

1156 somatropin

Available forms: Tabs 5, 10 mg

Administer:

PO route

- Without regard to meals
- Swallow product whole with water, liquid

SIDE EFFECTS

CNS: *Dizziness*, headache, confusion, depression, drowsiness

CV: Palpitations, sinus tachycardia

EENT: *Vision abnormalities*

GI: *Nausea, anorexia*, abdominal pain, *constipation, dry mouth*

INTEG: **Angioedema**

PHARMACOKINETICS

90% absorbed; 98% protein bound; extensively metabolized by CYP3A4; excreted in urine 69% (metabolites), feces 22%; half-life 45-68 hr; peak 4-8 hr, duration up to 24 hr

INTERACTIONS

Increase: QT prolongation—Class IA, III antiarrhythmias

Increase: CNS depression—sedatives, hypnotics, benzodiazepines, opioids

Increase: effects—CYP3A4 inhibitors (ketoconazole, clarithromycin, diclofenac, doxycycline, erythromycin, isoniazid, nefazodone, propofol, protease inhibitors, verapamil), max dose 5 mg

Decrease: effects—CYP3A4 inducers (carbamazepine, nevirapine, PHENobarbital, phenytoin)

Drug/Herb

Decrease: effects—St. John's wort

Drug/Food

Increase: effect—grapefruit juice

Drug/Lab Test

Increase: LFTs

NURSING CONSIDERATIONS

Assess:

- **Urinary patterns:** distention, nocturia, frequency, urgency, incontinence
- **Allergic reactions:** rash
- **Angioedema of the face, lips, tongue, larynx**
- **Pregnancy/breastfeeding:** use only if benefits outweigh fetal risk; do not breastfeed, excretion unknown

Evaluate:

- Therapeutic response: decreasing dysuria, frequency, nocturia, incontinence

Teach patient/family:

- To avoid hazardous activities because dizziness may occur
- That constipation, blurred vision may occur; to notify prescriber if abdominal pain with constipation occurs
- To take without regard to food
- To swallow tab whole; do not split, crush, chew
- To call prescriber if severe abdominal pain or constipation lasts for ≥ 3 days
- That heat prostration may occur if used in hot environment, sweating is decreased
- About **anticholinergic effects:** blurred vision, constipation, urinary retention, hyperthermia

HIGH ALERT

somatropin (Rx)

(soe-ma-troe'pin)

Genotropin, Humatrope, Norditropin, Norditropin Flexpro, Nutropin, Nutropin AQ, Omnitrope, Saizen, Serostim, Zorbivte, Zomacton

Func. class.: Pituitary hormone

Chem. class.: Growth hormone

Do not confuse:

somatropin/SUMatriptan/somatrem

ACTION: Stimulates growth; somatropin is similar to natural growth hormone; both preparations were developed with the use of recombinant DNA

USES: Pituitary growth hormone deficiency (hypopituitary dwarfism), children with human growth hormone deficiency/growth failure, AIDS wasting syndrome, cachexia, adults with somatropin deficiency syndrome (SDS), short stature in Noonan syndrome, SHOX deficiency, Turner's syndrome, Prader-Willi syndrome