

Kisspeptin, potential treatment for low sexual desire in women



KEY ACHIEVEMENTS

- Kisspeptin stimulates sexual behavior in female mice
- Kisspeptin deficiency is associated with reduced sexual behavior in female mice
- Kisspeptin acts in the brain on neural pathways involved in sexual motivation

KEY COMPETITIVE ADVANTAGES

- Kisspeptin is a natural peptide being produced in the brain so limited adverse effects to be expected
- Design of an experimental protocol for a proof-of-concept study using fMRI and physiological parameters to determine the effects of kisspeptin on sexual desire in women

UPCOMING CHALLENGES

- Conducting the clinical trial in women
- Improvement of administration mode with a view to commercialization as a potential therapy for low sexual desire

Low sexual desire is a very common symptom in women of any age with potential negative consequences on the quality of life. The prevalence of low sexual desire is directly correlated with increasing age ranging from 27 % in young women to 52 % in naturally postmenopausal women. A more recent study even reports a prevalence up to 69 % in women between 40 and 65 years of age.

This disorder has been found difficult to treat due to the large number of potential causes and contributing factors. Therefore, there is still a burning need for more efficient and safer pharmacotherapies for treating female low sexual disorder.

Kisspeptin, the protein product of the gene Kiss-1, and which is produced and secreted by neurons in the infundibular nucleus of the hypothalamus, is a potent activator of the reproductive axis. The research group led by Julie Bakker at the GIGA Neurosciences (Liège University, Belgium) has recently demonstrated that a single injection with kisspeptin reliably stimulates sexual behavior in female mice (Hellier et al., Nature Communications, volume 9, Article number: 400, 2018). This discovery opens new avenues of therapeutic strategies for treating low sexual desire in women.

INTELLECTUAL PROPERTY

WO/2020/151830 Agonists of human kisspeptin receptor for modulating sexual desire

UPCOMING CHALLENGES

- Research collaboration to undertake the women clinical trial
- License agreement