MELANOCORTIN RECEPTOR AGONIST · FDA APPROVED

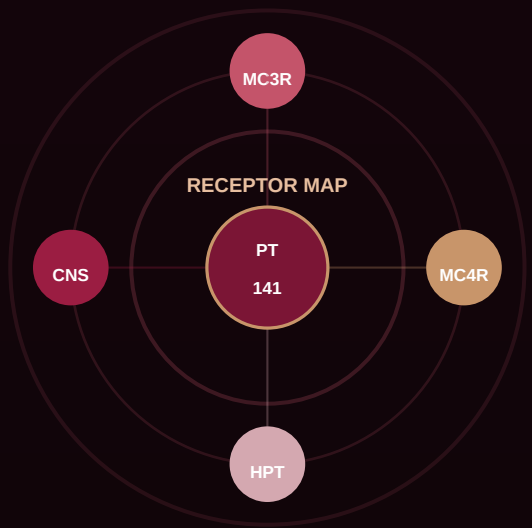
PT-141

Bremelanotide · Sexual Health Peptide

Desire · Arousal · Connection

The first FDA-approved peptide for hypoactive sexual desire disorder — acting centrally, not peripherally.

FDA	MC4R	~3h	SC
Approved 2019	Primary Target	Duration	Preferred Route



What is PT-141?

A centrally-acting melanocortin peptide approved for hypoactive sexual desire

PT-141, also known as Bremelanotide, is a synthetic cyclic heptapeptide analogue of alpha-MSH (melanocyte-stimulating hormone), developed from the sunless tanning peptide Melanotan II.

Unlike PDE5 inhibitors such as sildenafil or tadalafil — which act peripherally on vascular tissue — PT-141 acts directly on the central nervous system, specifically targeting melanocortin receptors MC3R and MC4R in the hypothalamus.

This central mechanism of action produces genuine desire and arousal at the neurological level, rather than merely facilitating physical response. It is the only approved treatment for Hypoactive Sexual Desire Disorder (HSDD) that works via CNS pathways.

In 2019, the FDA approved PT-141 (Vyleesi) for premenopausal women with HSDD — the first and only approved on-demand treatment for this condition. Off-label research continues to explore its benefits in men.

CYCLIC HEPTAPEPTIDE SEQUENCE

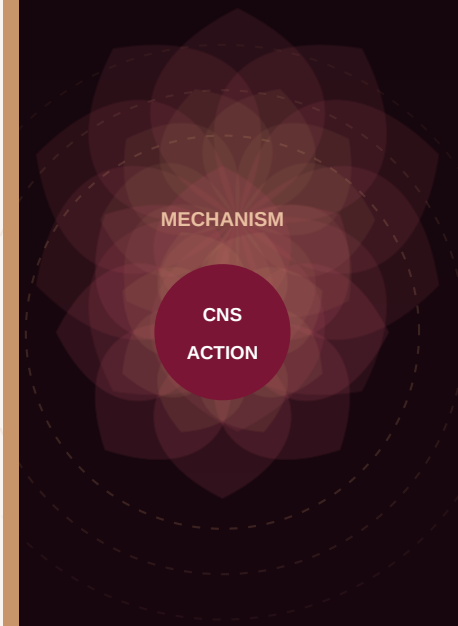
Ac-Nle-cyclo[Asp-His-D-Phe-Arg-Trp-Lys]-OH

MW: 1025.2 g/mol | Formula: C50H68N14O10

Feature	PT-141	PDE5 Inhibitor
Mechanism	Central (CNS)	Peripheral (vascular)
Target	MC3R / MC4R	Phosphodiesterase-5
Desire effect	Yes — neurological	No — physical only
Works without arousal	Yes	Limited
Gender	Both	Primarily male
FDA status	Approved (HSDD)	Approved (ED)

Quick Facts

Class	Cyclic heptapeptide
Origin	Alpha-MSH analogue
Approval	FDA 2019 (HSDD)
Brand	Vyleesi (Palatin)
Solubility	Water soluble
Storage	2-8°C refrigerated



Key Benefits

Clinically validated benefits for sexual health and wellbeing

Central Desire Activation

PT-141 stimulates MC4R receptors in the hypothalamus, triggering genuine neurological desire rather than merely enhancing physical response. Users report spontaneous, authentic arousal.

FDA-Approved Efficacy

Pivotal Phase III trials demonstrated significant improvements in satisfying sexual events (SSEs) and reduced distress scores in women with HSDD — earning full FDA approval in 2019.

Works for Both Sexes

Unlike approved PDE5 inhibitors, clinical research shows PT-141 improves sexual function in both men and women — including cases of erectile dysfunction refractory to sildenafil.

On-Demand Dosing

Administered 45 minutes before activity, PT-141 offers flexible on-demand use with no daily dosing requirement and no interaction with food or alcohol consumption.

Long Duration of Action

A single dose produces effects lasting 6–12 hours, offering extended windows of spontaneity that short-acting alternatives cannot match.

No Vascular Side Effects

By acting centrally rather than on vasculature, PT-141 avoids the cardiovascular contraindications of PDE5 inhibitors, making it suitable for patients with cardiac considerations.

PT-141 vs. PDE5 Inhibitors vs. Hormone Therapy

Research & Dosing

Clinical evidence supporting PT-141 from discovery to FDA approval

1998 **Melanocortin Discovery**

Palatin Technologies identified PT-141's potent MC3R/MC4R agonism from Melanotan II derivatives. Initial animal studies confirmed central nervous system-mediated pro-erectile and pro-arousal effects.

