

## NUMAFERM closes licensing agreement with *PEPDesign*

- **Low cost production and superior product purity of the diabetes drug liraglutide with NUMAFERM's unique technology platform**
- **Industry seeks optimized generic drug manufacturing methods after liraglutide patent expiration**

**Düsseldorf (Germany) and Pūrē (Latvia), 22. July 2019:** The Düsseldorf-based NUMAFERM GmbH has signed a licensing agreement for its unique manufacturing process for peptides with *PEPDesign* SIA. NUMAFERM's technology platform will be applied to the production of diabetes and obesity drugs. Under the terms of the agreement, *PEPDesign* will continue to drive production of the diabetes drug liraglutide in the direction of Good Manufacturing Practice (GMP) for production and market launch. Compared to current peptide production processes, the NUMAFERM biotechnological manufacturing process is cost-effective and yields a superior product purity. The shared objective of the collaboration is to identify a suitable partner for commercialization of the manufactured drug. Sales of liraglutide currently amount to eight billion USD, making it one of the highest-selling diabetes drugs worldwide. Liraglutide's patent protection will expire in August 2022. Financial details of the collaboration were not disclosed.

"This contract confirms that our award-winning technology meets a market demand and offers the industry an attractive production strategy," said **Philipp Bürling, Co-Founder and Chief Financial Officer (CFO) of NUMAFERM**. "With the help of our technology, peptides can be produced efficiently, inexpensively and with a higher product purity. In the context of the license agreement we strengthen our cooperation with *PEPDesign* and enter into the pre-commercialization phase."

**Dr. Christian Ewers, Co-Founder and Chief Executive Officer (CEO) of *PEPDesign*** went on to say: "Liraglutide is an extremely exciting development project with tremendous market potential, as sales are projected to reach 20 billion USD by 2022. Based on this, a low cost production process is of inestimable value. The quality observed in the first samples provided by NUMAFERM was exceptional. I am thrilled to inilicence this groundbreaking technology."

**Dr. Christian Schwarz, NUMAFERM Co-Founder and Chief Executive Officer (CEO)**, commented: "This agreement reflects the amazing work of our team and the increasing reputation of NUMAFERM in the market. Additional projects are ongoing with well-known industry partners, and we are optimistic to be involved in launches of exciting products in the near future."

In addition to diabetes and obesity, peptides play a major role in pharmaceutical pipelines. More than 500 peptide drugs are currently under development<sup>1</sup>. "Our clients' peptide projects that were

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<sup>1</sup> DrugDiscoveryToday, Volume20, Number1, January2015, Peptide therapeutics: current status and future directions, <https://www.sciencedirect.com/science/article/pii/S1359644614003997>

previously non-economical are being rolled-out again. This holds true for the pharma industry as well as for non-pharma applications where peptide-based innovations are under development in sectors such as veterinary, cosmetic, agriculture, aquaculture and nutrition” said **Schwarz**.

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#### **Notes to Editors:**

##### **About peptides and their production with NUMAFERM technology**

Peptides are short-chain proteins that play a major role in pharmaceutical industry. However, to date their production is resource-intensive, pricy and is performed primarily by chemical synthesis that is complex, tedious and causes pollution. This leads to average prices of one million euros per kilogram of pharma-grade peptides. Biotechnological approaches have so far required a high developmental effort and had a low probability of success, especially because peptides are destroyed rapidly by proteases of the production cells organisms. By applying its proprietary technological platform, NUMAFERM succeeds with a fermentative process which uses nature's efficiency to produce peptides predictably with the help of microorganisms in high yields, superior quality and with low costs.

##### **About NUMAFERM GmbH**

NUMAFERM GmbH specializes in the biotechnological production of peptides and small proteins. The Company offers its technology, related research, development services and a peptide catalog focusing on adhesive, antimicrobial and pharmaceutical peptides. NUMAFERM was founded in 2017 as a spin-off of the Institute of Biochemistry at the Heinrich Heine University in Düsseldorf by Christian Schwarz (CEO) and Philipp Bürling (CFO). The Company has since been awarded several times for its pioneering work. Investors include Prof. Detlev Riesner and Dr. Ing. Jürgen Schumacher, both co-founders of the most successful German biotech company Qiagen, the High-Tech Gründerfonds (HTGF), the European Investment Fund and Evonik Venture Capital GmbH.

**[www.numaferm.com](http://www.numaferm.com)**

##### **About PEPDesign SIA**

PEPDesign was founded in January 2019 by Dr. Christian Ewers together with co-investors and established near Riga / Latvia. Based on the guideline that only the combination of different, future-oriented technologies can yield the best solution for sophisticated peptide structures, PEPDesign supports and finances innovative approaches to the development and competitive production of attractive, peptide-based drugs. To this end, PEPDesign brings together many years of business experience from pharmaceuticals and contract manufacturing along with a deep scientific expertise with capital.

**[www.pepdesign.eu](http://www.pepdesign.eu)**



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