DROLATE®

DESCRIPTION

DROLATE is the trademark of Alendronic acid, which is Bone resorption inhibitor.
Each **DROLATE 5,10, 35** and **70** tablet contains Alendronic acid 5,10, 35 and 70 mg, respectively as Sodium Alendronate

CHEMISTRY

Sodium Alendronate is: 4-amino-1-hydroxybutylidene) bisphosphonic acid monosodium salt trihydrate.

CLINICAL PHARMACOLOGY

Animal studies indicate that **DROLATE** (Alendronate) shows preferential localization to sites of bone resorption where it inhibits osteoclast activity, but does not interfere with osteoclast recruitment or attachment. Studies in rats and mice showed that normal bone mass was formed on top of Alendronate, thereby incorporating Alendronate in the bone matrix. Alendronate is not pharmacologically active when incorporated; therefore, it must be administered continuously to suppress osteoclasts on newly formed resorption surfaces. Studies in baboons and rats indicate that Alendronate treatment reduces bone turnover (i.e. the number of sites at which bone is remodeled). In addition, bone formation exceeds bone resorption at these remodeling sites, leading to increased bone mass. Data from long-term animal studies indicate that the bone formed during Alendronate therapy is of normal quality.
Mean oral bioavailability of Alendronate in women was 0.7% for doses ranging from 5 to 40 mg and in men it was 0.59% following administration of a 10-mg dose 2 hours before the first meal of the day. Concomitant administration with coffee or orange juice reduced bioavailability by approximately 60%. Alendronate is highly bound to proteins (approximately 78% in human plasma). The terminal half life is estimated to be exceed 10 years.

INDICATIONS

- ❑ Treatment and prevention of osteoporosis in postmenopausal women
  - – For the treatment of osteoporosis, **DROLATE** increases bone mass and reduces the incidence of fractures, including those of the hip and spine (vertebral compression fractures).
  - – For the prevention of osteoporosis, **DROLATE** may be considered in postmenopausal women who are at risk of developing osteoporosis and for whom the desired clinical outcome is to maintain bone mass and to reduce the risk of future fracture.
- ❑ Treatment to increase bone mass in men with osteoporosis.
- ❑ Treatment of glucocorticoid-induced osteoporosis in men and women receiving glucocorticoids in a daily dosage equivalent to 7.5 mg or greater of prednisone and who have low bone mineral density.
- ❑ Treatment of Paget's disease of bone in men and women having alkaline phosphatase at least two times the upper limit of normal, or those who are symptomatic, or those at risk for future complications from their disease.

DOSAGE

Usual adult dose

- ❑ Treatment of osteoporosis in postmenopausal women: one 70 mg tablet once weekly or one 10 mg tablet once daily.
- ❑ Treatment to increase bone mass in men with osteoporosis: one 10 mg tablet once daily. Alternatively, one 70 mg tablet once weekly may be considered.
- ❑ Prevention of osteoporosis in postmenopausal women: one 35 mg tablet once weekly or one 5 mg tablet once daily.
- ❑ Treatment of glucocorticoid-induced osteoporosis in men and women: one 5 mg tablet once daily, except for postmenopausal women not receiving estrogen, for whom the recommended dosage is one 10 mg tablet once daily.
- ❑ Paget's disease of bone in men and women: 40 mg once a day for six months. Retreatment with **DROLATE** may be considered, following a six-month post-treatment evaluation period in patients who failed to normalize their serum alkaline phosphatase.

Notes:

- ❑ **DROLATE** must be taken at least one-half hour before the first food, beverage, or medication of the day with plain water only. Other beverages (including mineral water), food, and some medications are likely to reduce the absorption of **DROLATE**
- ❑ **DROLATE** should only be taken upon arising for the day. To facilitate delivery to the stomach and thus reduce the potential for esophageal irritation, a **DROLATE** tablet should be swallowed with a full glass of water.
- ❑ Patients should not lie down for at least 30 minutes and until after their first food of the day. **DROLATE** should not be taken at bedtime or before arising for the day.
- ❑ Patients should receive supplemental calcium and vitamin D, if dietary intake is inadequate.
- ❑ No dosage adjustment is necessary for the elderly or for patients with mild-to-moderate renal insufficiency (creatinine clearance 35 to 60 mL/min). **DROLATE** is not recommended for patients with more severe renal insufficiency (creatinine clearance <35 mL/min) due to lack of experience. No dosage adjustment is necessary in hepatic insufficiency.
- ❑ Safety and efficacy have not been established in pediatrics.

