### AMORE – MIO homeopathic mouth spray

## Testagen | PT-141 | Oxytocin

#### Background

AMORE – MIO homeopathic mouth spray is a mood and sexual enhancement supplement formulary designed to boost libido with additional benefits of anxiety and depression relief. This synergistic blend combines Testagen, PT-141, and Oxytocin to naturally increase sexual hormones in both men and women (increasing erectile activity in men and sexual desire in women) while promoting affective health by cultivating feelings of mindfulness, social bonding, and overall mood enhancement.

### Research

**Testagen** is a bioregulatory short peptide associated with boosting testosterone levels via capabilities to cross nuclear and cell membranes and directly interact with DNA. The peptide positively influences testosterone and thyroid function. The former is linked to the ability to modify protein expression while the latter is connected to stimulation of the anterior pituitary gland to support regulation of thyroid-stimulating hormone (TSH) levels. Testagen short peptide is considered a testosterone-boosting peptide and primary interest stems from abilities to travel across cellular and nuclear membranes. Given a relationship between thyroid and immune functions, testagen may improve immunity by the ability to regulate TSH levels.

PT-141 peptide is a cyclic heptapeptide melanocortin analogue used to treat erectile dysfunction (ED) in men and sexual desire disorder in women.<sup>1</sup> Diamond et al. (2005) evaluated coadministration of low doses of intranasal PT-141 and sildenafil to men with erectile dysfunction. <sup>1</sup> Study methods of this randomized cross-over design included (n = 19) patients with erectile dysfunction who were responders to brand name ED medication by self-report were given 25 mg sildenafil and 7.5 mg intranasal PT-141, 25 mg sildenafil and an intranasal placebo spray, and a placebo tablet and an intranasal placebo spray. <sup>1</sup> Outcome measures included erectile activity response rates and findings suggest the magnitude of the erectile response promoted by coadministration of PT-141 and sildenafil was significantly greater than the response produced by sildenafil alone. <sup>1</sup> Simon et al. (2019, 2022) evaluated the efficacy of bremelanotide (PT-141 peptide) as treatment for hypoactive sexual desire disorder in premenopausal women (n = 272) in a 52-week open-label extension of the RECONNECT studies.<sup>3, 4</sup> Results of their study suggest premenopausal women treated with bremelanotide showed persistent improvements in hypoactive sexual desire disorder symptoms. <sup>3</sup> Molinoff et al. (2003) suggest that administration of PT-141 to normal men and to patients with ED led to a rapid dose-dependent increase in erectile activity, suggesting the peptide may serve as a therapeutic option to treat sexual dysfunction in men and women.<sup>5</sup>

**Oxytocin**, as a chemical messenger in the brain, is associated with labor and delivery, lactation, regulating depression, coupled with physical stimulation of somatosensory organs, and mindfulness meditation – it may be linked to human behaviors and moods of well-being, social

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bonding, and emotional behavior. <sup>6</sup> Oxytocin is similarly constructed to anti-diuretic hormone (ADH), differing by only two amino acids, and produced in the posterior pituitary, often referred to as the "love hormone." <sup>7</sup>

# Conclusion

AMORE - MIO homeopathic mouth spray is designed as standalone therapy to naturally boost sexual hormones in adults, or as an adjunct to amplify effects of prescription-based hormone replacement therapy (HRT). This spray is designed to enhance love life, e.g., increasing erectile activity in men and sexual desire in women, while concurrently promoting positive affective benefits such as mindfulness, social bonding, and overall anxiety and depression relief. Nitric oxide is well known in the scientific community for its positive impacts on blood flow and holistic anti-aging benefits, which can contribute to skeletal muscle performance, and, by extension, stimulating sexual function, especially in men, and this supplement is designed to promote nitric oxide synthesis (mainly through PT-141).<sup>2</sup>

# References

- <sup>1</sup> Diamond LE, Earle DC, Garcia WD, Spana C. Co-administration of low doses of intranasal PT-141, a melanocortin receptor agonist, and sildenafil to men with erectile dysfunction results in an enhanced erectile response. Urology. 2005 Apr;65(4):755-9. Doi: 10.1016/j.urology.2004.10.060. PMID: 15833522.
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- <sup>3</sup> 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.00000000003514. PMID: 31599847; PMCID: PMC6819023.
- <sup>4</sup> Simon JA, Kingsberg SA, Portman D, Jordan R, Lucas J, Sadiq A, Krop J, Clayton AH. Prespecified and Integrated Subgroup Analyses from the RECONNECT Phase 3 Studies of Bremelanotide. J Womens Health (Larchmt). 2022 Mar;31(3):391-400. Doi: 10.1089/jwh.2021.0225. Epub 2022 Feb 25. PMID: 35230162.
- <sup>5</sup> Molinoff PB, Shadiack AM, Earle D, Diamond LE, Quon CY. PT-141: a melanocortin agonist for the treatment of sexual dysfunction. Ann N Y Acad Sci. 2003 Jun;994:96-102. Doi: 10.1111/j.1749-6632.2003.tb03167.x. PMID: 12851303.
- <sup>6</sup> Ito E, Shima R, Yoshioka T. A novel role of oxytocin: Oxytocin-induced well-being in humans. Biophys Physicobiol. 2019 Aug 24;16:132-139. Doi: 10.2142/biophysico.16.0\_132. PMID: 31608203; PMCID: PMC6784812.

<sup>7</sup> Chan WY. An investigation of the natriuretic, antidiuretic and oxytocic actions of neurohypophysial hormones and related peptides: delineation of separate mechanisms of action and assessment of molecular requirements. J Pharmacol Exp Ther. 1976 Mar;196(3):746-57.

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### Summary

AMORE – MIO homeopathic mouth spray is designed as standalone therapy to naturally boost sexual hormones in adults, or as an adjunct to amplify effects of prescription-based hormone replacement therapy (HRT). This synergistic blend combines Testagen, PT-141, and Oxytocin to naturally increase sexual hormones in both men and women (increasing erectile activity in men and sexual desire in women) while promoting affective health by cultivating feelings of mindfulness, social bonding, and overall mood enhancement.