L-Gluthome Injection

Product Information: L-Alanyl-L-Glutamine (20g/100mL) Injection

Composition:

• L-Alanyl-L-Glutamine (20g/100mL): A dipeptide of alanine and glutamine used as a parenteral nutrient supplement.

Pharmacological Class:

• L-Alanyl-L-Glutamine: Amino acid derivative used as a source of glutamine and nitrogen for nutritional support.

Indications:

L-Alanyl-L-Glutamine injection is indicated for:

- Parenteral nutrition (PN) in critically ill patients who cannot meet their nutritional needs orally or enterally.
- Conditions requiring glutamine supplementation, including:
 - Severe burns.
 - Trauma or post-surgical recovery.
 - Gastrointestinal disorders such as short bowel syndrome.
 - Cancer therapy (to improve recovery during chemotherapy or radiation therapy).

Mechanism of Action:

- L-Alanyl-L-Glutamine provides glutamine in a stable dipeptide form. Glutamine is an essential substrate for rapidly dividing cells (e.g., enterocytes and immune cells) and plays a vital role in:
 - o Protein synthesis.
 - Maintaining intestinal barrier function.
 - o Supporting immune function.
 - Acting as a precursor for nucleotides and neurotransmitters.

Dosage and Administration:

- Recommended dose:
 - Adults: Typically 0.3–0.5
 g/kg/day administered
 intravenously as part of total
 parenteral nutrition (TPN).
 - The dose should be adjusted based on clinical condition and nutritional requirements.
- Administration:
 - Dilute the injection with a compatible intravenous fluid (e.g., saline, glucose, or amino acid solutions) before infusion.
 - Administer as a continuous infusion through a central or peripheral vein as directed by a healthcare provider.

Contraindications:

- Hypersensitivity to L-Alanyl-L-Glutamine or any component of the formulation.
- Severe hepatic or renal impairment without appropriate monitoring of nitrogen levels.

Warnings and Precautions:

- Hyperammonemia: Monitor for ammonia levels, especially in patients with compromised liver function.
- Electrolyte imbalance: Regular monitoring is recommended to prevent complications due to electrolyte or fluid overload.
- Renal function: Use with caution in patients with renal impairment; ensure nitrogen levels are monitored.
- Allergic reactions: Discontinue use immediately if signs of hypersensitivity (e.g., rash, urticaria, or anaphylaxis) occur.

Adverse Effects:

- Common: Local irritation at the infusion site, mild nausea.
- Uncommon: Hyperammonemia, metabolic acidosis, and electrolyte imbalances.
- Rare: Hypersensitivity reactions, including rash, fever, or chills.

Drug Interactions:

Compatible with most TPN solutions; however, compatibility

- should always be verified before mixing.
- Avoid simultaneous use with other nitrogen-containing compounds without careful monitoring to prevent nitrogen overload.

Use in Special Populations:

- Pregnancy: Use only if clearly indicated and the benefits outweigh the risks (limited human data available).
- Lactation: Insufficient data; consult with a healthcare provider.
- Pediatrics: Safety and efficacy in children have not been fully established. Use with caution under expert guidance.
- Geriatrics: Dose adjustments may be necessary depending on renal and hepatic function.

Storage:

- Store below 25°C. Do not freeze.
- Protect from light and keep out of reach of children.
- Use immediately after opening the vial; discard unused portions.

Packaging:

• Sterile, single-use vial containing 20g of L-Alanyl-L-Glutamine in 100mL solution.

Key Points for Healthcare Providers:

- 1. Administer as part of a carefully monitored TPN regimen.
- 2. Monitor serum glutamine levels, nitrogen balance, and overall metabolic status during therapy.
- 3. Watch for signs of intolerance, including metabolic complications or infusion reactions.

Patient Information:

- This injection is administered under the supervision of a healthcare professional.
- Inform your doctor about any known allergies, liver, or kidney conditions.
- Report any unusual symptoms, such as dizziness, nausea, or swelling, during or after the infusion.

L-Alanyl-L-Glutamine injection is a critical supplement for providing glutamine in patients requiring parenteral nutrition, particularly in severe catabolic states. Proper administration and monitoring ensure optimal therapeutic outcomes.

Manufactured in India for:



(An ISO 9001: 2015 Certified Co.)

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