

Volipred 125 Injection

Methylprednisolone (125mg) Injection

Description

Methylprednisolone (125mg) Injection is a synthetic corticosteroid used to treat a wide range of inflammatory conditions, allergic reactions, and autoimmune disorders. It helps reduce swelling, redness, and inflammation in the body. Methylprednisolone works by modifying the immune system response and suppressing inflammation through the inhibition of various mediators of inflammation, including cytokines and prostaglandins.

This formulation is available as an intravenous (IV) or intramuscular (IM) injection for the management of acute symptoms or conditions that require rapid relief.

Composition

Each vial contains:

- Methylprednisolone (125mg)
 - Excipients: Sodium chloride, Water for injection, and other stabilizing agents.
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Indications

Methylprednisolone 125mg Injection is indicated for the treatment of:

- Severe Allergic Reactions: Such as anaphylaxis, angioedema, or serum sickness.
- Autoimmune Diseases: Including systemic lupus erythematosus (SLE), rheumatoid arthritis, and dermatologic disorders like eczema and psoriasis.

- Inflammatory Conditions: Such as asthma exacerbations, COPD flare-ups, inflammatory bowel disease (IBD), and arthritis.
 - Skin Conditions: To manage conditions like eczema and psoriasis that involve significant inflammation.
 - Ophthalmic Disorders: Including uveitis and optic neuritis.
 - Organ Transplantation: As part of immunosuppressive therapy to prevent organ rejection in transplant patients.
 - Infections: In combination with antibiotics for certain infections where inflammation plays a major role.
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Mechanism of Action

Methylprednisolone is a glucocorticoid that works by binding to glucocorticoid receptors in cells, resulting in the modulation of gene expression. It inhibits the production of pro-inflammatory proteins and immune system mediators such as cytokines, prostaglandins, and histamine. The primary effects of methylprednisolone include:

- Anti-inflammatory: Reduces swelling, pain, and redness.
 - Immunosuppressive: Suppresses the immune system, helping to manage conditions like autoimmune diseases and preventing organ rejection.
 - Antiallergic: Helps mitigate the effects of allergic reactions.
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Dosage and Administration

- Adult Dosage:
 - Initial Dose: 125mg via IV or IM injection. The dose may be adjusted based on the severity of

the condition and the patient's response.

- For conditions such as acute asthma exacerbations or severe allergic reactions, an initial dose of 125mg may be followed by a tapering regimen.
- For organ transplantation or autoimmune diseases, the dosage may vary and can range from 125mg to 1000mg on the first day of treatment, depending on the clinical situation.
- **Pediatric Dosage:** Pediatric doses are typically adjusted based on body weight and the condition being treated. The use of methylprednisolone in children should be under the guidance of a pediatrician.
- **Administration:**
 - **IV Injection:** Methylprednisolone should be given slowly over several minutes to avoid cardiovascular side effects.
 - **IM Injection:** It should be injected deeply into the muscle, avoiding sensitive areas to minimize discomfort.

Contraindications

- **Systemic fungal infections:** Methylprednisolone should not be used in patients with active systemic fungal infections as corticosteroids can worsen infections.
- **Hypersensitivity:** Contraindicated in patients who have shown hypersensitivity to methylprednisolone or any of the excipients.
- **Active infections:** Use cautiously in patients with untreated infections or those at risk of developing infections due to the immunosuppressive nature of methylprednisolone.
- **Live vaccines:** Not recommended during or shortly after methylprednisolone therapy, as steroids may interfere with the immune response to live vaccines.

Warnings and Precautions

- **Infections:** Methylprednisolone can mask signs of infection or increase susceptibility to infections. It should be used cautiously in patients with chronic infections or those receiving long-term treatment.
- **Gastrointestinal issues:** May increase the risk of gastric ulcers, bleeding, or perforation. Use cautiously in patients with a history of peptic ulcers or gastrointestinal disease.
- **Hypertension:** May cause fluid retention, leading to an increase in blood pressure. Monitor patients with hypertension or at risk of it.
- **Hyperglycemia:** Methylprednisolone can increase blood sugar levels. Patients with diabetes or prediabetes should be monitored for elevated glucose levels.
- **Osteoporosis:** Long-term use of methylprednisolone can cause bone loss, increasing the risk of fractures.
- **Psychiatric Effects:** Prolonged use may lead to mood swings, insomnia, or even more severe symptoms like psychosis or euphoria.
- **HPA Axis Suppression:** Long-term use may suppress the body's natural production of cortisol. It is advised to taper the dose gradually when discontinuing treatment to prevent adrenal insufficiency.

Side Effects

Common side effects include:

- Fluid retention and edema
- Weight gain and increased appetite
- Hyperglycemia and diabetes
- Increased blood pressure
- Gastrointestinal discomfort, nausea, or ulcer formation
- Mood swings, insomnia, or anxiety
- Increased risk of infection

- Osteoporosis and muscle weakness over time
 - Cataract formation and glaucoma with prolonged use
 - Skin thinning and easy bruising
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Drug Interactions

- **Antidiabetic Drugs:** Methylprednisolone may reduce the effectiveness of antidiabetic medications. Monitoring blood glucose levels is important.
 - **NSAIDs:** Concurrent use with NSAIDs (e.g., ibuprofen) increases the risk of gastrointestinal bleeding or ulceration.
 - **Anticoagulants:** May affect the action of warfarin, increasing or decreasing the anticoagulant effect.
 - **Cyclosporine:** When used with cyclosporine, there may be an increased risk of toxicity due to the combined immunosuppressive effects.
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Storage Instructions

- Store at room temperature (15°C to 30°C), away from light and moisture.
 - Do not freeze.
 - Keep vials tightly closed and out of reach of children.
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Presentation

- **Form:** Injection (IV or IM)
 - **Strength:** 125mg per vial
 - **Pack Size:** Available in single vials or multi-dose vials.
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Conclusion

Methylprednisolone 125mg Injection is a potent corticosteroid that provides rapid relief in various inflammatory, autoimmune, and allergic

conditions. It is typically used in situations requiring urgent anti-inflammatory effects, such as severe allergic reactions, asthma exacerbations, and autoimmune flare-ups. As with all corticosteroids, it should be administered under close medical supervision, particularly for long-term or high-dose therapy, to minimize potential side effects such as infection risk, gastrointestinal issues, and bone loss. Always follow the prescribed dosage and consult with a healthcare provider for appropriate monitoring during treatment.

Manufactured in India for:



Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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