

# PT-141 Peptide: SD, ED, and More

PT-141, which is also sometimes referred to as Bremelanotide, is a synthetic peptide that researchers suggest may mimic the action of  $\alpha$ -melanocyte-stimulating hormone ( $\alpha$ -MSH). The peptide appears to mostly bind to MC-4R, one of the melanocortin receptors, to potentially regulate metabolism, sexual behavior, and erectile function.

Despite research in Bremelanotide's impact on female hypoactive sexual desire disorder, peptide researchers are keenly studying the chemical to determine its possible impact on male sexual dysfunction.

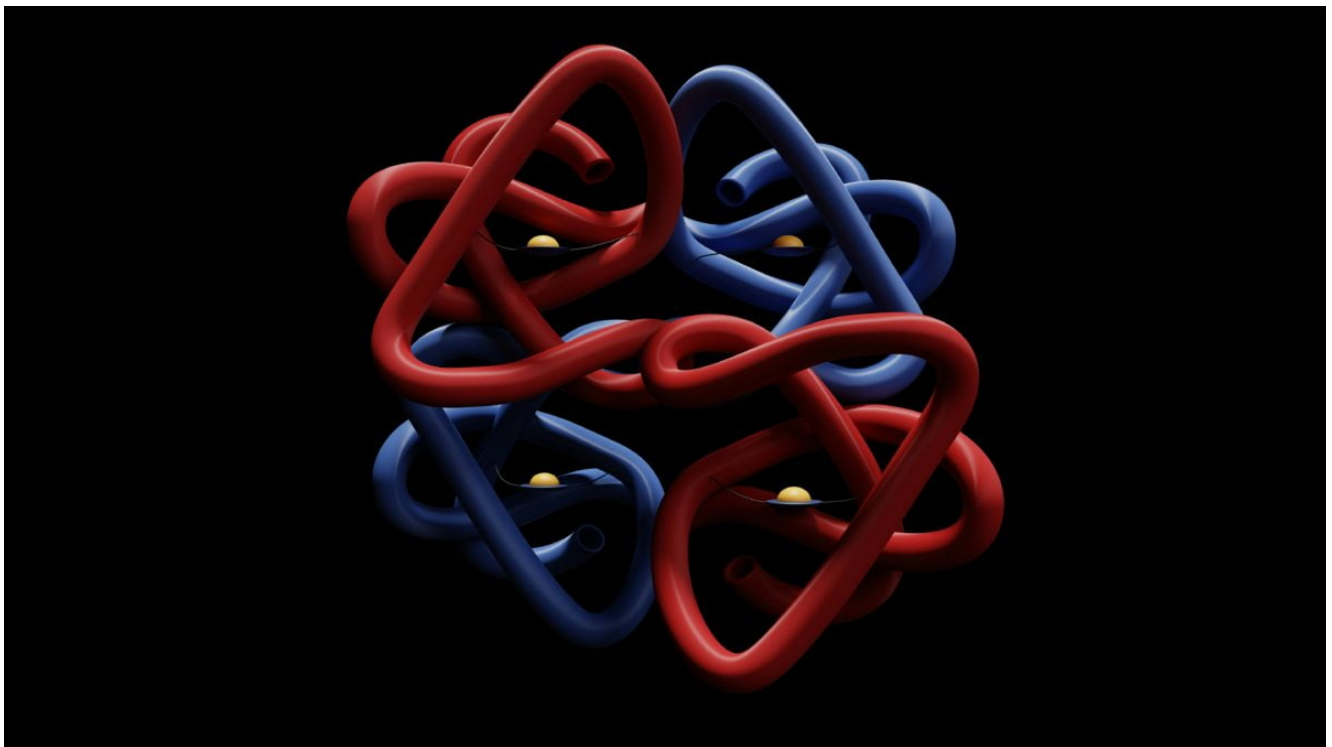


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## PT-141 Peptide: What is it?

PT-141 is an artificial version of alpha-melanocyte-stimulating hormone that has undergone significant modification. Bremelanotide is its common name, and it is an agonist to the melanocortin-4 and melanocortin-1 receptors.

## **PT-141 Peptide: Mechanism of Action**

PT-141 has been rigorously researched in the context of HSDD. However, other study results suggest it may potentially induce further downstream actions, so it remains prominent in existing research.

## **PT-141 Peptide Potential**

PT-141 is a cyclic heptapeptide with a specific sequence that researchers suggest may enable it to bind selectively to certain subtypes of melanocortin receptors. The peptide is characterized by its stability, which may make it an ideal candidate for research involving receptor-mediated signaling. Unlike its precursors and related peptides, PT-141 does not appear to rely on vascular mechanisms for its activity, distinguishing its mode of action and the pathways it may influence.

The biggest hypothesized property of PT-141 so far is in the context of HSDD.

According to recent studies, PT-141 seems to enhance libido in female animal models by *“kickstarting presynaptic MC4Rs on neurons in the mPOA of the hypothalamus, leading to enhanced release of dopamine (DA),”* among other proposed mechanisms. However, further study may be required to fully comprehend PT-141's precise mode of action.

## **PT-141 Peptide and Sexual Dysfunction**

In cases of erectile dysfunction, PT-141 appears to increase mating/reproductive behavior, which is a major research finding. When routinely exposed in animal models over 12 weeks, PT-141 appeared to have increased the frequency of reproductive events, through randomized, placebo-controlled concentration-finding experiment.