2003 **Phase I Human Trials**

First-in-human trials confirmed intranasal PT-141 produced significant improvements in erectile function in men with psychogenic and organic ED, including sildenafil non-responders.

2008 **Female HSDD Studies**

Phase II trials in premenopausal women with HSDD demonstrated statistically significant improvements in desire, arousal, and genital sensation scores versus placebo.

2017 **Phase III Pivotal Trials**

Multicenter, double-blind, placebo-controlled Phase III trials met all primary endpoints: increased satisfying sexual events and significantly reduced personal distress scores in women with HSDD.

2019 **FDA Approval (Vyleesi)**

The FDA approved Bremelanotide (PT-141) injection as Vyleesi for acquired, generalised HSDD in premenopausal women — the first on-demand, CNS-acting treatment for sexual desire disorders.

Dosing Protocol

Route	Subcutaneous injection
Dose	1.75 mg (auto-injector)
Timing	45 min before activity
Max frequency	Once per 24 hours
Max per month	8 doses (clinical)
Onset	30–60 minutes
Duration	6–12 hours
Storage	Refrigerated 2–8°C

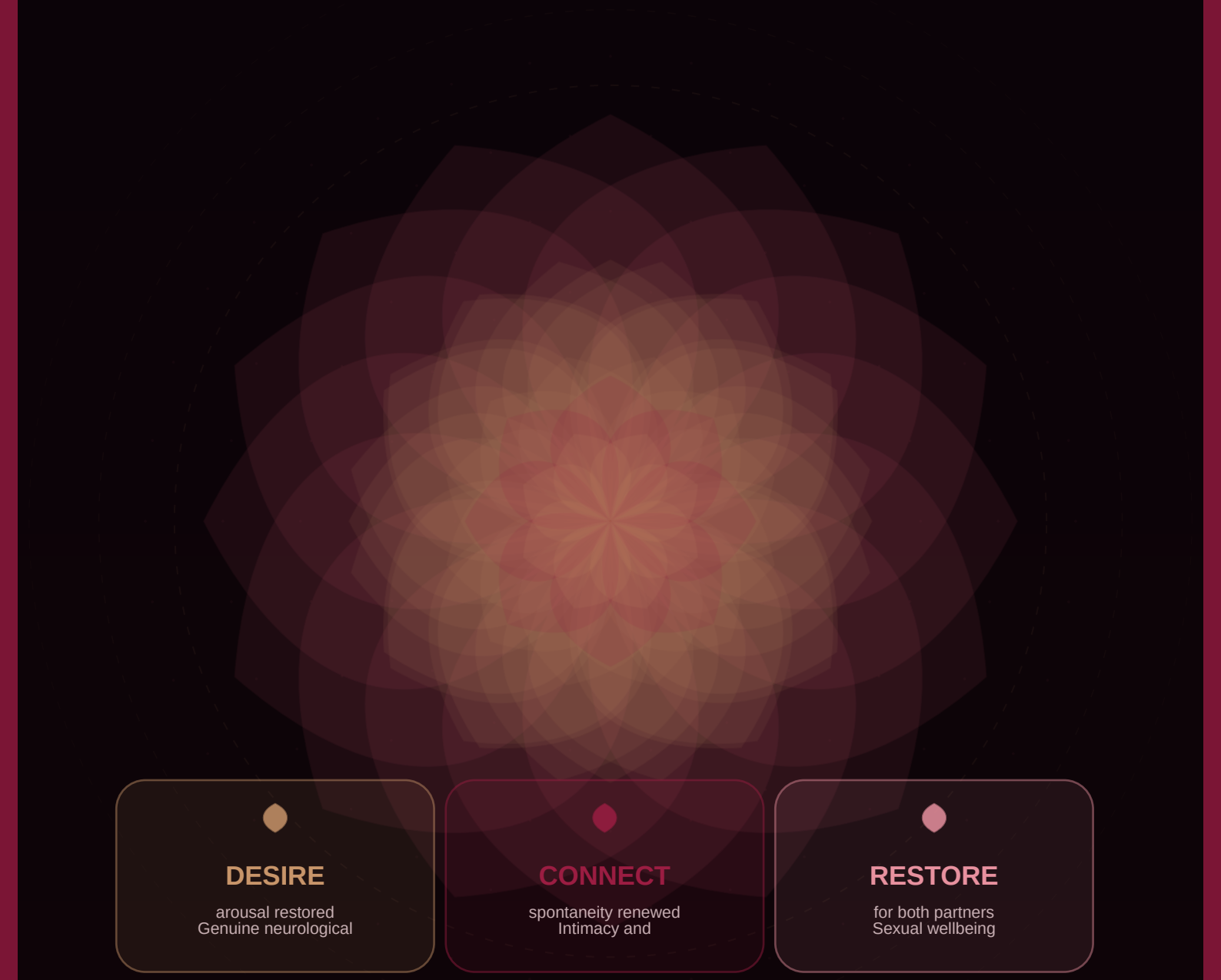
Common Side Effects (Clinical)

- Nausea (most common, ~40%)
- Flushing & warmth
- Headache
- Transient BP increase
- Injection site reaction

Research use only. PT-141 is FDA-approved for HSDD in premenopausal women. Consult a physician for all therapeutic applications.

Rediscover Desire.

PT-141 is not about mechanics. It is about reconnecting with desire at its neurological source — restoring intimacy, confidence, and spontaneity through the science of melanocortin signalling.



DESIRE

arousal restored
Genuine neurological

CONNECT

spontaneity renewed
Intimacy and

RESTORE

for both partners
Sexual wellbeing

ORDER NOW

LEARN MORE

FREE SAMPLE

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