Reference number(s)
6290-A

Specialty Guideline Management
Casgevy

Products Referenced by this Document

Drugs that are listed in the following table include both brand and generic and all dosage forms and strengths unless otherwise stated. Over-the-counter (OTC) products are not included unless otherwise stated.

Brand Name	Generic Name
Casgevy	exagamglogene autotemcel

Indications

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-approved Indications

- Casgevy is indicated for the treatment of sickle cell disease (SCD) in patients 12 years and older with recurrent vaso-occlusive crises (VOCs).
- Casgevy is indicated for the treatment of transfusion-dependent beta-thalassemia (TDT) in patients 12 years and older.

All other indications are considered experimental/investigational and not medically necessary.

Documentation

Submission of the following information is necessary to initiate the prior authorization review:

Sickle cell disease:

- Molecular or genetic testing results documenting sickle cell disease genotype
- Chart notes or medical records documenting history of severe vaso-occlusive episodes

Transfusion-dependent beta-thalassemia:

- Molecular or genetic testing results documenting transfusion-dependent beta-thalassemia genotype
- Chart notes or medical records documenting history of blood cell transfusions

Prescriber Specialties

This medication must be prescribed by or in consultation with a hematologist.

Coverage Criteria

Sickle cell disease

Authorization of 3 months for one dose total may be granted for sickle cell disease when all of the following criteria are met:

- Member is 12 years of age or older
- Member has a diagnosis of sickle cell disease with one of the following genotypes confirmed by molecular or genetic testing:
  - β^s/β^s
  - β^s/β^0
  - β^s/β^+
- Member has a documented history of at least 2 severe vaso-occlusive episodes per year during the previous two years (see Appendix A for examples)
- Member is eligible for a hematopoietic stem cell transplant (HSCT) but is unable to find a human leukocyte antigen (HLA)-matched related donor
- Member has not received a prior hematopoietic stem cell transplant (HSCT)
- Member has not received Casgevy or any other gene therapy previously
- Member meets one of the following:
  - Has experienced, at any time in the past, an inadequate response or intolerance to a trial of hydroxyurea
  - Has a contraindication to hydroxyurea

Transfusion-dependent beta-thalassemia

Authorization of 3 months for one dose total may be granted for transfusion-dependent beta-thalassemia when all of the following criteria are met:

- Member is 12 years of age or older
- Member has a diagnosis of transfusion-dependent beta-thalassemia with a non-β0/β0 OR β0/β0 genotype confirmed via molecular or genetic testing (see Appendix B for examples)

- Member has received at least 100 milliliter per kilogram or 10 units of packed red blood cells (pRBCs) per year during the previous two years
- Member is eligible for a hematopoietic stem cell transplant (HSCT) but is unable to find a human leukocyte antigen (HLA)-matched related donor
- Member has not received a prior hematopoietic stem cell transplant (HSCT)
- Member has not received Casgevy or any other gene therapy previously

Appendix

Examples of Severe Vaso-Occlusive Events

- Acute pain event requiring a visit to a medical facility and administration of pain medications (opioids or intravenous [IV] non-steroidal anti-inflammatory drugs [NSAIDs]) or RBC transfusions
- Acute chest syndrome
- Priapism lasting > 2 hours and requiring a visit to a medical facility
- Splenic sequestration
- Hepatic sequestration

Examples of non-β0/β0 OR β0/β0 genotypes

- β0/β0
- β0/β+
- βE/β0
- β0/IVS-I-110
- IVS-I-110/IVS-1-110

References

1. Casgevy [package insert]. Boston, MA: Vertex Pharmaceuticals Incorporated; January 2024.
2. Frangoul H, Altshuler D, Cappellini MD, et al. CRISPR-CaS9 gene editing for sickle cell disease and β-thalassemia. N Engl J Med 2021; 384:252-60.
3. Evidence-Based Management of Sickle Cell Disease: Expert Panel Report, 2014. National Institutes of Health. Available at https://www.nhlbi.nih.gov/sites/default/files/media/docs/sickle-cell-disease-report%20020816_0.pdf. Accessed July 16, 2024.
4. Cappellini MD, Farmakis D, Porter J, Taher A. 2021 Guidelines for the management of transfusion dependent thalassaemia (TDT). Nicosia, Cyprus: Thalassaemia International Federation, 2021.