PRIOR AUTHORIZATION POLICY

POLICY: Homozygous Familial Hypercholesterolemia Juxtapid Prior Authorization Policy
- Juxtapid® (lomitapide capsules – Amryt)

REVIEW DATE: 04/13/2022

OVERVIEW

Juxtapid, a microsomal triglyceride transfer protein inhibitor, is indicated as an adjunct to a low fat diet and other lipid modifying therapies, including low-density lipoprotein (LDL) apheresis where available, to reduce low-density lipoprotein cholesterol (LDL-C), total cholesterol, apolipoprotein B, and non-high-density lipoprotein cholesterol in adults with **homozygous familial hypercholesterolemia** (HoFH).[1] Limitations of use include that the safety and efficacy of Juxtapid have not been established in patients with hypercholesterolemia who do not have HoFH, including those with heterozygous familial hypercholesterolemia (HeFH).[1] Also, the effect of Juxtapid on cardiovascular (CV) morbidity and mortality have not been determined.

Repatha® (evolocumab subcutaneous [SC] injection) and Praluent® (alirocumab SC injection), two proprotein convertase subtilisin kexin type 9 (PCSK9) inhibitors, are indicated as an adjunct to diet and other LDL-lowering therapies (e.g., statins, ezetimibe, LDL apheresis) in patients with HoFH who require additional LDL-C lowering.[2,3] It is notable that patients known to have two LDL-receptor negative alleles (little or no residual function) did not respond or had minimal response to these agents. PCSK9 inhibitors are well tolerated and not associated with hepatotoxicity.[2] Simvastatin, atorvastatin, and rosuvastatin are statins that are indicated for the management of patients with HoFH.[4-6] Ezetimibe is also indicated for use in combination with atorvastatin or simvastatin in patients with HoFH.[7] Ezetimibe/simvastatin tablets are indicated for use in HoFH.[8]

Guidelines

The **2014 HoFH position paper from the Consensus Panel on familial hypercholesterolemia of the European Atherosclerosis Society** states the diagnosis of HoFH is made based on genetic or clinical criteria.[9] A definitive diagnosis can be made by genetic confirmation of two mutant alleles at the low density lipoprotein receptor, apolipoprotein B, PCSK9, or low-density lipoprotein receptor adaptor protein 1 gene locus. However, in some patients genetic confirmation remains elusive. Historically, HoFH has been commonly diagnosed based on LDL-C levels such as an untreated LDL-C > 500 mg/dL, or a treated LDL-C ≥ 300 mg/dL. Also confirming the diagnosis is the presence of xanthomas (cutaneous or tendinous) before 10 years of age or a family of elevated LDL-C levels consistent with HeFH in both parents. Other clinical manifestations of HoFH include arcus cornea or xanthelasma. Initial therapy for HoFH is high-intensity statins.[9,10] Other guidelines note that ezetimibe and PCSK9 inhibitors can be added if further reductions are needed; Juxtapid can be considered.[11,12]

Safety

Juxtapid has a Boxed Warning regarding the risk of hepatotoxicity.[1] Juxtapid may cause elevations in liver transaminases. Also, Juxtapid increases hepatic fat (hepatic steatosis) with or without concomitant increases in transaminases. Due to the risk of hepatotoxicity, Juxtapid is available only through a Risk Mitigation and Strategy Program. Juxtapid is a Pregnancy Category X medication and may cause fetal harm when given to a pregnant woman based on findings suggesting teratogenicity in animals. Females of reproductive potential should obtain a negative pregnancy test before Juxtapid initiation and should utilize effective contraception during Juxtapid use. Juxtapid is associated with gastrointestinal (GI) adverse events (AEs), which occurred in 93% of patients (n = 27/29). GI AEs included diarrhea (79%), nausea (65%),

dyspepsia (38%), vomiting (34%), and abdominal pain (34%). Postmarketing reports regarding severe diarrhea have been associated with use of Juxtapid which have involved hospitalization of patients due to diarrhea-related complications such as volume depletion.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of Juxtapid. All approvals are provided for the duration noted below. Because of the specialized skills required for managing patients with HoFH, approval requires Juxtapid to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

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

FDA-Approved Indication

1. **Homozygous Familial Hypercholesterolemia (HoFH).** Approve Juxtapid for 1 year if the patient meets the following criteria (A, B, C, D, and E):
   - **A)** Patient is ≥ 18 years of age; AND
   - **B)** Patient meets one of the following (i, ii, or iii):
     - **i.** Patient has had genetic confirmation of two mutant alleles at the low-density lipoprotein receptor, apolipoprotein B, proprotein convertase subtilisin kexin type 9 (PCSK9), or low-density lipoprotein receptor adaptor protein 1 gene locus; OR
     - **ii.** Patient has an untreated low-density lipoprotein cholesterol (LDL-C) level > 500 mg/dL AND meets one of the following (a or b):
       Note: Untreated refers to prior therapy with any antihyperlipidemic agent.
       - **a)** Patient had clinical manifestation of homozygous familial hypercholesterolemia before 10 years of age; OR
         Note: Clinical manifestations of homozygous familial hypercholesterolemia are cutaneous xanthomas, tendon xanthomas, arcus cornea, tuberous xanthomas, or xanthelasma.
       - **b)** Both parents of the patient had untreated LDL-C levels or total cholesterol levels consistent with heterozygous familial hypercholesterolemia; OR
         Note: An example of heterozygous familial hypercholesterolemia in both parents would be if both had an untreated low-density LDL-C level ≥ 190 mg/dL and/or an untreated total cholesterol level > 250 mg/dL.
     - **iii.** Patient has a treated LDL-C level ≥ 300 mg/dL AND meets one of the following (a or b):
       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, PCSK9 inhibitors (i.e., Repatha [evolocumab subcutaneous injection], Praluent [alirocumab subcutaneous injection]), and Evkeeza (evinacumab-dgnb intravenous infusion).
       - **a)** Patient had clinical manifestations of homozygous familial hypercholesterolemia before 10 years of age; OR
         Note: Examples of clinical manifestations of homozygous familial hypercholesterolemia are cutaneous xanthomas, tendon xanthomas, arcus cornea, tuberous xanthomas or xanthelasma.

