

**VHSC PHARMACEUTICAL SCIENCES CSU
NON-FORMULARY DRUG DATA SHEET**

Drug Name L-Arginine Hydrochloride (Amino Acid)	Manufacturer Sandoz
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Strength 250 mg/ml - 30 mL vial	Dosage Form Injection
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Indications

- treatment of metabolic disorders such as hyperammonemia in patients with urea cycle enzyme deficiencies and those with mitochondrial encephalomyopathy
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Compatibility and Stability

- stable at room temperature
 - single use vial
 - compatible with D5W, D10W
 - compatible with Sodium Phenylacetate and Sodium Benzoate
 - diluted solutions stable x 24 hours at room temperature
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Dosage and Administration

- Mitochondrial Encephalomyopathy: 30 g in 250mL D5W IV Q12H x 3 doses
Infuse each dose over 30 minutes using an infusion pump
To be given within 6 hours of the onset of acute stroke (may be given outside this time frame, but most effective if given within 6 hours of onset of stroke symptoms)
 - Hyperammonemia - Ornithine Transcarbamylase (OTC) Deficiency:
Priming infusion: 4 g/M² (mixed with Sodium Phenylacetate and Sodium Benzoate) in 1L D10W infused over 90 minutes.
Sustaining infusion: 4 g/M² (mixed with Sodium Phenylacetate and Sodium Benzoate) in 1L D10W infused over 24 hours.
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Side Effects* and Drug Interactions

- nausea, vomiting, numbness, headache and venous irritation are among the most frequently reported side effects following IV administration of amino acids, especially if administered too rapidly.
 - necrosis and superficial phlebitis may occur due to leakage of IV solutions into the surrounding tissue
 - arginine stimulates pancreatic release of insulin and glucagon, and causes increases in blood glucose concentration
 - drug interactions: estrogens and estrogen-progestin oral contraceptives (may reduce glucagon and insulin response to arginine); thiazide diuretics and aminophylline (insulin concentrations following arginine stimulation may be further elevated); sulfonylurea antidiabetic agents (may suppress plasma glucagon response to arginine); spironolactone, potassium-sparing diuretics (may cause significant hyperkalemia)
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Precautions

- administer with caution in patients with hyperchloremic acidosis or with renal failure
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***Report any side effects to Pharmaceutical Sciences CSU**

AUG2010