

MAGNUS PHARMACEUTICALS

IGF-1 LR3

1mg IGF-1 LR3 (VIAL)

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

About

Long(R3)-IGF-I is a synthetic variant of Insulin-Like Growth Factor-1 (IGF-I), a peptide hormone found naturally in the human body. It is a close derivative of this natural protein. The name "Long R3" actually describes how the original IGF-I protein has been modified. It is made by extending the IGF-I protein with a chain of 13 amino acids, and substituting an arginine at the 3rd position. This new synthetic form of IGF-I seems to retain much of the hormone's original biological activity. It binds and activates the IGF-I receptor with similar affinity, and imparts a similar anabolic effect. However, it also differs by displaying a significantly longer half-life, and higher resistance to binding proteins, in comparison. As a result, milligram for milligram, Long(R3)-IGF-I is estimated to be approximately 2.5 to 3 times more potent than natural IGF-I. In the fitness community, this substance is most commonly used to support increases in muscle mass.

IGF-I is an important hormone for human development. Its levels are especially high during childhood and adolescence, where it supports linear growth, as well as the growth of nearly all body tissues. Serum IGF-I levels decline greatly in adulthood, though remain substantial throughout life. This hormone will continue to play important roles in metabolism and physiology, including the support of skeletal muscle mass and strength. IGF-I has several key anabolic/anti-catabolic activities. It supports the synthesis of new muscle protein, satellite cell activity, and the incorporation of new nuclei into muscle cells. It is also noted for reducing the activity of both p27Kip1 and myostatin, which are two powerful inhibitors of muscle growth. As such, IGF-I is regarded as possessing both strong anabolic and anti-catabolic properties.

Long(R3)-IGF-I belongs to the Growth Hormone and Related family of drugs. This is because IGF-I levels increase in response to growth hormone administration. This hormone is actually responsible for most of all of anabolic effect of hGH (somatropin) therapy. Likewise, the two have a very direct relationship in the body. However, it is worth noting that Long(R3)-IGF-I use is likely to be qualitatively different from that of hGH. While its anabolic effects are presumed to be similar, GH imparts a substantial thermogenic effect that is not replicated with Long(R3)-IGF-I. To the contrary, the drug can actually have lipogenic properties similar to insulin. In some users, it increases the tendency for fat gain, not fat loss. Likewise, Long(R3)-IGF-I would be most closely compared to Increlex (rhIGF-I) therapy instead. Its use is typically characterized by intensified pumps, increased appetite, and moderate increases in lean muscle mass and strength. The stimulation of thermogenesis (fat loss) is not one of this drug's most noteworthy properties.

Warnings

Long(R3)-IGF-I is an unapproved new drug. A thorough understanding of its safety and propensity for side effects in humans is lacking at this time.

This drug should never be used during pregnancy, with cancer, a history of cancer, diabetic retinopathy, sclerosing diseases of the liver or lungs, intracranial hypertension, or uncontrolled diabetes.

Side Effects

The most common adverse reaction to Long(R3)-IGF-I is hypoglycemia. Signs of mild to moderate hypoglycemia include hunger, drowsiness, blurred vision, depressive mood, dizziness, sweating, palpitation, tremor, restlessness, tingling in the hands, feet, lips, or tongue, lightheadedness, inability to concentrate, headache, sleep disturbances, anxiety, slurred speech, irritability, abnormal behavior, unsteady movement, and personality changes. If any of these warning signs should occur, one should immediately consume a food or drink containing simple sugars such as a candy bar or carbohydrate drink. Signs of severe hypoglycemia include disorientation, seizure, and unconsciousness. Severe hypoglycemia can lead to death and requires immediate emergency medical attention. Note that in some cases the symptoms of hypoglycemia can be mistaken for drunkenness.

Long(R3)-IGF-I should never be taken before sleep or in higher than recommended doses. A meal or snack must be consumed within 20 minutes (before or after) of administration.

The subcutaneous administration of Long(R3)-IGF-I may cause redness, itching, or bruising at the site of injection. It may also cause a localized increase of adipose tissue, which may be compounded by the repeated administration at the same site of injection. For these reasons, intramuscular injection is generally preferred with this substance.

Other potential adverse reactions to Long(R3)-IGF-I include joint pain, growth of the tonsils, snoring, headache, dizziness, convulsions, vomiting, ear pain, hearing loss, and hypertrophy of the thymus gland. Long(R3)-IGF-I can stimulate the growth of internal organs. Enlargement of the kidney, spleen, and heart were all noted in studies with recombinant IGF-I therapy. Elevations in cholesterol and triglycerides were also observed. The overall relationship between Long(R3)-IGF-I use and cardiac changes remains unclear. Thickening of facial soft tissues is also possible, and should be monitored. The abuse of Long(R3)-IGF-I may cause acromegaly, which is characterized by a visible thickening of the bones, most notably the feet, forehead, hands, jaw, and elbows.

Administration

Long(R3)-IGF-I has not been approved for use in humans. Prescribing guidelines are unavailable. When used for physique- or performance-enhancing purposes, Long(R3)-IGF-I is primarily given by intramuscular injection. A dosage of 20-80 meg daily is most commonly used. This is given in one application, usually earlier in the day. A meal with sufficient carbohydrate content is consumed within 20 minutes of injection to help reduce the likelihood of hypoglycemia. Long(R3)-IGF-I is often injected into the muscle that will be trained that day, in an effort to support site-specific growth. However, the efficacy of this practice remains unclear.

It is generally advised to taper-up the dosage of Long(R3)-IGF-I. The user often begins on the low end of the dosage range (20 meg), and increases the amount by 5-10 meg every 3-4 days, until a desired stable dosage is reached. This practice can help acclimate the user to the effects of Long(R3)-IGF-I, especially its potential blood-sugar-lowering properties (see: Side Effects).

Cycles of Long(R3)-IGF-I usually last 30-40 days. Beyond this, there is some concern about desensitization to its anabolic effects. After each cycle, a break of at least 4-6 weeks is usually advised. This drug has not been subject to extensive human testing, however. Likewise, its potential for desensitization has not been clearly characterized.