

Effective Date: 7/1/2020
Last Reviewed: 4/2020, 2/2021, 2/2022, 7/2023, 4/2024
Scope: Medicaid

**Sodium Phenylbutyrate (generic Buphenyl)
Olpruva (sodium phenylbutyrate)
Pheburane (sodium phenylbutyrate)**

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.

FDA-Approved Indication

- A. Buphenyl is indicated as adjunctive therapy in the chronic management of patients with urea cycle disorders involving deficiencies of carbamylphosphate synthetase (CPS), ornithine transcarbamylase (OTC), or argininosuccinic acid synthetase (AS). It is indicated in all patients with neonatal-onset deficiency (complete enzymatic deficiency, presenting within the first 28 days of life). It is also indicated in patients with late-onset disease (partial enzymatic deficiency, presenting after the first month of life) who have a history of hyperammonemic encephalopathy. It is important that the diagnosis be made early, and treatment initiated immediately to improve survival. Any episode of acute hyperammonemia should be treated as a life-threatening emergency.
- B. Pheburane is indicated as adjunctive therapy to standard of care, which includes dietary management, for the chronic management of adult and pediatric patients with urea cycle disorders (UCDs), involving deficiencies of carbamylphosphate synthetase (CPS), ornithine transcarbamylase (OTC) or argininosuccinic acid synthetase (AS).
- C. Olpruva is indicated as adjunctive therapy to standard of care, which includes dietary management, for the chronic management of adult and pediatric patients weighing 20 kg or greater and with a body surface area (BSA) of 1.2 m² or greater, with urea cycle disorders (UCDs) involving deficiencies of carbamylphosphate synthetase (CPS), ornithine transcarbamylase (OTC), or argininosuccinic acid synthetase (AS).

Compendial Use

Arginase deficiency

All other indications are considered experimental/investigational and are not a covered benefit.

II. DOCUMENTATION

Submission of the following information is necessary to initiate the prior authorization review:

- A. Initial requests:
 - 1. Enzyme assay, biochemical, or genetic testing results supporting diagnosis; and
 - 2. Lab results documenting baseline plasma ammonia levels or glutamine levels.
- B. Continuation of therapy requests: lab results documenting a reduction in plasma ammonia levels from baseline.

Effective Date: 7/1/2020
Last Reviewed: 4/2020, 2/2021, 2/2022, 7/2023, 4/2024
Scope: Medicaid

III. CRITERIA FOR INITIAL APPROVAL

Urea Cycle Disorder (UCD) Chronic Management

Authorization of 6 months may be granted for chronic management of urea cycle disorder (UCD) including arginase deficiency, when the following criteria are met:

1. The diagnosis is confirmed by enzymatic, biochemical, or genetic testing.
2. The member has elevated plasma ammonia levels at baseline, evidenced by a lab value of a fasting plasma ammonia level > 0.5 upper limit of normal OR a glutamine level that is greater than 1,000 $\mu\text{mol/L}$.
3. Member must have had an inadequate response to and continue to be on a protein restricted diet or amino acid supplementation.
4. The requested drug is not being used for the management of acute hyperammonemia.
5. The prescribed dose does not exceed 20 grams per day.
6. If the request is for Olpruva, both the following criteria are met:
 - a. Member weighs 20kg or greater; and
 - b. Member has a body surface area (BSA) of 1.2 m^2 or greater

IV. CONTINUATION OF THERAPY

If member has not been approved for this drug by Neighborhood in the past, clinician must submit documentation that initial criteria is met. Authorization of 6 months may be granted for continued treatment in members requesting reauthorization for chronic management of a urea cycle disorder (UCD), who are experiencing benefit from therapy as evidenced by a reduction in plasma ammonia levels from baseline.

V. QUANTITY LIMIT

1. Sodium Phenylbutyrate (generic Buphenyl)
 - i. 500mg tablet: 40 tablets per day (1200 tablets per 30 days)
 - ii. 266 gm bottle of powder: 26.6 gm per day (3 bottles or 798 gram per 30 days)
2. Olpruva Paks
 - i. 2gm and 3gm paks: 1 kit per 30 days (1 kit = 90 doses/envelopes = 180 packets)
 - ii. 4gm, 5gm, 6gm and 6.67 gm paks: 1 kit per 30 days (1 kit = 90 doses/envelopes = 270 packets)
 - iii. A quantity limit exception of more than 1 kit per 30 days may be granted if member requires dosing four to six times per day, up to the maximum daily dose of 20 grams per day.
3. Pheburane Oral Pellets (Each bottle contains 84g sodium phenylbutyrate in 174g of oral pellets.)
 - i. 46.4 gm per day (8 bottles or 1,392 grams per 30 days)

VI. REFERENCES

1. Buphenyl (sodium phenylbutyrate). Horizon Therapeutics. Lake Forest, IL. FDA Package Insert. April 2023.
2. Mew NA, Lanpher BC. Urea Cycle Disorders Overview. In: Pagon RA, Adam MP, Ardinger HH, et. al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2017 [updated June 22, 2017]. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK1217/?report=printable>.
3. Häberle J, Boddart N, Burlina A, et al. Suggested guidelines for the diagnosis and management of urea cycle disorders. *J Inherit Metab Dis*. 2019;42(6):1192-1230.
4. Wong D, Cederbaum S, Crombez, E. Arginase Deficiency. *GeneReviews*. August 2014 (updated May 20, 2020); <http://www.ncbi.nlm.nih.gov/books/NBK1159/>.

Effective Date: 7/1/2020
Last Reviewed: 4/2020, 2/2021, 2/2022, 7/2023, 4/2024
Scope: Medicaid

5. Pheburane [package insert]. Bryn Mawr, PA: Medunik USA, Inc.; August 2023.
6. Olpruva [package insert]. Newton, MA: Acer Therapeutics, Inc.; December 2022.