

## Dicot Pharma presents new research findings on the mechanism of action of LIB-01

Uppsala, Sweden, December 8, 2025. Dicot Pharma AB today presents results from preclinical studies that expand knowledge about the mechanism of action of its drug candidate LIB-01, developed for erectile dysfunction. The results show that LIB-01 affects a biological system, the melanocortin system, which is well known for regulating several functions in the body, such as sexual function and energy metabolism. The research findings provide further support for LIB-01's potential to improve erectile function even in non-responders of current treatments, and strengthen the possibility of use in other indication areas.

Dicot Pharma is conducting preclinical studies to characterize the mechanism of action for its potency drug candidate LIB-01. New results from these studies confirm that the drug substance affects the body's endogenous melanocortin system, which involves several receptors including the MC4 receptor (MC4R). MC4R is involved in erectile function by modulating nerve signals in the brain and spinal cord, and also plays an important role in regulating other functions such as hunger, satiety, and energy expenditure. In the preclinical studies conducted to date, Dicot Pharma has evaluated the effect of LIB-01 in combination with an MC4R antagonist, a substance that inhibits the melanocortin system.

LIB-01 has a positive effect on erectile function by enhancing MC4R signaling. This effect is due to LIB-01 increasing the gene expression of both MC4R itself and a natural agonist that activates the receptor. Unlike other synthetic peptide agonists that only affect the MC4 receptors already present in the body, LIB-01 increases the body's own production of both the receptor and its activator, which explains LIB-01's long-term treatment effect even after LIB-01 has disappeared from the body. The involvement of MC4R in LIB-01's pro erectile effect is demonstrated by attenuation of the effect when an MC4R antagonist (inhibitor) is administered at the same time, as the preclinical studies now show.

The results reinforce the company's hypothesis regarding the mechanism of action of the drug substance and underscore its potential ability to also help men who do not respond to currently available treatments for erectile dysfunction.

*"These research findings are another piece of the puzzle that explains the mechanism of action of LIB-01 and fits well with our hypothesis about how the drug candidate exerts its pro erectile effect. Together with previous results, this reinforces our view that LIB-01 is a potent drug candidate with promising potential to treat underlying causes of erectile dysfunction. The results also indicate potential opportunities in other therapeutic areas, which is in line with previous findings that form the basis of the preclinical program in metabolic indications that we have initiated,"* says Charlotta Gauffin, CSO of Dicot Pharma.

Previous research has shown that LIB-01 affects the underlying structures that play a central role in penile erection. A penile erection occurs through increased arterial inflow to the penis accompanied by a relaxation of the erectile tissue, processes controlled by neural command. By analyzing gene expression in anatomical structures, Dicot Pharma has found that LIB-01 affects these underlying nervous and vascular structures. Unlike today's market-leading drugs, PDE5 inhibitors, which act within the erectile tissue by preventing blood outflow and therefore require sufficient blood inflow to function. Through its unique mechanism of action, LIB-01 affects gene expression in these underlying structures, which can explain the drug candidate's long-term effect on erectile function and open possibilities to treat even those men who are not helped by current treatments.

Dicot Pharma continues to characterize the mechanism of action through studies of specific processes in the body.

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**About Dicot Pharma AB**

Dicot Pharma is developing the drug candidate LIB-01, which will be a potency agent to better treat erectile dysfunction and premature ejaculation. The ambition is to create a drug with significantly longer effect and far fewer side effects, compared to current available drugs. Today, over 500 million men suffer from these sexual dysfunctions and the market is valued at USD 8 billion. Dicot Pharma's business model involves evaluating industrial and financial partnerships during clinical development to bring LIB-01 to commercialization on the world market.

Dicot Pharma is listed on Nasdaq First North and has approximately 17,400 shareholders. FNCA Sweden AB is appointed Certified Adviser. For more information, please visit [www.dicotpharma.com](http://www.dicotpharma.com).

*This is a translation from the Swedish original. In case of differences between versions, the Swedish version prevails.*