b) Both parents of the patient had untreated LDL-C levels or total cholesterol levels consistent with heterozygous familial hypercholesterolemia ; AND
Note: An example of heterozygous familial hypercholesterolemia in both parents would be if both had an untreated LDL-C ≥ 190 mg/dL and/or an untreated total cholesterol > 250 mg/dL.

C) Patient meets one of the following (i or ii):
- **i.** Patient meets both of the following (a and b):
  - **a)** Patient has tried at least one proprotein convertase subtilisin kexin type 9 (PCSK9) inhibitor for ≥ 8 continuous weeks; AND
    Note: Examples of PCSK9 inhibitors include Repatha (evolocumab subcutaneous injection), and Praluent (alirocumab subcutaneous injection).
  - **b)** LDL-C level after this PCSK9 inhibitor therapy remains ≥ 70 mg/dL; OR
- **ii.** Patient is known to have two LDL-receptor negative alleles; AND

D) Patient meets one of the following criteria (i or ii):
- **i.** Patient meets all of the following criteria (a, b and c):
  - **a)** Patient has tried one high-intensity statin therapy (i.e., atorvastatin ≥ 40 mg daily; rosuvastatin tablets ≥ 20 mg daily [as a single-entity or as a combination product]); AND
  - **b)** Patient has tried one high-intensity statin along with ezetimibe (as a single entity or as a combination product) for ≥ 8 continuous weeks; AND
  - **c)** LDL-C level after this treatment regimen remains ≥ 70 mg/dL; OR
- **ii.** Patient has been determined to be statin intolerant by meeting one of the following criteria (a or b):
  - **a)** 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 ≥ 0.5 mg/dL increase in Scr or doubling of the Scr] and/or myoglobinuria [myoglobin present in urine]); OR
  - **b)** Patient meets all of the following criteria [(1), (2), and (3)]:
    - **(1)** 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).
    - **(2)** The skeletal-related muscle symptoms occurred while receiving separate trials of both atorvastatin and rosuvastatin (as single-entity or as combination products); AND
    - **(3)** 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.

E) 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.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Juxtapid is not recommended in the following situations:

1. **Heterozygous Familial Hypercholesterolemia (HeFH).** The safety and effectiveness of Juxtapid have not been established in patients with hypercholesterolemia who do not have HoFH, including those with HeFH.[1]

2. **Hyperlipidemia.** The safety and efficacy of Juxtapid have not been established in patients with hypercholesterolemia who do not have HoFH.[1]

Note: This is not associated with homozygous familial hypercholesterolemia and may be referred to as combined hyperlipidemia, hypercholesterolemia (pure, primary), mixed dyslipidemia, or increased/elevated low-density lipoprotein cholesterol (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. Juxtapid® capsules [prescribing information]. Dublin, Ireland: Amryt; September 2020.
2. Repatha® subcutaneous injection [prescribing information]. Thousand Oaks, CA: Amgen; September 2021.
3. Praluent® subcutaneous injection [prescribing information]. Tarrytown, NY: Regeneron; April 2021.
4. Zocor® tablets [prescribing information]. Jersey City, NJ: Organon; March 2022.
5. Lipitor® tablets [prescribing information]. New York, NY: Pfizer; November 2021.
6. Crestor® tablets [prescribing information]. Wilmington, DE: AstraZeneca; September 2021.
7. Zetia® tablets [prescribing information]. Jersey City, NJ: June 2021.
8. Vytorin® tablets [prescribing information]. Whitehouse Station, NJ: Merck; September 2020.
9. Cuchel M, Bruckert E, Ginsberg HN, et al, for the European Atherosclerosis Society Consensus Panel on Familial Hypercholesterolaemia. Homozygous familial hypercholesterolemia: new insights and guidance for clinicians to improve detection and clinical management. A position paper from the Consensus Panel on Familial Hypercholesterolemia of the European Atherosclerosis Society. *Eur Heart J*. 2014;35:2146-2157.
10. Goldberg AC, Hopkins PN, Toth PP, et al. Familial hypercholesterolemia: screening, diagnosis and management of pediatric and adult patients. *J Clin Lipidol*. 2011;5:S1-S8.
11. Raal FJ, Hovingh GK, Catapano AL. Familial hypercholesterolemia treatments: guidelines and new therapies. *Atherosclerosis*. 2018;277:483-492.
12. Lloyd-Jones DM, Morris PB, Ballantyne CM. 2017 focused update of the 2016 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 Cardiol*. 2017;70(14):1785-1822.

HoFH – Homozygous familial hypercholesterolemia; LDL-C – Low density lipoprotein cholesterol; HeFH – Heterozygous familial hypercholesterolemia.