Carbaglu is used in N-acetylglutamate synthase deficiency. It is classified as an antidote; metabolic alkalosis agent; Urea Cycle disorder Treatment Agent. N-acetylglutamate synthase (NAGS) is a mitochondrial enzyme which produces N-acetylglutamate (NAG). NAG is a required allosteric activator of the hepatic mitochondrial enzyme, carbamoyl phosphate synthetase 1 (CPS 1), which converts ammonia into urea (N-acetylglutamate analog) in the first step of the urea cycle. In NAGS-deficient patients, carglumic acid serves as a replacement for NAG.

Pre-Authorization Criteria:

adjunctive treatment of acute hyperammonemia and maintenance therapy of chronic hyperammonemia due to the deficiency of the hepatic enzyme N-acetylglutamate synthase (NAGS) in adult and pediatric patients

Note:
VCHCP requires that Carbaglu be prescribed by a physician experienced in the management of metabolic disorders, as hyperammonemia is a potentially life-threatening emergency.

Dosing: Adult:
Acute hyperammonemia: Oral: 100-250 mg/kg/day given in 2 or 4 divided doses (rounded to the nearest 100 mg); titrate to age-appropriate plasma ammonia levels. Concomitant adjunctive ammonia-lowering therapy recommended.
Chronic hyperammonemia: Oral: Usual dose (based on limited data): <100 mg/kg/day given in 2 or 4 divided doses; titrate to age-appropriate plasma ammonia levels

Dosing: Pediatric:
Acute hyperammonemia: Oral: Refer to adult dosing.
Chronic hyperammonemia: Oral: Refer to adult dosing.

Dosing: Renal Impairment:
No dosage adjustment provided in manufacturer’s labeling.

Dosing: Hepatic Impairment:
No dosage adjustment provided in manufacturer’s labeling.

Dosage Forms: U.S.
Excipient information presented when available (limited, particularly for generics); consult specific product labeling.
Tablet, Oral:
Carbaglu: 200 mg [scored]

Generic Equivalent Available: U.S.-No

Prescribing and Access Restrictions:
Carbaglu is not available through pharmaceutical wholesalers or retail pharmacies, but only through direct shipping from the Accredo specialty pharmacy. Prescribers must contact Accredo Health Group at 888-454-8860 or refer to www.accredo.com to initiate patients on this product.

Administration:
Administer immediately prior to meals.
Oral: Tablets should not be crushed or swallowed whole. Disperse each 200 mg tablet in a minimum of 2.5 mL of water immediately before use and administer orally or via a nasogastric tube. Tablets do not dissolve completely, and some particles may remain; rinse container with water and swallow rinse immediately. Follow administration via nasogastric tube by flush with additional water to clear the tube. Carglumic acid tablets should not be mixed with any other foods or liquids other than water.
Oral syringe: Disperse each 200 mg tablet in 2.5 mL of water to yield a concentration of 80 mg/mL (shake gently in container). Appropriate volume of dispersion needed for dose should be drawn up in an oral syringe and administered immediately (discard unused dispersion). After administration, oral syringe should be refilled with a minimum of 1-2 mL of water and administered immediately.

Adverse Reactions:
>10%: fever, headache, vomiting, abdominal pain, diarrhea, anemia, ear infection, tonsillitis, nasopharyngitis, other infections.

References:
1. www.uptodate.com: Carglumic acid: Drug Information
2. www.epocrates.com: Carbaglu: Drug information

Revision History:
Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD
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Date Reviewed/No Updates: 2/18/20 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/18/20
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