Tesamorelin

Purity: >98% (HPLC on request) | Molecular Formula: C221H366N72067S Molecular Weight: 5135.77 | Sequence: trans-hexenoyl-acid-Tyr-Ala-Asp-Ala-Ile-Phe-Thr-Asn Ser-Tyr-Arg-Lys-Val-Leu-Gly-Gln-Leu-Ser-Ala-Arg-Lys-Leu-LeuGln-Asp-Ile-Met-Ser-Arg-Gln Gln-Gly-Glu-Ser-Asn-Gln-Glu-Arg-Gly-Ala-Arg-Ala-Arg-Leu-NH2

DESCRIPTION:

Tesamorelin is a growth hormone releasing hormone analog that increases IGF-1 levels in men and women, by an average of 181 micrograms/liter. It binds to and stimulates GHRH receptors with similar potency as endogenous GHRH. It has a host of other benefits including nootropic effects and reducing triglycerides. Tesamorelin has subsequently been shown to decrease carotid intima-media thickness (cIMT), visceral adipose tissue (VAT), and c-reactive protein (CRP). It has not been linked to significantly affect other pituitary hormones and their respective mechanisms in the body. Additionally, it can improve cognitive function for healthy seniors and patients with an increased risk of Alzheimer's disease, due to mild cognitive impairment.

PROTOCOL:

Content & Potency: Provided as a 10mg lyophilized vial

Vial reconstitution: 1ml sterile water for injection

Suggested dosage: Inject 1mg (0.1ml or 10units) subcutaneously 5 out of 7 days per week fasting 2- 3 hours prior to injection

CLINICAL RESEARCH:

Long-term safety and effects of tesamorelin, a growth hormone-releasing factor analogue, in HIV patients with abdominal fat accumulation

Treatment of HIV patients with daily tesamorelin, a growth hormone-releasing factor analogue, for 26 weeks resulted in a significant decrease in visceral adipose tissue (VAT) and improvement in lipids. The objective of the 26-week extension phase was to evaluate long-term safety and effects of tesamorelin. HIV patients with central fat accumulation in the context of antiretroviral therapy were randomized to tesamorelin 2 mg (n = 273) or placebo (n = 137) s.c. daily for 26 weeks. At week 26, patients originally on tesamorelin were rerandomized to 2 mg tesamorelin (T-T group, n = 154) or placebo (T-P group, n = 50), whereas patients originally on placebo were switched to tesamorelin (P-T group, n = 111). Safety included adverse events and glucose parameters. Tesamorelin was generally well tolerated. The prevalence of adverse events and serious adverse events during the extension phase were comparable with the initial phase. Changes in glucose parameters over 52 weeks were not clinically significant and similar to those after 26 weeks. The change in VAT was sustained at -18% over 52 weeks of treatment ($P < 0.001$ versus baseline) as was the change in triglycerides (-51 mg/dl, $P<0.001$ versus baseline). Similar sustained beneficial effects were seen for total cholesterol, but high-density lipoprotein decreased minimally over 52 weeks. Upon discontinuation of tesamorelin, VAT reaccumulated. Treatment with tesamorelin was generally well tolerated and resulted in sustained decreases in VAT and triglycerides over 52 weeks without aggravating glucose. Though effects on VAT are sustained during treatment for 52 weeks, these effects do not last beyond the duration of treatment.

Falutz, Julian & Allas, Soraya & Mampuru, Jean-Claude & Potvin, Diane & Kotler, Donald & Somero, Michael & Berger, Daniel & Brown, Stephen & Richmond, Gary & Fessel, Jeffrey & Turner, Ralph & Grinspoon, Steven. (2008). Long-term safety and effects of tesamorelin, a growth hormone releasing factor analogue, in HIV patients with abdominal fat accumulation. AIDS (London, England). 22. 1719-28