

**POLICY:** Homozygous Familial Hypercholesterolemia – Evkeeza Utilization Management Medical Policy

- Evkeeza<sup>®</sup> (evinacumab-dgnb intravenous infusion – Regeneron)

**EFFECTIVE DATE:** 06/01/2021

**LAST REVISION DATE:** 09/16/2024

**COVERAGE CRITERIA FOR:** All UCare Plans

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**OVERVIEW**

Evkeeza, an angiopoietin-like 3 inhibitor, is indicated as an adjunct to other low-density lipoprotein cholesterol (LDL-C) lowering therapies for the treatment of **homozygous familial hypercholesterolemia** (HoFH) in patients  $\geq 5$  years of age.<sup>1</sup>

In the pivotal trial that led to approval of Evkeeza, patients were receiving additional medications to lower LDL-C levels such as statins (94% [77% of patients at high-intensity statin doses]), a proprotein convertase subtilisin kexin type 9 (PCSK9) inhibitor (77%), ezetimibe (75%), and Juxtapid<sup>®</sup> (lomitapide capsules). Although some Phase II data are available,<sup>3</sup> the safety and effectiveness of Evkeeza have not been established in patients with other causes of hypercholesterolemia, including those with heterozygous familial hypercholesterolemia (HeFH).<sup>1</sup> The effects of Evkeeza on cardiovascular (CV) morbidity and mortality have not been determined.

**Disease Overview**

Familial hypercholesterolemias, which include HeFH and HoFH, encompass a group of genetic defects that cause severe elevations in LDL-C levels, as well as other lipid parameters.<sup>4,5</sup> HoFH impacts approximately 1 in 300,000 to 1,000,000 persons. The condition is most commonly due to impaired functionality of the low-density lipoprotein (LDL) receptor which leads to a low or absence of clearance of LDL-C from the circulation. Currently known causes of familial hypercholesterolemia include mutations in the LDL receptor, apolipoprotein B, or PCSK9 genes. Patients with familial hypercholesterolemia may have physical findings such as tendon or cutaneous xanthomas, which may occur in childhood. Individuals with familial hypercholesterolemia are at very high risk of atherosclerotic cardiovascular disease (ASCVD) at a premature age. Most guidelines recommended LDL-C targets of  $< 100$  mg/dL for adults and  $< 70$  mg/dL for adults with ASCVD or other risk factors. Statins are the initial treatment for familial hypercholesterolemia. For patients with HoFH, high-intensity statin therapy is recommended, with ezetimibe added as well. Therapy with a PCSK9 inhibitor (e.g., Repatha<sup>®</sup> [evolocumab subcutaneous injection], Praluent<sup>®</sup> [alirocumab subcutaneous injection]) is usually the next step. Juxtapid can be added onto maximal lipid-lowering therapy and Evkeeza may be considered. Combination therapy is required for most patients. LDL apheresis is recommended in certain circumstances. The diagnosis of HoFH can be done by genetic or clinical criteria.<sup>5</sup> An untreated LDL-C ( $> 400$  mg/dL) is suggestive of HoFH. Patients may have cutaneous or tendon xanthomas before 10 years of age and/or untreated elevated LDL-C levels consistent with HeFH in both

parents. In the digenic form, one parent may have normal LDL-C levels and the other may have LDL-C levels consistent with HoFH.

### Guidelines

Guidelines provide strategies for managing familial hypercholesterolemia, including HoFH, and mention the role of Evkeeza.<sup>5,6</sup>

- **American College of Cardiology (2022):** Specialized therapies, one of which includes Evkeeza, may be needed to control LDL-C in certain patients (e.g., those with HoFH) who have had an inadequate response to statins, with or without ezetimibe, and PCSK9 inhibitors.<sup>6</sup>
- **European Atherosclerosis Society (2023):** Clinical guidance by this organization recommends lipid-lowering therapy be initiated with high-intensity statin therapy and ezetimibe.<sup>5</sup> A PCSK9 inhibitor can be added as well. If not at LDL-C goals, other agents can be alternatives as well (e.g., Juxtapid, Evkeeza). Lipoprotein apheresis may also be considered. The goal is to reduce LDL-C to < 115 mg/dL in children and adolescents, < 70 mg/dL in adults if no major ASCVD risk factors are present, and < 55 mg/dL if patients have ASCVD or major ASCVD risk factors.

### POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Evkeeza. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indication. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). All approvals are provided for the duration noted below. A patient who has previously met Initial Therapy criteria for Evkeeza for the requested indication under the Coverage Review Department and is currently receiving Evkeeza is only required to meet continuation of therapy criteria (i.e., currently receiving therapy). If past criteria has not been met under the Coverage Review Department and the patient is currently receiving Evkeeza, or is restarting Evkeeza, Initial Therapy criteria must be met.

**Automation:** None.

### RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Evkeeza is recommended in those who meet the following criteria:

#### FDA-Approved Indication

1. **Homozygous Familial Hypercholesterolemia.** Approve for 1 year if the patient meets ONE of the following (A or B):
  - A) **Initial Therapy.** Approve if the patient meets ALL of the following (i, ii, iii, and iv):
    - i. Patient is  $\geq 5$  years of age; AND
    - ii. Patient meets ONE of the following (a, b, or c):

- a) Patient has phenotypic confirmation of homozygous familial hypercholesterolemia;  
OR  
Note: Examples include pathogenic variants at the low-density lipoprotein receptor (LDLR), apolipoprotein B (apo B), proprotein convertase subtilisin kexin type 9 (PCSK9), or low-density lipoprotein receptor adaptor protein 1 (LDLRAP1) gene.
- b) Patient has an untreated low-density lipoprotein cholesterol (LDL-C) level > 400 mg/dL AND meets ONE of the following [(1) or (2)]:  
Note: Untreated refers to prior to therapy with any antihyperlipidemic agent.
- (1) Patient had clinical manifestations of homozygous familial hypercholesterolemia before the age of 10 years; OR  
Note: Clinical manifestations of homozygous familial hypercholesterolemia are cutaneous xanthomas, tendon xanthomas, arcus cornea, tuberous xanthomas, or xanthelasma.
- (2) At least one parent of the patient had untreated LDL-C levels or total cholesterol levels consistent with familial hypercholesterolemia; OR  
Note: An example of familial hypercholesterolemia is an untreated LDL-C level  $\geq$  190 mg/dL and/or an untreated total cholesterol level > 250 mg/dL.
- c) Patient has a treated LDL-C level  $\geq$  300 mg/dL AND meets ONE of the following [(1) or (2)]:  
Note: Treated refers to after therapy with at least one antihyperlipidemic agent. Some examples of antihyperlipidemic agents include statins (e.g., atorvastatin, rosuvastatin, lovastatin, simvastatin, pravastatin), ezetimibe, a PCSK9 inhibitor (i.e., Repatha [evolocumab subcutaneous injection, Praluent [alirocumab subcutaneous injection]), or Juxtapid (lomitapide capsules).
- (1) Patient had clinical manifestations of homozygous familial hypercholesterolemia before the age of 10 years; OR  
Note: Examples of clinical manifestations of homozygous familial hypercholesterolemia are cutaneous xanthomas, tendon xanthomas, arcus cornea, tuberous xanthomas, or xanthelasma.
- (2) At least one parent of the patient had untreated LDL-C levels or total cholesterol levels consistent with familial hypercholesterolemia; AND  
Note: An example of familial hypercholesterolemia in both parents would be if both had an untreated LDL-C  $\geq$  190 mg/dL and/or an untreated total cholesterol > 250 mg/dL.
- iii. Patient meets ONE of the following (a or b):
- a) Patient meets ALL of the following [(1), (2), and (3)]:
- (1) Patient has tried one high-intensity statin therapy (i.e., atorvastatin  $\geq$  40 mg daily; rosuvastatin  $\geq$  20 mg daily [as a single entity or as a combination product]); AND
- (2) Patient has tried one high-intensity statin along with ezetimibe (as a single-entity or as a combination product) for  $\geq$  8 continuous weeks; AND
- (3) Low-density lipoprotein cholesterol level after this treatment regimen remains  $\geq$  70 mg/dL; OR
- b) Patient has been determined to be statin intolerant by meeting ONE of the following [(1) or (2)]:

