



GENORACLE

Melanotan II

Purity: >98% (HPLC on request) | Molecular Formula: C₅₀H₆₉N₁₅O₉

Molecular Weight: 1024.2 | Sequence: Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH₂(cyclic 2-7)

DESCRIPTION:

Melanotan I and Melanotan II are both analogs of the peptide hormone alpha-melanocyte-stimulating hormone (α-MSH) that induces skin tanning. Like its predecessor, Melanotan I, MT 2 plays a role in stimulating melanogenesis and thus provides a protective mechanism against UV rays since under its actions melanocytes are able to increase production and secretion of the

hormone melanin. Scientists have also noticed that MT 2 had a positive effect on libido due to its aphrodisiac properties. Additionally, MT 2 exhibits a mild positive fat-mobilizing effect.

Melanotan I is an FDA approved drug under the brand name Scenesse. Scenesse is most commonly used to treat patients that have an intolerance to light.

PROTOCOL:

Content & Potency: Provided as a 10mg lyophilized vial

Vial reconstitution: 2ml sterile water for injection

Suggested dosage: Inject 150mcg (0.03ml or 3units) subcutaneously once daily 7-14 days then 500mcg (0.1ml or 10units) subcutaneously twice weekly

CLINICAL RESEARCH:

Evaluation of melanotan-II, a super potent cyclic melanotropic peptide in a pilot phase-I clinical study.

A pilot phase I study was conducted with a cyclic heptapeptide analog of alpha-melanocyte stimulating hormone (alpha-MSH). The lactam-bridged molecule, called Melanotan-II (MT-II), has the structure Ac-Nle⁴-Asp⁵-His⁶-D-Phe⁷-Arg⁸-Trp⁹-Lys¹⁰ alpha-MSH₄₋₁₀-NH₂ (MT-II) and has superpotent melanotropic activity in vitro. A single-blind, alternating day (saline or MT-II), placebo-controlled trial was conducted in 3 normal male volunteers at the starting dose of 0.01 mg/kg of MT-II. Subcutaneous injections of MT-II or saline were given daily (Monday-Friday) for 2 consecutive weeks. Two subjects were escalated by 0.005 mg/kg increments to 0.03 mg/kg and one to 0.025 mg/kg. The 0.03 mg/kg dose produced Grade II somnolence and fatigue in one of two subjects (WHO standards). Mild nausea, not requiring antiemetic treatment, was reported at most MT-II dose levels.

A stretching and yawning complex appeared to correlate with the onset of spontaneous, Penile erections which were intermittently experienced for 1-5 hours after MT-II dosing, depending on the MT-II dose. Two subjects had increased pigmentation in the face, upper body and buttock, as measured by quantitative reflectance and by visual perception 1 week after MT-II dosing ended. These results demonstrate that MT-II has tanning activity in humans given only 5 low dose every other day by subcutaneous injection. The recommended single MTII dose for future Phase I studies is 0.025 mg/kg/day.

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