

PT-141

Bremelanotide | MC3R / MC4R Agonist | FDA-Approved (Vyleesi)

COMPOUND OVERVIEW

PT-141 (Bremelanotide) is a cyclic heptapeptide analog of alpha-MSH. It is an FDA-approved pharmaceutical (Vyleesi), indicated for hypoactive sexual desire disorder (HSDD) in premenopausal women, providing a more established clinical and safety data profile than most research peptides.

MECHANISM OF ACTION

PT-141 binds melanocortin receptors MC3R and MC4R in the central nervous system, primarily in the hypothalamus. This CNS-mediated mechanism distinguishes it from PDE5 inhibitors, which act peripherally. MC4R activation in the hypothalamus modulates sexual arousal pathways independently of vascular function.

RESEARCH APPLICATIONS

- Central melanocortin receptor (MC3R/MC4R) pharmacology
- Hypothalamic drive pathway and sexual arousal research
- CNS vs. peripheral mechanism comparison in drive pathway models
- Melanocortin system and energy homeostasis research

EVIDENCE STATUS & KNOWN LIMITATIONS

Evidence Status: PT-141 has the strongest regulatory evidence profile in this catalogue, having achieved FDA approval as Vyleesi for HSDD in premenopausal women. Other applications are outside the approved label. Documented adverse events from clinical trials include nausea, flushing, and transient blood pressure elevation.

ANALYTICAL & STORAGE DATA

PURITY	>99.4% by HPLC/MS	PHYSICAL FORM	Lyophilised Powder
STORAGE	2-8 C	REGULATORY NOTE	FDA-approved as Vyleesi
RECONSTITUTION	Bacteriostatic Water (USP)	BATCH DOCS	Available on Request

RECONSTITUTION NOTE

Introduce reconstitution solvent against the vial wall. Allow complete dissolution at rest without agitation. Refrigerate post-reconstitution.

REGULATORY CLASSIFICATION: All BioUnfolding compounds are strictly intended for laboratory evaluation and in-vitro analysis. These materials are not intended for human consumption, veterinary use, or therapeutic application. Researchers are solely responsible for compliance with applicable local regulations including SAHPRA guidelines.

REQUEST BATCH DOCUMENTATION

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