- (1) Patient experienced statin-related rhabdomyolysis; OR  
Note: Rhabdomyolysis is statin-induced muscle breakdown that is associated with markedly elevated creatine kinase levels (at least 10 times the upper limit of normal), along with evidence of end organ damage which can include signs of acute renal injury (noted by substantial increases in serum creatinine [Scr] levels [ $a \geq 0.5$  mg/dL increase in Scr or doubling of the Scr] and/or myoglobinuria [myoglobin present in urine]).
- (2) Patient meets ALL of the following [(a), (b), and (c)]:
  - (a) Patient experienced skeletal-related muscle symptoms; AND  
Note: Examples of skeletal-related muscle symptoms include myopathy (muscle weakness) or myalgia (muscle aches, soreness, stiffness, or tenderness).
  - (b) The skeletal-muscle related symptoms occurred while receiving separate trials of both atorvastatin and rosuvastatin (as single-entity or combination products); AND
  - (c) When receiving separate trials of both atorvastatin and rosuvastatin (as single-entity or as combination products) the skeletal-related muscle symptoms resolved upon discontinuation of each respective statin therapy (atorvastatin and rosuvastatin); AND  
Note: Examples of skeletal-related muscle symptoms include myopathy and myalgia.

iv. Patient meets ONE of the following (a, b, or c):

- a) Patient meets BOTH of the following [(1) and (2)]:
    - (1) Patient has tried one PCSK9 inhibitor for  $\geq 8$  continuous weeks; AND  
Note: Examples of PCSK9 inhibitors include Repatha (evolocumab subcutaneous injection) and Praluent (alirocumab subcutaneous injection).
    - (2) The LDL-C level after this PCSK9 inhibitor therapy remains  $\geq 70$  mg/dL; OR
  - b) Patient is known to have two LDL-receptor negative alleles; OR
  - c) Patient is 5 to 9 years of age; OR
- B) Patient Currently Receiving Evkeeza.** Approve if according to the prescriber, the patient has experienced a response to therapy.  
Note: Examples of a response to therapy include decreasing LDL-C, total cholesterol, non-high-density lipoprotein (non-HDL-C), or apolipoprotein B levels. Also, if the patient is currently receiving the requested therapy but has not previously received approval of Evkeeza for this specific indication through the Coverage Review Department, review under criteria for Initial Therapy. If the patient is restarting therapy with Evkeeza, Initial Therapy criteria must be met.

**Dosing.** Approve 15 mg/kg administered by intravenous infusion no more frequently than once every 4 weeks.

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**CONDITIONS NOT RECOMMENDED FOR APPROVAL**

Coverage of Evkeeza is not recommended in the following situations:

1. **Heterozygous Familial Hypercholesterolemia.** The safety and effectiveness of Evkeeza have not been established in patients with hypercholesterolemia who do not have HoFH, including those with HeFH.<sup>1</sup>
2. **Hyperlipidemia.** Although data are available, the prescribing information for Evkeeza states that the safety and efficacy of Evkeeza have not been established in patients with other forms of hypercholesterolemia.<sup>1,3</sup>  
Note: This is not associated with HoFH and is referred to as combined hyperlipidemia, hypercholesterolemia (pure, primary), dyslipidemia, or increased/elevated LDL-C levels.
3. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

**REFERENCES**

1. Evkeeza<sup>®</sup> intravenous infusion [prescribing information]. Tarrytown, NY: Regeneron; March 2023.
2. Raal FJ, Rosenson RS, Reeskamp LF, et al, for the ELIPSE HoFH investigators. Evkeeza for homozygous familial hypercholesterolemia. *N Engl J Med.* 2020;383(8):711-720.
3. Rosenson RS, Burgess LJ, Ebenbichler CF, et al. Evkeeza in patients with refractory hypercholesterolemia. *N Engl J Med.* 2020;383(24):2307-2319.
4. Raal FJ, Hovingh GK, Catapano AL. Familial hypercholesterolemia treatments: guidelines and new therapies. *Atherosclerosis.* 2018;277:483-492.
5. Cuchel M, Raal FJ, Hegele RA, et al. 2023 update on European Atherosclerosis Society Consensus Statement on Homozygous Familial Hypercholesterolaemia: new treatments and clinical guidance. *Eur Heart J.* 2023;44:2277-2291.
6. Lloyd-Jones DM, Morris PB, Ballantyne CM, et al. 2022 ACC Expert Consensus Decision Pathway on the Role of Non-Statin Therapies for LDL-Cholesterol Lowering in the Management of Atherosclerotic Cardiovascular Disease Risk. *J Am Coll.* 2022;80(14):1366-1418.

