# **Calostyle D3 Injection**

Vitamin D3 600,000 IU Injection: Detailed Information

**Generic Name:** 

**Cholecalciferol (Vitamin D3)** 

**Dosage Form:** 

**Intramuscular Injection (600,000 IU/ampoule)** 

What is Vitamin D3 Injection?

Vitamin D3 (Cholecalciferol) injection is a high-dose formulation of vitamin D, essential for calcium and phosphorus regulation in the body. It helps maintain bone health, support immune function, and prevent diseases caused by vitamin D deficiency.

#### **Indications:**

- Treatment of Vitamin D Deficiency For individuals with severe deficiency or conditions that impair oral absorption.
- Rickets and Osteomalacia
   Used to treat softening of bones in children and adults.
- Osteoporosis
   Supports calcium metabolism to strengthen bones.
- Hypoparathyroidism
   Helps in calcium absorption in
   parathyroid disorders.
- Renal Osteodystrophy
   For bone problems due to kidney failure.
- Malabsorption Syndromes
   Patients with conditions like celiac disease or Crohn's disease.

## **Composition:**

- Active Ingredient: Cholecalciferol (Vitamin D3) 600,000 IU per ampoule.
- Excipients: Sterile water and stabilizers (may vary by manufacturer).

## **Dosage and Administration:**

- Route: Intramuscular (IM) injection.
- Frequency: Usually administered once weekly, biweekly, or as prescribed by a healthcare provider.
- Dosage Adjustments: Based on blood levels of 25-hydroxyvitamin D and calcium.

Note: It should only be administered under medical supervision to avoid toxicity.

#### Mechanism of Action:

Vitamin D3 is converted in the liver to 25hydroxyvitamin D, which is further hydroxylated in the kidneys to its active form, calcitriol. This active form regulates calcium and phosphate absorption in the intestine and reabsorption in the kidneys, promoting bone mineralization.

#### **Contraindications:**

- Hypercalcemia (high calcium levels in the blood)
- Hypervitaminosis D (excess vitamin D levels)

- Severe renal impairment
- Allergy to cholecalciferol or other components

 Dietary Considerations: Complement with dietary calcium and vitamin D-rich foods as advised by your doctor.

### Warnings and Precautions:

- Overdose Risk: Vitamin D toxicity may lead to hypercalcemia, which can cause nausea, vomiting, kidney damage, and other serious complications.
- Pregnancy and Breastfeeding: Use only if clearly needed and prescribed.
- Monitoring: Regularly monitor calcium, phosphorus, and 25-hydroxyvitamin D levels during treatment.

#### **Side Effects:**

- Nausea and vomiting
- Loss of appetite
- · Increased thirst and urination
- Abdominal pain
- Fatigue and weakness
- Rare: Hypercalcemia and kidney stones

#### **Storage:**

- Store below  $25^{\circ}$ C ( $77^{\circ}$ F).
- Protect from light and moisture.
- Keep out of reach of children.

## **Important Notes:**

- Not for self-administration: Must be administered by a trained healthcare professional.
- Follow-up: Periodic blood tests are required to evaluate the effectiveness and adjust the dosage.

## **Availability:**

Vitamin D3 600,000 IU injections are available in single-use ampoules. It is a prescription-only medication and should be used under medical supervision.

Manufactured in India for:



(An ISO 9001: 2015 Certified Co.) Plot no.: 367-FF, Industrial Area Phase-I,

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