

### Medication Names

<b>Prototype Med</b>	somatropin (Genotropin)
	Nutropin
	Humatrope
	Serostim

**ACTION:** Stimulates the release of insulin-like growth factor-1, abbreviated IGF-1, from the liver and other tissues.

### Therapeutic Use

- Growth hormone deficiencies, such as Turner's syndrome
- Growth hormone deficiency in adults to increase lean muscle mass
- AIDS wasting syndrome

### Adverse

- Hyperglycemia
- Fatality in PWS Clients
- Neutralizing antibodies

### Contraindications

- Severe obesity
- Severe respiratory impairment
- Closed epiphyses in children
- Critical illness

### Interactions

Glucocorticoids and adrenocorticotrophic hormone counteract growth-stimulating effects.

Thyroid hormones, estrogens, and androgens promote epiphyseal closure.

### Nursing Interventions

Monitor blood glucose levels.

### Administration

Give IM or subcutaneously (preferable).

Dosage is based on weight

Given daily or several times a week

Very costly

Pediatric Clients: Obtain baseline height, weight, thyroid function, and growth hormone levels and monitor monthly; yearly X-rays of long bones

When reconstituting the drug, rotate the vial gently and do not shake it

Inject subcutaneously into the abdomen and thighs and rotate sites.

Discontinue treatment prior to epiphyseal closure in children.

### Client Instructions

Injection site should be rotated.

### Precautions

- Diabetes mellitus
- Prader-Willi syndrome
- Hypothyroidism
- Chronic renal failure

