



Adakveo® (crizanlizumab-tmca) (Intravenous)

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Dates Reviewed: 12/2019

I. Length of Authorization

Coverage will be provided for 6 months initially and may be renewed annually thereafter.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- Adakveo 100 mg/10 mL single-dose vials: 6 vials at weeks 0 and 2 and every 4 weeks thereafter

B. Max Units (per dose and over time) [HCPS Unit]:

- 120 billable units at weeks 0 and 2 and every 4 weeks thereafter

III. Initial Approval Criteria^{1,2}

Coverage is provided in the following conditions:

- Therapy will not be used in conjunction with voxelotor (Oxbryta) or L-glutamine (Endari);
AND

Sickle Cell Disease^{1,2,3} †

- Patient must be 16 years or older; **AND**
- Patient has a confirmed diagnosis of sickle-cell disease, of any genotype (e.g., HbSS, HbSC, HbS/beta⁰-thalassemia, HbS/beta⁺-thalassemia, and others) as determined by one of the following:
 - Identification of significant quantities of HbS with or without an additional abnormal β -globin chain variant by hemoglobin assay; **OR**
 - Identification of biallelic *HBB* pathogenic variants where at least one allele is the p.Glu6Val pathogenic variant on molecular genetic testing; **AND**
- Patient had an insufficient response to a minimum 3-month trial of hydroxyurea (unless contraindicated or intolerant); **AND**

- Patient experienced one or more vaso-occlusive crises (VOC)* in the previous year despite adherence to hydroxyurea therapy

*VOC is defined as an event prompting either a visit or outreach to the provider which results in a diagnosis of VOC being made necessitating subsequent interventions such as narcotic pain management, non-steroidal anti-inflammatory therapy, hydration, etc.

† FDA Approved Indication(s); ‡ Compendium Recommended Indication(s)

IV. Renewal Criteria^{1,3}

Coverage can be renewed based upon the following criteria:

- Patient continues to meet the relevant criteria identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include the following: severe infusion related reactions (e.g., fever, chills, nausea, vomiting, fatigue, dizziness, pruritus, urticaria, sweating, shortness of breath or wheezing), etc.; **AND**
- Disease response compared to pretreatment baseline as evidenced by a decrease in the frequency of vaso-occlusive crises (VOC) necessitating treatment, reduction in number or duration of hospitalizations, and/or reduction in severity of VOC

V. Dosage/Administration

Indication	Dose
Sickle-cell Disease	Administer Adakveo 5 mg/kg by intravenous infusion over a period of 30 minutes at Week 0, Week 2, and every 4 weeks thereafter.

VI. Billing Code/Availability Information

HCPCS:

- J3590 – Unclassified biologic drugs
- C9399 – Unclassified drugs or biologicals (*Hospital outpatient use only*)
- C9053 – Injection, crizanlizumab-tmca, 1 mg; 1 billable unit = 1mg (*effective 04/01/2020-06/30/2020*)
- J0791 – Injection, crizanlizumab-tmca, 5 mg; 1 billable unit=5 mg (*effective 07/01/2020*)

NDC:

- Adakveo 100 mg/10 mL (10 mg/mL) single-dose vial: 00078-0883-xx

VII. References

1. Adakveo [package insert]. East Hanover, NJ; Novartis Pharmaceuticals, Inc., November 2019. Accessed November 2019.

2. Bender MA. Sickle Cell Disease. 2003 Sep 15 [Updated 2017 Aug 17]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2019. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1377/>.
3. Ataga KI, Kutlar A, Kanter J, et al. Crizanlizumab for the Prevention of Pain Crises in Sickle Cell Disease. N Engl J Med. 2017 Feb 2;376(5):429-439. doi: 10.1056/NEJMoa1611770. Epub 2016 Dec 3.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D57.00	Hb-SS disease with crisis unspecified
D57.01	Hb-SS disease with acute chest syndrome
D57.02	Hb-SS disease with splenic sequestration
D57.20	Sickle-cell/Hb-C disease without crisis
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome
D57.212	Sickle-cell/Hb-C disease with splenic sequestration
D57.219	Sickle-cell/Hb-C disease with crisis unspecified
D57.3	Sickle-cell trait
D57.40	Sickle-cell thalassemia without crisis
D57.411	Sickle-cell thalassemia with acute chest syndrome
D57.412	Sickle-cell thalassemia with splenic sequestration
D57.419	Sickle-cell thalassemia with crisis unspecified
D57.811	Other sickle-cell disorders with acute chest syndrome
D57.812	Other sickle-cell disorders with splenic sequestration
D57.819	Other sickle-cell disorders with crisis, unspecified

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC