Teriparatide (Forteo®)

Teriparatide is an analog of human parathyroid hormone related peptide (PTHrP[1-34]), which acts as an agonist at the PTH1 receptor (PTH1R). This results in stimulation of osteoblast function, increasing gastrointestinal calcium absorption and increasing renal tubular reabsorption of calcium. Treatment with teriparatide results in increased bone mineral density, bone mass, and strength.

Resources from Manufacturer

Patient Medication Guide

Full Prescribing Information

Forteo Copay Card

Teriparatide Copay Card

Eli Lilly Assistance Application

FDA-Approved Indications and Dosing in Rheumatology

Teriparatide is indicated for:

- Treatment of postmenopausal women with osteoporosis
- Increase in bone mass in men with primary or hypogonadal osteoporosis
- Treatment of men and women with gluco-corticoid associated osteoporosis

Subcutaneous dosing

- RA, PsA, and AS (adults): Inject 40 mg under the skin every 14 days
- Non-infectious uveitis: 80 mg as a single dose under the skin on day 1 and then 40 mg every 14 days starting day 8 after initial dose
- Pediatric JIA (weight-based dosing)

Contraindications

Known hypersensitivity to teriparatide

Warnings and Precautions

7. Orthostatic hypotension: usually occurs within 4 hours of dose, within first several doses
8. Hypercalcemia: use with caution
9. Hypercalciuria and Urolithiasis: Monitor urine calcium if preexisting hypercalciuria or active urolithiasis are suspected
10. Patients with Paget's disease or open epiphyses should be treated with teriparatide
11. Patients with bone metastases, history of skeletal malignancies, other metabolic bone diseases or hypercalcemic disorders should but use teriparatide
12. Should not be used in pregnancy

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Adverse Reactions (>10%)

- Arthralgia
- Pain
- Nausea

Medication Strength and Preparations

- Forteo: 600mcg/2.4 mL multi-use pen injector
- Teriparatide (generic): 600mcg/2.4mL and 600mcg/2.48mL multi-use pen injector

Medication Administration and Storage

- Store between 2°C to 8°C (36°F to 46°F) in the original carton, protected from light
- Discard pen 28 days after first injection, even if it contains some unused solution

Subcutaneous Administration

1. Wash your hands prior to each injection, clean off injection site with alcohol swab
2. Remove medication from refrigerator
3. Check medicine in cartridge, ensure medication is clear and colorless. Clean area to inject in periumbilical region
4. Pull off cap
5. Attach new needle and remove large needle cover
6. Remove small needle protector
7. Turn dose knob clockwise until the arrow in the dose window and the raised notches on the pen on in line. Pull out dose knob until you see a "0" in the window. Turn knob clockwise until you see "2" in the window which corresponds to 20mcg dose
8. Hold Forteo pen so you are able to see display window, insert pen straight into skin
9. Press the blue injection button until it cannot go any further and diamond is centered on the dose window
10. Count to 5 to allow full dose of Forteo to be given
11. Remove needle, put cap back on and return to refrigerator

Note: If a dose is missed, resume injections as soon as you remember, do not inject 2 doses on the same day

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