Market Applicability							
Market	**DC**	**GA**	**KY**	**MD**	**NJ**	**NY**	**WA**
Applicable	X	X	X	X	X	X	NA

Enzyme Replacement Therapy for Gaucher Disease

Override(s)	Approval Duration
Prior Authorization	1 Year

Medications	Dosing Limit
Cerezyme (imiglucerase) ELELYSO (taliglucerase alfa) VPRIV (velaglucerase alfa)	60 units/kg as frequently as every 2 weeks

Dosing Override Criteria

I. Requests for higher dosing or more frequent administration may be approved when the treating physician has indicated that it is necessary based on the individual's disease severity or lack of response.
II. Individuals currently being treated on a stable dosage of Cerezyme may be switched to Elelyso or Vpriv at the previous Cerezyme dosage.
III. For Cerezyme, may approve alternate dosing of up to three times weekly.

APPROVAL CRITERIA

Initial requests for enzyme replacement therapy for Gaucher disease [Cerezyme (imiglucerase), Elelyso (taliglucerase) and Vpriv (velaglucerase)] may be approved if the following criteria are met:

I. Individual is 18 years of age and older with a diagnosis of **type 1** Gaucher disease and the following criteria are met:
   A. Type 1 Gaucher disease is confirmed by either (Weinreb, 2004; Wang, 2011):
      1. Deficiency in gluocerebrosidase enzyme activity as measured in the white blood cells or skin fibroblasts; **OR**
      2. Genotype testing indicates mutation of two alleles of the glucocerebrosidase genome;

   AND

   B. Individual has clinically significant manifestations of Gaucher disease including (Andersson, 2005; Weinreb, 2004):
      1. Skeletal disease (such as but not limited to avascular necrosis, Erlenmeyer flask deformity, osteopenia or pathological fracture); **OR**
      2. Two or more of the following:
         a. Clinically significant hepatomegaly; **OR**

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Market Applicability							
Market	**DC**	**GA**	**KY**	**MD**	**NJ**	**NY**	**WA**
Applicable	X	X	X	X	X	X	NA

b. Clinically significant splenomegaly; **OR**
c. Hemoglobin at least 1.0g/dL below lower limit for normal for age and sex; **OR**
d. Platelet count less than or equal to 120,000mm^3;

OR

II. Individual is less than 18 years of age with a diagnosis of **type 1** Gaucher disease and the following criteria are met:
   A. Type 1 Gaucher disease is confirmed by either (Kaplan, 2013; Wang, 2011):
      1. Deficiency in glucocerebrosidase activity as measured in the white blood cells or skin fibroblasts; **OR**
      2. Genotype testing indicates mutation of two alleles of the glucocerebrosidase genome;

   AND
   B. Individual has clinically significant manifestations of Gaucher disease (such as but not limited to hepatomegaly, splenomegaly, anemia, thrombocytopenia, skeletal disease or growth failure) (Andersson, 2005);

OR

III. Individual is 18 years of age or older with a diagnosis of **type 3** Gaucher disease and the following criteria are met (Kaplan, 2013):
   A. Type 3 Gaucher disease is confirmed by genotype testing indicating mutation of two alleles of the glucocerebrosidase genome (Kaplan, 2013; Wang, 2011); **AND**
   B. Individual has clinically significant manifestations of Gaucher disease including (Andersson, 2005; Weinreb, 2004):
      1. Skeletal disease (such as but not limited to avascular necrosis, Erlenmeyer flask deformity, osteopenia or pathological fracture); **OR**
      2. Two or more of the following:
         a. Clinically significant hepatomegaly**; OR**
         b. Clinically significant splenomegaly**; OR**
         c. Hemoglobin at least 1.0 g/dL below lower limit for normal for age and sex)**; OR**
         d. Platelet count less than or equal to 120,000mm^3;

   AND
   C. There are neurological findings consistent with type 3 Gaucher disease based on neurological evaluation including brain imaging [magnetic resonance imaging (MRI) or computed tomography (CT)] and electroencephalography (EEG) (Vellodi, 2009);

OR

IV. Individual is less than 18 years of age with type 3 Gaucher disease and the following criteria are met (Kaplan, 2013):

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Market Applicability							
Market	**DC**	**GA**	**KY**	**MD**	**NJ**	**NY**	**WA**
Applicable	X	X	X	X	X	X	NA

A. Type 3 Gaucher disease is confirmed by genotype testing indicating mutation of two alleles of the glucocerbrosidase genome (Kaplan, 2013; Wang, 2011); **AND**
B. Individual has clinically significant manifestations of Gaucher disease (such as but not limited to hepatomegaly, splenomegaly, anemia, thrombocytopenia, skeletal disease or growth failure) (Andersson, 2005); **AND**
C. There are neurological findings consistent with type 3 Gaucher disease based on neurological evaluation including brain imaging [magnetic resonance imaging (MRI) or computed tomography (CT)] and electroencephalography (EEG) (Vellodi, 2009).

Continuation requests for enzyme replacement therapy for Gaucher disease (Cerezyme [imiglucerase], Elelyso [taliglucerase], Vpriv [velaglucerase]) may be approved if the following criterion is met:

I. There is confirmation of clinically significant improvement in clinical signs and symptoms of disease (including but not limited to reduction of spleen volume, reduction of liver volume, resolution of anemia, resolution of thrombocytopenia, reduction in fatigue, improvement in skeletal manifestations).

Enzyme replacement therapy for Gaucher disease [Cerezyme (imiglucerase), Elelyso (taliglucerase) and Vpriv (velaglucerase)] may **not** be approved for the following:

I. All other indications not included above; **OR**
II. Individuals with type 2 Gaucher disease; **OR**
III. Use in conjunction with another enzyme replacement therapy agent or substrate reduction therapy agent [Cerdelga (eliglustat), Zavesca (miglustat)] for the treatment of Gaucher disease.

Key References:

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Market Applicability							
Market	**DC**	**GA**	**KY**	**MD**	**NJ**	**NY**	**WA**
Applicable	X	X	X	X	X	X	NA

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12. Zimran A, Brill-Almon E, Chertkoff R, et al. Pivotal trial with plant cell-expressed recombinant glucocerebrosidase, taliglucerase alfa, a novel enzyme replacement therapy for Gaucher disease. *Blood.* 2011; 118: 5767-5773.

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