**HISTORY**

Type of Revision	Summary of Changes	Review Date
Annual Revision	No criteria changes.	03/08/2023
Selected Revision	<b>Homozygous Familial Hypercholesterolemia:</b> The age of approval was changed to $\geq 5$ years of age; previously, a patient had to be $\geq 12$ years of age. Also, criteria were revised to not require a patient 5 to 9 years of age to try one proprotein convertase subtilisin kexin type 9 inhibitor.	03/29/2023
Early Annual Revision	It was added to the Policy Statement that a patient who has previously met initial therapy criteria for Evkeeza for the requested indication under the Coverage Review Department and is currently receiving Evkeeza is only required to meet	04/26/2023

	<p>continuation of therapy criteria (i.e., currently receiving therapy). If past criteria has not been met under the Coverage Review Department and the patient is currently receiving Evkeeza, or is restarting Evkeeza, initial criteria must be met. In addition, the following changes were made:</p> <p><b>Homozygous Familial Hypercholesterolemia:</b> Requirements were divided to distinguish between initial therapy and patient currently receiving Evkeeza (previously there was only one criteria set). For a patient who is currently receiving Evkeeza and has previously met initial therapy criteria for the requested indication under the Coverage Review Department, only the continuation of therapy criteria has to be met. The continuation of therapy criteria states that according to the prescribing physician, the patient has experienced a response to therapy with examples provided in a Note.</p>	
<p>Annual Revision</p>	<p>It was removed from the Policy Statement that the agent is prescribing by or in consultation with a physician who specializes in the condition being treated. In addition, the following changes were made:</p> <p><b>Homozygous Familial Hypercholesterolemia:</b> For <u>Initial Therapy</u>, the requirement that the medication is prescribed by or in consultation with a cardiologist, an endocrinologist, or a physician who focuses in the treatment of cardiovascular risk management and/or lipid disorders was removed. The requirement that the patient has had genetic confirmation by two mutant alleles at the low-density lipoprotein receptor, apolipoprotein B, proprotein convertase subtilisin kexin type 9, or low-density lipoprotein receptor adaptor protein 1 gene locus was changed to state that the patient has phenotypic confirmation of homozygous familial hypercholesterolemia with the above examples moved to a Note. The diagnostic criterion which stated that the patient has an untreated low-density lipoprotein cholesterol level &gt; 500 mg/dL was changed to &gt; 400 mg/dL. The criterion (which is in two places [those with an untreated low-density lipoprotein cholesterol level &gt; 400 mg/dL and a treated low-density lipoprotein cholesterol level ≥ 300 mg/dL]) that both parents of the patient had untreated low-density lipoprotein cholesterol levels or total cholesterol levels consistent with heterozygous familial hypercholesterolemia was changed to state that at least one parent of the patient had untreated low-density lipoprotein cholesterol levels or total cholesterol levels consistent with familial hypercholesterolemia. The related Note that “An example of heterozygous familial hypercholesterolemia in both parents would be if both had an untreated low-density lipoprotein cholesterol level ≥ 190 mg/dL and/or an untreated total</p>	<p>05/08/2024</p>

	<p>cholesterol level &gt; 250 mg/dL” was changed to state “An example of familial hypercholesterolemia is an untreated low-density lipoprotein cholesterol level <math>\geq</math> 190 mg/dL and/or an untreated total cholesterol level &gt; 250 mg/dL.” For a <u>Patient Currently Receiving the Medication</u>, the requirement that the “prescribing physician” notes that the patient has experienced a response to therapy was changed to “prescriber”.</p>	
<p>UCare P&amp;T Review</p>	<p>Policy reviewed and approved by UCare P&amp;T committee. Annual review process</p>	<p>09/16/2024</p>