Effective date: 12/12/2018
Review date: 6/2019, 5/2020, 3/2021, 2/2022, 2/2023, 2/2024, 2/2025 Scope: Medicaid

SPECIALTY GUIDELINE MANAGEMENT

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
Sapropterin dihydrochloride is indicated to reduce blood phenylalanine (Phe) levels in patients one month of age and older with hyperphenylalaninemia (HPA) due to tetrahydrobiopterin- (BH4-) responsive phenylketonuria (PKU). Sapropterin dihydrochloride 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. 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. Documentation that the member must be 1 month and older.
3. Documentation that the member has phenylalanine restricted diet alone despite strict compliance.
4. Documentation that the member has a baseline phenylalanine level greater than or equal to 360 micromol/L (6mg/dL) with dietary interventions alone.
5. Documentation that the member is not receiving sapropterin dihydrochloride in combination with Palynziq (pegvaliase-pqpz).
6. The dose 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, sapropterin dihydrochloride 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 with documentation 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)

III. CONTINUATION OF THERAPY

A. Phenylketonuria (PKU)

Authorization of 6 months may be granted for continued treatment in members with documentation 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 sapropterin dihydrochloride in combination with Palynziq (pegvaliase-pqpz).
3. The dose 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, sapropterin dihydrochloride should be discontinued.

B. Biopterin Metabolic Defects

Authorization of 6 months may be granted for continued treatment in members with documentation 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.

IV. QUANTITY LIMIT

1. sapropterin dihydrochloride 100mg powder packets: 20 packets per day
2. sapropterin dihydrochloride 500mg powder packets: 4 packets per day
3. sapropterin dihydrochloride 100mg tablets: 20 tablets per day

V. REFERENCES

1. Sapropterin dihydrochloride [package insert]. Chestnut Ridge, NY: Par Pharmaceutical; August 2024.
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.