Kynamro (mipomersen)
Policy Number: C3892-A

CRITERIA EFFECTIVE DATES:

ORIGINAL EFFECTIVE DATE	LAST REVIEWED DATE	NEXT REVIEW DATE
10/2013	07/03/2019	07/03/2020
J CODE	**TYPE OF CRITERIA**	**LAST P&T APPROVAL/VERSION**
J3490 (NOC)	MCP to PA	Q3 2019 20190828C3892-A

PRODUCTS AFFECTED:
Kynamro (mipomersen)

DRUG CLASS:
Antihyperlipidemics - Misc

ROUTE OF ADMINISTRATION:
Subcutaneous

PLACE OF SERVICE:
Buy and Bill, Specialty Pharmacy
The recommendation is that medications in this policy will be for medical benefit coverage and administered in a place of service that is a non-hospital facility based location (i.e., home infusion provider, provider's office, free-standing ambulatory infusion center)

AVAILABLE DOSAGE FORMS:
Kynamro SOSY 200MG/ML

FDA-APPROVED USES:
For the treatment of homozygous familial hypercholesterolemia (HoFH).

COMPENDIAL APPROVED OFF-LABELED USES: None

COVERAGE CRITERIA: INITIAL AUTHORIZATION

DIAGNOSIS: homozygous familial hypercholesterolemia

REQUIRED MEDICAL INFORMATION:
A. HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA
1. Diagnosis of definite homozygous familial hypercholesterolemia confirmed by
   (i) ONE of the following genetic testing: Genetic testing demonstrating mutations in both alleles for LDLR (LDL receptors) OR Genetic testing demonstrating gain-of-function mutations in both alleles for PCSK9 OR Genetic testing demonstrating mutations in both alleles for apoB (apoprotein B) OR Cellular testing demonstrating reduced LDL receptor activity in fibroblasts / lymphocytes equaling 20% or less of the normal activity
   OR
   (ii) Documented diagnosis of definite FH according to the Simon Broome criteria:[Adult: Cholesterol above 7.5mmol/l or LDL cholesterol above 4.9 mmol/l, or Child under 16: Cholesterol above 6.7mmol/l or LDL cholesterol above 4 mmol/l AND Tendon

xanthomas in patient or a 1st degree relative (parent, sibling, child), or in a 2nd degree relative (grandparent, uncle, aunt).] OR DNA-based evidence of an LDL receptor mutation, familial defective apoB-100, or a PCSK9 mutation.

AND
2. Prescriber attests that member has been and will continue to follow a low-fat diet supplying less than 20% of energy from fat
AND
3. Member has had an inadequate clinical response (defined as failure to reach target LDL), intolerance or contraindication to TWO of the following HMG CoA reductase inhibitor (statin) therapy after an adherent trial at maximum therapeutic dose for at least 90 days of consecutive therapy in the past 12 months: pravastatin (Pravachol) 80mg daily, simvastatin (Zocor) 40mg daily, atorvastatin (Lipitor) 80mg daily OR rosuvastatin (Crestor) 40mg daily
AND
4. Member has had an inadequate clinical response (defined as failure to reach target LDL), intolerance or contraindication to Repatha (evolocumab)
AND
5. Prescriber attests that Kynamro (mipomersen) will be used in combination with a standard lipid lowering regimen containing a high potency statin
AND
6. Kynamro (mipomersen) will not be used concomitantly with Juxtapid (lomitapide)
AND
7. Member has not had LDL apheresis within 8 weeks

DURATION OF APPROVAL: Initial authorization: 6 months, Contiuation of therapy:

QUANTITY:
200 mg once weekly as a subcutaneous injection. Four (4) vials or prefilled syringes per 28 days.

PRESCRIBER REQUIREMENTS: Prescribed by or in consultation with a board-certified clinical lipidologist (achieved certification from the American Board of Clinical Lipidology); specialist in Endocrinology, Diabetes and Metabolism; cardiologist; or hematologist
Prescribed by a certified REMS provider demonstrated with supporting documentation (signed attestation)

AGE RESTRICTIONS:
18 years of age or older

GENDER:
Male and female

CONTINUATION OF THERAPY:
A. HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA
1. Adherence to therapy at least 85% of the time as verified by Prescriber and member's medication fill history (review Rx history for compliance)
AND
2. Documentation of demonstrated efficacy to Kynamro (mipomersen) treatment as demonstrated by the following: (i) For members who initiated Kynamro therapy within the past 6 months only: Documentation that member's LDL-C level reduction achieved is sufficiently robust by Week 28 to support continuation of Kynamro therapy OR (ii) For members who have been maintained on Kynamro therapy for longer than 6 months: Documentation of positive clinical response to Kynamro therapy

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:
All other uses of the Kynamro (mipomersen) that are not an FDA-approved indication or included above are considered experimental/investigational and is not a covered benefit. The following list may not be all-inclusive and is subject to change based on research and medical literature. The

safety and effectiveness of Kynamro (mipomersen) have not been established in patients with hypercholesterolemia who do not have HoFH, including those with heterozygous familial hypercholesterolemia (HeFH). The effect of Kynamro (mipomersen) on cardiovascular morbidity and mortality has not been determined. The use of Kynamro (mipomersen) as an adjunct to LDL apheresis is not recommended.

OTHER SPECIAL CONSIDERATIONS: None

BACKGROUND:
Familial hypercholesterolemia results mainly from autosomal dominant genetic defects in the LDL-C receptor, apo B, or proprotein convertase subtilisin kexin type 9 (PCSK9), all of which are involved in the normal processing and trafficking of LDL-C. It is estimated that one in every 500 individuals in the United States has heterozygous familial hypercholesterolemia, while one in one million individuals is affected by HoFH. Patients with HoFH carry two of the same defective genes, while patients with the heterozygous form of the condition carry one defective gene. For patients with HoFH, plasma LDL-C levels are often five times greater than normal, and in a small sample of patients with HoFH, untreated TC levels were commonly between 700 mg/dL and 800 mg/dL. Other signs and symptoms of HoFH are a deposition of cholesterol (xanthomas) in the skin and tendons, especially the elbows, knees, Achilles tendon, and hands. Patients may also present with cholesterol deposits in the cornea (corneal arcus). Xanthomas may become apparent during childhood in patients with HoFH, and severe coronary artery disease resulting in myocardial infarction or requiring interventions such as coronary artery bypass grafting is often present by the age of 20 years.
Kynamro (mipomersen) is an oligonucleotide inhibitor of apolipoprotein B-100 synthesis indicated as an adjunct to lipid-lowering medications and diet to reduce low density lipoprotein cholesterol (LDL-C), apolipoprotein B (apo B), total cholesterol (TC), and non-high density lipoprotein-cholesterol (nonHDL-C) in patients with homozygous familial hypercholesterolemia (HoFH).

APPENDIX:

REFERENCES:

1. Kynamro [package insert]. Cambridge, MA: Genzyme Corporation; May 2016.
2. 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. Eur Heart J. 2014; 35:2146-57.