COMPOUND GUIDE

Melanotan II — Melanocortin Receptor Agonist

Cyclic 7-AA alpha-MSH analogue · NOT FDA-approved · Monitor moles closely

Quick Start

NOT APPROVED — MOLE MONITORING REQUIRED

Melanotan II (MT-II) is NOT FDA-approved and is illegal to sell for human use in the US, UK, and Australia. It is not approved in any major jurisdiction as a medical treatment. Case reports have linked MT-II use to melanoma and rapid changes in existing naevi (moles). All existing moles must be documented before starting any research protocol and monitored regularly. Discontinue immediately if any mole changes in size, colour, shape, or texture.

WHAT IT IS

Melanotan II is a synthetic cyclic analogue of alpha-melanocyte stimulating hormone (alpha-MSH), developed at the University of Arizona in the 1980s–1990s as a sunless tanning agent. It activates melanocortin receptors (MC1R, MC3R, MC4R, MC5R), producing skin tanning, sexual effects, and appetite suppression. It is not selective — it activates all melanocortin receptor subtypes simultaneously.

RESEARCH DOSING PROTOCOL

Loading: 100–250 mcg/day → titrate to 250–500 mcg/day → 500–1,000 mcg/day (administered at bedtime to minimise nausea). **Maintenance:** 500–1,000 mcg 1–2× per week once desired effect is observed. Plasma half-life is approximately **1–2 hours** — not "33 hours" (a commonly cited error that confuses plasma clearance with tissue/receptor effects).

REGULATORY STATUS

Not approved in any major jurisdiction. Illegal to sell for human use in the US, UK, and Australia. No FDA IND filed. Not on WADA list. For research purposes only. Researchers should be aware of their jurisdiction's specific regulations regarding this compound.

Research Protocol

PHASE	DOSE	FREQUENCY	DURATION	NOTES
Titration start	100–250 mcg	Once daily, bedtime	1–2 weeks	Bedtime reduces nausea; start low to assess tolerance
Titration mid	250–500 mcg	Once daily, bedtime	1–2 weeks	Increase when lower dose is well tolerated
Target dose	500–1,000 mcg	Once daily, bedtime	Until desired effect observed	Most protocols target effect within 4–8 weeks total
Maintenance	500–1,000 mcg	1–2× per week	Ongoing	Lower frequency once skin saturation observed

Supplies & Reconstitution

Reconstitution Math — 10 mg Vial (3 mL BAC)

TARGET DOSE	UNITS (U-100)	DOSES / VIAL
250 mcg	**7.5 units**	40
500 mcg	**15.0 units**	20
750 mcg	**22.5 units**	13.3
1000 mcg	**30.0 units**	10

Reconstitute the 10 mg vial with **3.0 mL bacteriostatic water** → 3.33 mg/mL (3,333 mcg/mL). U-100 syringe = 100 units per mL. Swirl gently — do not shake. Refrigerate 2–8°C.

Reconstitution Steps

01 **Warm the vial**
Allow vial to reach room temperature from freezer before reconstitution.

02 **Swab and draw**
Alcohol swab both vial tops, air-dry. Draw 3.0 mL BAC water.

03 **Inject along the wall**
Let BAC water run slowly down the inside wall. Do not jet onto the powder.

04 **Swirl gently**
Swirl until clear and fully dissolved. Do not shake. Bedtime injection minimises nausea awareness.

05 **Refrigerate**
Store at 2–8°C for up to 30 days. Protect from light. Do not freeze after reconstitution.

Mechanism of Action & Receptor Profile

RECEPTOR	LOCATION	ACTIVATION EFFECT
MC1R	Melanocytes in skin	Stimulates melanin production → skin darkening (tanning effect)
MC3R	Hypothalamus, brain limbic	Appetite suppression; sexual response contribution; energy balance
MC4R	Hypothalamus, PVN	Strong appetite suppression; sexual response; nausea (via area postrema)
MC5R	Exocrine glands, skin	Sebaceous gland activity; may contribute to oiliness during use

MT-II activates all five melanocortin receptor subtypes. PT-141 (Bremelanotide) is more selective for MC3R/MC4R with far less MC1R activation — explaining PT-141's minimal tanning effect vs MT-II's strong tanning effect.

⚠ **MELANOMA RISK — NAEVUS MONITORING REQUIRED**
Multiple case reports associate MT-II use with rapid changes in existing naevi and, in some cases, melanoma. MC1R activation stimulates melanocyte proliferation and melanin production — effects that can theoretically promote existing atypical melanocytes. Dermatological documentation of all existing moles before protocol start and regular monitoring are essential in any research context. Discontinue immediately if any mole changes appearance.

MT-II vs Related Melanocortin Compounds

COMPOUND	FDA STATUS	TANNING	SEXUAL EFFECT	HALF-LIFE
Melanotan II (MT-II)	Not approved	Strong (MC1R)	Yes (MC3R/MC4R)	~1–2 h plasma
PT-141 (Bremelanotide / Vyleesi)	Approved (HSDD women)	Minimal	Yes — primary effect	~2.7 h
Afamelanotide (Scenesse)	Approved (EPP)	Strong (MC1R selective)	Minimal	Implant releases over ~60 days

Storage

STATE	TEMPERATURE	DURATION	NOTES
Lyophilised (powder)	−20°C (freezer)	Up to 24 months	Protect from light; sensitive to moisture
Reconstituted (liquid)	2–8°C (refrigerator)	Up to 30 days	Do not freeze after reconstitution; protect from light

⚠ **DISCLAIMER**
This document is an educational research reference only. Melanotan II is not approved for human use in any major jurisdiction. Case reports link its use to melanoma. Mole monitoring is essential in any research protocol. Do not use alongside PT-141. By purchasing from LA LAB you confirm you are 18+ and that products are for research purposes only.