

PRESS RELEASE

Joint Press Release by WACKER and Pantherna Therapeutics

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Pantherna and WACKER Intensify Collaboration in the Development and Production of mRNA Biopharmaceuticals

Munich/Hennigsdorf, April 5, 2024 – WACKER’s mRNA competence center in Halle is to produce an active ingredient based on mRNA and lipid nanoparticles (LNPs) for combating acute respiratory distress syndrome (ARDS). Manufacture of the PAN004 active ingredient supplied by Pantherna Therapeutics, a biotech company, is based on a large-scale production process developed by WACKER for mRNA formulated in LNPs. This makes Pantherna WACKER’s first partner to receive preclinical material from its state-of-the-art production plant, which is set to go on stream in mid-2024. WACKER covers the entire production process – from starting material and plasmid DNA through to the mRNA LNP formulation and dispensed mRNA active.

A competence center for active ingredients based on messenger ribonucleic acid (mRNA) will soon open at WACKER’s site in Halle. This site features four new production lines that Wacker Biotech GmbH, a fully owned subsidiary of Wacker Chemie AG, will use to contract manufacture mRNA vaccines, among other things. Part of the new capacity will be available to the German federal government as and when required as part of its pandemic preparedness contracts. Pantherna is the first partner to be supplied by the new facility in Halle.

Dr. Guido Seidel, managing director of Wacker Biotech GmbH, said: “Early collaboration with Pantherna made it possible to develop a cost-effective and scalable process. This doesn’t often happen during preclinical stages in a CDMO setting. Close collaboration with our experts in Corporate R&D was the key to success here. The transfer of technology to our new production facility is now moving at full speed and we are certain that Pantherna will benefit from our manufacturing expertise.”

Dr. Jörg Kaufmann, CSO of Pantherna Therapeutics, said: “We have established a very good collaborative R&D footing with WACKER and value its broad expertise in the production of mRNA active ingredients – expertise that we were able to use to turn our innovative technology into a product. WACKER plays a special role in the market, as it combines many years of experience in the toll manufacturing of complex biopharmaceuticals with the capabilities of its own Corporate R&D unit. We are delighted to now see our innovative mRNA active ingredient move from the laboratory to regulated production. This marks an important milestone for our company and opens a new chapter in our joint collaboration.”

With sites in Halle, Jena, Amsterdam and San Diego, Wacker Biotech is a CDMO for the GMP-compliant production of active ingredients for the pharmaceutical industry. What’s more, the involvement of WACKER’s Munich-based Corporate R&D unit enables Wacker Biotech to work on the early development stages of active ingredients. Active ingredients from preclinical collaborations can subsequently be transferred to Wacker Biotech’s facilities for GMP production. For the first time in the mRNA field, this is now happening

with Pantherna's novel mRNA therapy development candidate PAN004 for combating acute respiratory distress syndrome (ARDS).

Pantherna and Wacker Biotech have been collaborating since 2022. As part of a joint research project, both companies initially developed the manufacturing process for mRNA-based active ingredients using WACKER's own process. The plasmid-based template DNA, yield and critical parameters were all optimized by focusing on process scalability. The LNP manufacturing process based on Pantherna's proprietary LNP formulation technology PTX Δ LNP[®] was transferred from Pantherna to Wacker Biotech as part of this project. The resultant mRNA formulations were, in turn, evaluated by Pantherna in a cell culture model. At the end of 2023, Pantherna decided to join Wacker Biotech in the large-scale production of an active ingredient based on mRNA and lipid nanoparticles for preclinical dose range finding studies as an initial major step toward translating Pantherna's technology into clinical development.

About Pantherna Therapeutics

Pantherna Therapeutics GmbH develops novel first-in-class therapies based on mRNA for indications with high medical need. Pantherna's therapeutic programs are based on two innovative and proprietary platform technologies, the mRNA expression constructs (PTXmRNA[®]) and necessary lipid nanoparticles (PTX Δ LNP[®]) for cell type-specific expression of therapeutic proteins. PAN004 is Pantherna's first development candidate to emerge from this platform and represents a defined mRNA-LNP formulation for the selective

mRNA expression of a Tie2 agonist in the vascular endothelium of pulmonary capillaries. Pantherna is pursuing the development of a pipeline of novel mRNA-LNP candidates that will enable the therapeutic use of mRNA in various tissues and cell types.

www.pantherna-therapeutics.com

About Wacker Biotech

Wacker Biotech GmbH, Wacker Biotech B.V. and Wacker Biotech US Inc. are full-service contract manufacturers of therapeutic proteins, live microbial products (LMPs), plasmid DNA (pDNA), messenger ribonucleic acid (mRNA) and vaccines based on microbial systems. Wacker Biotech's portfolio extends from strain/process development and analytical testing through to production for clinical and commercial applications. Wacker Biotech operates three GMP-compliant, FDA- and EMA-certified production plants at its Jena and Halle sites in Germany and in Amsterdam in the Netherlands. In addition, Wacker Biotech has had a plant in San Diego (Wacker Biotech US Inc.) since February 2021. Wacker Biotech GmbH, Wacker Biotech B.V. and Wacker Biotech US Inc. are wholly owned subsidiaries of Munich-based Wacker Chemie AG.

www.wacker.com/biologics



WACKER's mRNA competence center will more than triple production capacity at its Halle site. (PHOTO: WACKER)

Note:

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