## **PT-141 Peptide and HSDD Stress**

Research conducted by Kingsberg et al. (2019) reviewed data from two randomized phase 3 studies and suggested that PT-141 might alleviate stress hormone secretion in cases of hypoactive sexual desire disorder.

### **PT-141 Peptide and Sexual Function**

PT-141 may potentially increase instances of an erection. According to Rosen et al. (2004), PT-141 appeared to have had a “statistically significant” impact on erection-achieving abilities in animal models.

### **PT-141 Peptide and ED**

Research conducted in 2008 indicated that PT-141, in comparison to control compounds that induce erectile functions, may have increased instances of copulation in models of erectile dysfunction. The trial was randomized, double-blind, and placebo-controlled. The PT-141 peptide was given to 33.5% of the cohort, 45 minutes to 2 hours before sexual activity, and the findings were deemed “*positive experimental results.*”

### **Buying PT-141 Peptide Online**

Many internet sellers offer PT-141 for sale, which is good news for researchers looking for a place to get them. Only authorized researchers can obtain PT-141 while it is offered as a study chemical.

Not even the most knowledgeable and experienced researchers will have an easy time locating a reliable source of research-grade PT-141. This is because peptide production and sale are not well-regulated in many countries, and many websites advertise pure PT-141 but do not provide it.

Thus, which provider is reliable for researchers? Our team has conducted extensive research and performed test purchases to determine which vendors are reliable.

In writing this PT-141 online buying guide, we aimed to address any concerns or questions researchers could have had on the best places to get this peptide. If you are a licensed researcher, you may get your hands on PT-141, a research-approved compound for hypoactive sexual desire disorder (HSDD), over the Internet.

## **Conclusion**

[PT-141 peptide](#) is a significant molecular research chemical, offering insights into the complex signaling pathways mediated by melanocortin receptors. Its unique potential and specific action mechanism may make it an indispensable peptide in studies aimed at unraveling the molecular underpinnings of receptor-mediated processes. Further exploration of this peptide will likely yield valuable information that can broaden our scientific horizons within the confines of research environments.

PT-141 has a great deal of promise for future studies, especially in the context of erectile dysfunction, even in cases of non-response to traditional compounds used to induce erectile functions. Please remember that none of the compounds discussed in this paper have been approved for human or animal consumption. They should not, therefore, be utilized or acquired by unlicensed individuals outside of contained research environments such as laboratories. This article served educational purposes only.

## **References**

[i] Mayer D, Lynch SE. Bremelanotide: New Drug Approved for Treating Hypoactive Sexual Desire Disorder. *Ann Pharmacother*. 2020 Jul;54(7):684-690. doi: 10.1177/1060028019899152. Epub 2020 Jan 1. PMID: 31893927.

[ii] Pfaus JG, Sadiq A, Spana C, Clayton AH. The neurobiology of bremelanotide for the treatment of hypoactive sexual desire disorder in premenopausal women. *CNS Spectr*. 2021 Jan 18:1-9.

doi: 10.1017/S109285292100002X. Epub ahead of print. PMID: 33455598.

[iii] Clayton, A. H., Althof, S. E., Kingsberg, S., DeRogatis, L. R., Kroll, R., Goldstein, I., Kaminetsky, J., Spana, C., Lucas, J., Jordan, R., & Portman, D. J. (2016). Bremelanotide for female sexual dysfunctions in premenopausal women: a randomized, placebo-controlled dose-finding trial. *Women's health (London, England)*, 12(3), 325–337.

<https://doi.org/10.2217/whe-2016-0018>

[iv] Kingsberg SA, Clayton AH, Portman D, Williams LA, Krop J, Jordan R, Lucas J, Simon JA. Bremelanotide for the Treatment of Hypoactive Sexual Desire Disorder: Two Randomized Phase 3 Trials. *Obstet Gynecol*. 2019 Nov;134(5):899-908. doi: 10.1097/AOG.0000000000003500. PMID: 31599840; PMCID: PMC6819021.

[v] Rosen, R. C., Diamond, L. E., Earle, D. C., Shadiack, A. M., & Molinoff, P. B. (2004). Evaluation of the safety, pharmacokinetics and pharmacodynamic effects of subcutaneously administered PT-141, a melanocortin receptor agonist, in healthy male subjects and in patients with an inadequate response to Viagra. *International journal of impotence research*, 16(2), 135–142.

<https://doi.org/10.1038/sj.ijir.3901200>

[vi] Safarinejad, M. R., & Hosseini, S. Y. (2008). Salvage of sildenafil failures with bremelanotide: a randomized, double-blind, placebo controlled study. *The Journal of urology*, 179(3), 1066–1071. <https://doi.org/10.1016/j.juro.2007.10.063>

[vii] Simon JA, Kingsberg SA, Portman D, Williams LA, Krop J, Jordan R, Lucas J, Clayton AH. Long-Term Safety and Efficacy of Bremelanotide for Hypoactive Sexual Desire Disorder. *Obstet Gynecol*. 2019 Nov;134(5):909-917. doi: 10.1097/AOG.0000000000003514. PMID: 31599847; PMCID: PMC6819023.

[viii] Althof S, Derogatis LR, Greenberg S, Clayton AH, Jordan R, Lucas J, Spana C. Responder Analyses from a Phase 2b Dose-Ranging Study of Bremelanotide. *J Sex Med.* 2019 Aug;16(8):1226-1235. doi: 10.1016/j.jsxm.2019.05.012. Epub 2019 Jul 2. PMID: 31277966.