, Baris H, De Meirleir L, et al. Revised recommendations for the management of Gaucher disease in children. Eur J Pediatr. 2013 Apr;172(4):447-58.
11. Vellodi A, Tylki-Szymanska A, Davies EH, et al. Management of neuronopathic Gaucher disease: revised recommendations. J Inherit Metab Dis. 2009 Oct;32(5):660-664.

Revision Details

Type of Revision	Summary of Changes	Date
Annual Revision	**Policy Name Change: Updated** Policy Name from "Velaglucerase" to "Gaucher Disease – Enzyme Replacement Therapy – Vpriv." **Gaucher Disease – Type 1: Added** qualifier "Type 1" to the condition name and Note to indicate Type 1 disease is also referred to as non-neuronopathic disease. **Added** age ≥ 4 years as a condition of approval. **Removed** statement "… or type 3 Gaucher disease that results in at least one of the following: anemia, thrombocytopenia, bone disease, hepatomegaly, or splenomegaly." **Added** dosing information. **Gaucher Disease – Type 3**: **Added** the new condition of approval under other uses with supportive evidence.	10/15/2024

The policy effective date is in force until updated or retired.