Effective date: 12/12/2018
Review date:6/2019,5/2020, 3/2021
Scope: Medicaid

SPECIALTY GUIDELINE MANAGEMENT

KUVAN (sapropterin dihydrochloride)

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. FDA-Approved Indication
Kuvan is indicated to reduce blood phenylalanine (Phe) levels in patients with hyperphenylalaninemia (HPA) due to tetrahydrobiopterin- (BH4-) responsive phenylketonuria (PKU). Kuvan is to be used in conjunction with a Phe-restricted diet.

B. Compendial Uses
1. Autosomal dominant guanine triphosphate cyclohydrolase deficiency (Segawa disease)
2. Autosomal recessive guanine (GTP) cyclohydrolase deficiency
3. 6-pyruvoyl-tetrahydropterin synthase (6-PTS) deficiency
4. Sepiapterin reductase deficiency
5. Dihydropteridine reductase (DHPR) deficiency
6. Pterin-4a-carbinolamine dehydralase deficiency (also called primapterinuria)

All other indications are considered experimental/investigational and not medically necessary.

II. REQUIRED DOCUMENTATION

Submission of the following information is necessary to initiate the prior authorization review: enzyme assay, genetic testing, or phenylalanine level results supporting diagnosis and most recent weight

III. CRITERIA FOR INITIAL APPROVAL

A. Phenylketonuria (PKU)
Authorization of 60 days may be granted for members with a diagnosis of phenylketonuria (PKU) and meets the following criteria:
1. Must be prescribed by a physician with knowledge and experience in metabolic disease.
2. Member must be 1 month and older.
3. The member has phenylalanine restricted diet alone despite strict compliance.
4. Member has a baseline phenylalanine level greater than or equal to 360 micromol/L (6mg/dL) with dietary interventions alone.
5. The member is not receiving Kuvan in combination with Palynziq (pegvaliase-pqpz).
6. The dose of Kuvan does not exceed 20mg/kg/day.
    a. If blood Phe levels do not decrease after one month, the dose should be increased to 20 mg/kg daily. If blood Phe levels do not decrease after one month of therapy with 20 mg/kg daily, Kuvan should be discontinued. A responsive patient may receive a dosage within the range of 5-20 mg/kg daily.

B. Biopterin Metabolic Defects

Authorization of 6 months may be granted for members who have any of the following biopterin metabolic defects:

1. Autosomal dominant guanine triphosphate cyclohydrolase deficiency (Segawa disease)
2. Autosomal recessive guanine (GTP) cyclohydrolase deficiency
3. 6-pyruvoyl-tetrahydropterin synthase (6-PTS) deficiency
4. Sepiapterin reductase deficiency
5. Dihydropteridine reductase (DHPR) deficiency
6. Pterin-4a-carbinolamine dehydralase deficiency (also called primapterinuria)

IV. CONTINUATION OF THERAPY

A. Phenylketonuria (PKU)

Authorization of 6 months may be granted for continued treatment in members requesting reauthorization for phenylketonuria (PKU) who meet all of the following criteria:

1. The member continues to maintain a Phe restricted diet.
2. The member is not receiving Kuvan in combination with Palynziq (pegvaliase-pqpz).
3. The dose of Kuvan does not exceed 20mg/kg/day.
4. Achieve or maintain a 30% decrease in phenylalanine levels from baseline; OR
5. Phenylalanine levels are in an acceptable range (less than 360 micromol/L or 6mg/dL); AND
6. If blood Phe levels do not decrease after one month of therapy with 20 mg/kg daily, Kuvan should be discontinued.

B. Biopterin Metabolic Defects

Authorization of 6 months may be granted for continued treatment in members requesting reauthorization for any biopterin metabolic defect listed in Section III who are experiencing benefit from therapy as evidenced by disease stability or disease improvement.

V. REFERENCES

1. Kuvan [package insert]. Novato, CA: BioMarin Pharmaceutical Inc.; February 2021.
2. Clinical Consult: Caremark Clinical Programs Review: Focus on Phenylketonuria. February 2008.
3. Vockley J, Andersson HC, Antshel KM, et al. Phenylalanine hydroxylase deficiency: diagnosis and management guideline. *Genet Med.* 2014;16(2):188-200.
4. Singh RH, Rohr F, Frazier D, et al. Recommendations for the nutrition management of phenylalanine hydroxylase deficiency. *Genet Med.* 2014;16(2):121-131.