ADVERSE EFFECTS

More frequent effects
Abdominal pain.
Less frequent effects
Dysphagia, heartburn, irritation, pain or ulceration of the esophagus, muscle pain, abdominal distension, constipation, diarrhea, flatulence, headache, nausea.

USE IN PREGNANCY

Studies in animals showed decreased weight gain, incomplete fetal ossification, decreased survival of the fetus, and delays in delivery
There are no studies in pregnant women. Alendronate should be used during pregnancy only if the potential benefit justifies the potential risk to the mother and fetus. FDA Pregnancy Category C.

USE IN LACTATION

It is not known whether Alendronate is distributed into human breast milk. It should not be given to nursing women because Alendronate is distributed in milk of rats.

INTERFERENCE WITH CLINICAL AND LABORATORY TESTS

Serum calcium and serum phosphate: Alendronate has been reported to cause a 2% reduction in serum calcium concentrations and a 4 to 6% reduction in serum phosphate concentrations in the first month after initiation of therapy; no further decreases have been observed during the 3-year duration of therapy.

DRUG INTERACTIONS

- Dietary supplements (including calcium) or food and beverages or oral medications (including antacids): simultaneous use may interfere with the absorption of Alendronate; patients should be advised to take Alendronate at least 30 minutes before taking other medications, food, or beverages.
- Ranitidine: intravenous ranitidine was shown to double the bioavailability of oral Alendronate; the clinical significance of this increased bioavailability is not known.

CONTRAINDICATIONS

- Gastrointestinal diseases such as duodenitis, dysphagia, symptomatic esophageal diseases, frequent heartburn, gastritis, gastroesophageal reflux disease, hiatal hernia, or ulcers: Alendronate may exacerbate these conditions.
- Hypersensitivity to Alendronate.
- Abnormalities of the esophagus which delay esophageal emptying such as stricture or achalasia
- Inability to stand or sit upright for at least 30 minutes
- Hypocalcemia.

WARNINGS

Risk-benefit should be considered when the following medical problems exist:

Hypocalcemia or vitamin D deficiency: Alendronate may exacerbate these conditions; hypocalcemia and vitamin D deficiency should be corrected before Alendronate therapy is begun.

OVERDOSE

No specific information is available on the treatment of overdosage with **DROLATE**. Hypocalcemia, hypophosphatemia, and upper gastrointestinal adverse events, such as upset stomach, heartburn, esophagitis, gastritis, or ulcer, may result from oral overdosage. Milk or antacids should be given to bind Alendronate. Due to the risk of esophageal irritation, vomiting should not be induced and the patient should remain fully upright. Dialysis would not be beneficial.

PRECAUTIONS

- For Paget's disease: serum alkaline phosphatase determinations is recommended every 3 to 6 months and urinary hydroxyproline determinations is recommended every 6 to 12 months. Serum calcium determinations is recommended every 3 to 4 months. Urinary N-telopeptide of type I collagen determinations is recommended every 3 to 6 months.
- For postmenopausal osteoporosis: bone mineral density determinations is recommended every 1 to 2 years to assess effectiveness of therapy.
- Renal function impairment when creatinine clearance is < 35 mL per minute (0.58 mL/sec): use is not recommended because elimination of Alendronate may be reduced; greater accumulation of alendronate in the bone may be expected.

HOW SUPPLIED

- Boxes of 30 blistered Tablets of **DROLATE 5**.
- Boxes of 30 blistered Tablets of **DROLATE 10**.
- Boxes of 4 blistered Tablets of **DROLATE 35**.
- Boxes of 4 blistered Tablets of **DROLATE 70**.
- Hospital packs of different presentations.

Store according to conditions specified on the package.

Do not use after the expiry date shown on the package.

THIS IS A MEDICAMENT

- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who dispensed the medicament.
- The doctor and the pharmacist are experts in medicine.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.
- Keep medicaments out of the reach of children.

COUNCIL OF ARAB HEALTH MINISTERS
UNION OF ARAB PHARMACISTS

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Prescribing Information Available Upon Request

JPM

THE JORDANIAN PHARMACEUTICAL MANUFACTURING CO.(P.L.C.)

P.O. BOX 94, NAOR 11710, JORDAN