Carglumic acid

From Wikipedia, the free encyclopedia

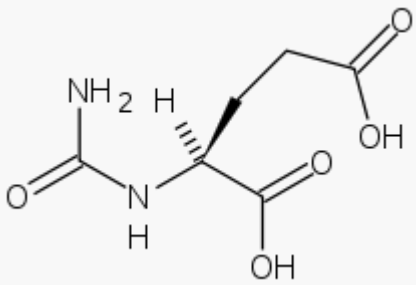
Carglumic acid is an orphan drug, marketed by Orphan Europe under the trade name **Carbaglu**. Carglumic acid is used for the treatment of hyperammonaemia in patients with *N*-acetylglutamate synthase deficiency.[1][2] The initial daily dose ranges from 100 to 250 mg/kg, adjusted thereafter to maintain normal plasma levels of ammonia.

The US FDA approved it for treatment of hyperammonaemia on March 18, 2010. Orphan Drug exclusivity expires on March 18,2017.[3]

References [edit]

1. ^ Caldovic L, Morizono H, Daikhin Y, Nissim I, McCarter RJ, Yudkoff M, Tuchman M (2004). "Restoration of ureagenesis in N-acetylglutamate synthase deficiency by N-carbamylglutamate". *J Pediatr* **145** (4): 552–4. doi:10.1016/j.jpeds.2004.06.047. PMID 15480384.
2. ^ Elpeleg O, Shaag A, Ben-Shalom E, Schmid T, Bachmann C (2002). "N-acetylglutamate synthase deficiency and the treatment of hyperammonemic encephalopathy". *Ann Neurol* **52** (6): 845–9. doi:10.1002/ana.10406. PMID 12447942.
3. ^ "Patent and Exclusivity Search Results".

Carglumic acid



Systematic (IUPAC) name	
(2*S*)-2-(carbamoylamino)pentanedioic acid	
Clinical data	
AHFS / Drugs.com	Consumer Drug Information
Licence data	EMA:Link
Pregnancy category	unknown
Legal status	?
Routes	Oral
Pharmacokinetic data	
Bioavailability	30%
Protein binding	Undetermined
Metabolism	Partial
Half-life	4.3 to 9.5 hours
Excretion	Fecal (60%) and renal (9%, unchanged)
Identifiers	
CAS number	1188-38-1 ✗
ATC code	A16AA05
PubChem	CID 121396
DrugBank	DB06775
ChemSpider	1265942 ✗
UNII	5L0HB4V1EW ✗
KEGG	D07130 ✓
ChEBI	CHEBI:71028 ✗
ChEMBL	CHEMBL1201780 ✗
Synonyms	(*S*)-2-ureidopentanedioic acid

Chemical data	
Formula	$C_6H_{10}N_2O_5$
Molecular mass	190.2 g/mol
SMILES	[show]
InChI	[show]
✗ (what is this?) (verify)	

v · t · e · Other alimentary tract and metabolism products (A16) [hide]	
Amino acids and derivatives	Levocarnitine · Ademetionine · Levoglutamide · Cysteamine · **Carglumic acid** · Betaine ·
Enzymes	Carbohydrate metabolism: *sucrase* (Sacrosidase) · *alpha-glucosidase* (Alglucosidase alfa) · Glycolipid/sphingolipid: *glucocerebrosidase* (Alglucerase · Imiglucerase · Taliglucerase alfa · Velaglucerase alfa) · *alpha-galactosidase* (Agalsidase alfa · Agalsidase beta) · Glycosaminoglycan: *iduronidase* (Laronidase) · *arylsulfatase B* (Galsulfase) · *iduronate-2-sulfatase* (Idursulfase) ·
Various alimentary tract and metabolism products	Anethole trithione · Eliglustat · Glycerol phenylbutyrate · Miglustat · Nitisinone · Sapropterin · Sodium phenylbutyrate · Teduglutide · Tioctic acid · Zinc acetate ·

Index of digestion v · t · e ·	
Description	Anatomy (tract · glands · other) · Physiology (enzymes) · Development ·
Disease	Congenital · Neoplasms and cancer · Other · Symptoms and signs (eponymous) · Blood tests ·
Treatment	Procedures · Drugs (anabolic steroids · antacids · diarrhoea and infection · bile and liver · functional gastrointestinal disorders · laxatives · peptic ulcer and reflux · vomiting · other) ·

Categories: Orphan drugs | Carbamates | Dicarboxylic acids | Amino acid derivatives