

# Nanexa Announces Breakthrough Preclinical Data Demonstrating Exceptional Pharmacokinetic Profile for Monthly Semaglutide Formulation

- **Nanexa's atomic layer deposition (ALD) platform PharmaShell® demonstrably improves the pharmacokinetic profile of semaglutide injections.**
- **Significantly smoother plasma concentration curve could mitigate many common side effects of GLP-1 drugs.**
- **Less frequent dosing and improved adherence are key selling points for the next generation of GLP-1s, and reinforce Nanexa's ability to secure new commercial partnerships.**

Nanexa AB today announces exceptional preclinical results for its long-acting semaglutide formulation developed using the company's proprietary PharmaShell® drug delivery platform. PharmaShell encases active pharmaceutical ingredients at the atomic level in a highly protective, extremely thin film coating (approximately 30 nm thick) of slow-dissolving non-toxic inorganic oxides.

Recent preclinical studies demonstrate an extraordinary pharmacokinetic (PK) profile, indicating a very low ratio between the maximum and minimum plasma concentration over the dosing interval following once-monthly subcutaneous administration. The plasma concentration is significantly more stable than that typically achieved with weekly administration of the marketed product Wegovy® (semaglutide).

## **Breakthrough PK Profile with Potential to Reduce Gastrointestinal Side Effects**

A key hallmark of the new formulation is its low initial peak - a feature considered critical in reducing gastrointestinal (GI) adverse events commonly associated with GLP-1 therapies. By avoiding the sharp plasma concentration spikes often linked to nausea and other GI symptoms, Nanexa's formulation may offer a more tolerable initiation and maintenance profile for patients. The preclinical results show clear dose-linearity, and significantly improved bioavailability compared with Nanexa's earlier liraglutide formulations. Improved tolerability is strongly linked to improved adherence, which is a key issue associated with GLP-1 therapies.

## **Strategic Shift: From Liraglutide to Semaglutide**

With these highly encouraging preclinical findings, Nanexa is shifting its development focus from liraglutide to semaglutide, reflecting the substantial therapeutic and commercial opportunity for long-acting GLP-1 treatments.

The advancement of this semaglutide program builds directly on the clinical Phase 1 data from Nanexa's liraglutide program, presented in 2025, which provided key insights into PharmaShell® performance in humans. Those findings enabled refined modelling, improved formulation strategies, and faster advancement for Nanexa toward clinical readiness for semaglutide.

"These latest results represent a major milestone for Nanexa," said David Westberg, CEO of Nanexa. "Demonstrating such a long release profile and low ratio between the maximum and minimum plasma concentration for monthly administration is exceptional and highlights how powerful the PharmaShell® technology can be for complex molecules like semaglutide. We are excited about this data which will strengthen our position to secure commercial partnerships."

**For additional information, please contact:**

---

David Westberg – CEO, Nanexa AB (publ)  
Phone: +46 70 942 83 03  
Email: [david.westberg@nanexa.se](mailto:david.westberg@nanexa.se)  
[www.nanexa.com](http://www.nanexa.com)

Richard Hayhurst – Co-founder, 59 North Communications  
Phone: +447711 821527  
Email: [richard.hayhurst@59north.bio](mailto:richard.hayhurst@59north.bio)

The company's Certified Adviser is Tapper Partners AB.

**About Nanexa AB (publ)**

---

Nanexa is bringing the control, precision and versatility of Atomic Layer Deposition (ALD) technology to drug formulation. The company's proprietary PharmaShell® platform is a unique drug delivery system that enables a high drug load, thus low injection volume, creating a new generation of 'super generic' formulations that will provide greater convenience and reduce costs in the treatment of conditions such as metabolic diseases like type 2 diabetes and obesity, hematology/oncology, cardiovascular disorders, psychiatry, and many others. Nanexa develops its own products and also has collaboration agreements with several pharma companies, including the latest license and option agreement with Moderna.

Nanexa's share is listed on Nasdaq First North Growth Market in Stockholm (NANEXA).

**Attachments**

---

[Nanexa Announces Breakthrough Preclinical Data Demonstrating Exceptional Pharmacokinetic Profile for Monthly Semaglutide Formulation](#)