

# Antihyperlipidemics – Apolipoprotein B Synthesis Inhibitors: lomitapide mesylate

Medical policy no. 39.48.00

Effective: November 3, 2018

**Related medical policies:**

- **Antihyperlipidemics – Proprotein Convertase Subtilisin Kexin type 9 (PCSK-9) Inhibitors**

**Note:**

- For non-preferred agents in this class/category, patients must have had an inadequate response or have had a documented intolerance due to severe adverse reaction or contraindication to at least TWO\* preferred agents.  
\*If there is only one preferred agent in the class/category documentation of inadequate response to ONE preferred agent is needed
- If a new-to-market drug falls into an existing class/category, the drug will be considered non-preferred and subject to this class/category prior authorization (PA) criteria

**Background:**

Lomitapide is a microsomal triglyceride transfer protein inhibitor indicated as an adjunct to a low-fat diet and other lipid lowering treatments, including LDL apheresis where available, to reduce low-density lipoprotein cholesterol (LDL-C), total cholesterol (TC), apolipoprotein B (apo B), and non-high-density lipoprotein cholesterol (non-HDL) in patients with homozygous familial hypercholesterolemia (HoFH).

**Medical necessity**

Drug	Medical Necessity
Lomitapide mesylate (JUXTAPID®)	May be considered medically necessary when: Used for the treatment of homozygous familial hypercholesterolemia (HoFH) following a trial of a proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor

**Clinical policy:**

Drug	Clinical Criteria (Initial Approval)
Lomitapide mesylate (JUXTAPID®)	<ol style="list-style-type: none"> <li>1. Homozygous familial hypercholesterolemia (HoFH) confirmed by <b>one</b> of the following:               <ol style="list-style-type: none"> <li>a. Genetic confirmation of two mutant alleles at the LDLR, APOB, PCSK9, or LDLRAP1 gene locus.</li> <li>b. Documented DNA test for functional mutation(s) in both LDL receptor alleles or alleles known to affect LDL receptor functionality</li> <li>c. An untreated low density lipoprotein (LDL) cholesterol &gt; 500mg/dL and TG &lt; 300 mg/dL and both parents with documented untreated TC &gt; 250 mg/dL with either:                   <ol style="list-style-type: none"> <li>i. Cutaneous or tendon xanthoma before age 10 years</li> <li>ii. Evidence of heterozygous familial hypercholesterolemia in both parents</li> </ol> </li> </ol> </li> </ol>

	<p>2. History of failure after 3 months of <b>two</b> PCSK9 inhibitors with different active ingredients without decrease of LDL to patient specific goal, unless contraindication or intolerance due to severe adverse side effects.</p> <p>3. Greater than or equal to (<math>\geq</math>) 18 years of age</p> <p>4. Prescribed by or in consultation with a provider specializing in lipid management (e.g. cardiologist, lipid specialist, or endocrinologist)</p> <p><b>Approve for 6 months</b></p>
	<b>Criteria (Reauthorization)</b>
	<p>1. Continued clinical benefit (e.g. LDL reduction over baseline)</p> <p>2. Prescribed by or in consultation with a provider specializing in lipid management (e.g. cardiologist, lipid specialist, or endocrinologist)</p> <p><b>Approve for 12 months</b></p>

## Dosage and quantity limits

Drug Name	Dose and Quantity Limits
Juxtapid 5mg capsule	#1 capsule per day; #28 capsules per 28-days
Juxtapid 10mg capsule	#1 capsule per day; #28 capsules per 28-days
Juxtapid 20mg capsule	#1 capsule per day; #28 capsules per 28-days
Juxtapid 30mg capsule	#1 capsule per day; #28 capsules per 28-days
Juxtapid 40mg capsule	#1 capsule per day; #28 capsules per 28-days
Juxtapid 60mg capsule	#1 capsule per day; #28 capsules per 28-days

## References

1. Cuchel, M, Bruckert, E, Ginsberg, HN, et al. Homozygous familial hypercholesterolaemia: new insights and guidance for clinicians to improve detection and clinical management. A position paper from the Consensus Panel on Familial Hypercholesterolaemia of the European Atherosclerosis Society. *European heart journal*. 2014;35:2146-57. PMID: 25053660
2. Raal, FJ, Santos, RD. Homozygous familial hypercholesterolemia: current perspectives on diagnosis and treatment. *Atherosclerosis*. 2012;223:262-8. PMID: 22398274
3. Kynamro Risk Evaluation and Mitigation Strategy [cited 5/26/2017]; Available from: <http://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM337472.pdf> .
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5. Raal, FJ, Santos, RD, Blom, DJ, et al. Mipomersen, an apolipoprotein B synthesis inhibitor, for lowering of LDL cholesterol concentrations in patients with homozygous familial hypercholesterolaemia: a randomised, double-blind, placebo-controlled trial. *Lancet*. 2010;375:998-1006. PMID: 20227758
6. Stein, EA, Dufour, R, Gagne, C, et al. Apolipoprotein B synthesis inhibition with mipomersen in heterozygous familial hypercholesterolemia: results of a randomized, double-blind, placebo-controlled trial to assess

- efficacy and safety as add-on therapy in patients with coronary artery disease. *Circulation*. 2012;126:2283-92. PMID: 23060426
7. Akdim, F, Visser, ME, Tribble, DL, et al. Effect of mipomersen, an apolipoprotein B synthesis inhibitor, on low-density lipoprotein cholesterol in patients with familial hypercholesterolemia. *The American journal of cardiology*. 2010;105:1413-9. PMID: 20451687
  8. Panta, R, Dahal, K, Kunwar, S. Efficacy and safety of mipomersen in treatment of dyslipidemia: A meta-analysis of randomized controlled trials. *Journal of clinical lipidology*. 2015 Mar-Apr;9(2):217-25. PMID: 25911078
  9. Kynamro® [Prescribing Information]. Cambridge, MA: Genzyme; March 2015
  10. Samaha, FF, McKenney, J, Bloedon, LT, Sasiela, WJ, Rader, DJ. Inhibition of microsomal triglyceride transfer protein alone or with ezetimibe in patients with moderate hypercholesterolemia. *Nat Clin Pract Cardiovasc Med*. 2008;5:497-505. PMID: 18506154
  11. Juxtapid® [Prescribing Information]. Cambridge, MA: Aegerion Pharmaceuticals; May 2016

## History

Date	Action and Summary of Changes
12/6/2018	Removal of Kynamro from related policies
11/02/2018	Trial of PCSK-9 added
04/18/2018	New Policy