



## **Nosopharm and Evotec enter into collaboration to accelerate development of novel antibiotics**

**New partnership to advance Nosopharm's lead candidate to clinical stage and develop second drug candidate**

**NOSO-502 could be first novel antibiotic class against Enterobacteriace infections to enter clinics in forty years**

**Lyon, France and Hamburg, Germany, July 3rd, 2019** – Nosopharm, a company dedicated to the research and development of new anti-infective drugs, and Evotec SE, a drug discovery and development company, today announce their partnership aimed at advancing Nosopharm's lead candidate, NOSO-502 to the clinical stage, as well as developing a second-generation Odilorhabdin drug candidate. Financial terms of the agreement were not disclosed.

Initial focus will be on Chemistry, Manufacturing and Control (CMC) as well as Clinical Trial Application (CTA)-enabling and filing activities related to NOSO-502, ahead of the planning of Phase I clinical trials for the treatment of complicated Urinary Tract Infections (cUTI) and complicated Intra-Abdominal Infections (cIAI).

NOSO-502 is the first clinical candidate in the novel antibiotic class called Odilhorhabdins (ODLs). It inhibits the bacterial ribosome with a new mechanism of action and is intended for the treatment of nosocomial infections caused by *Enterobacteriaceae*, including *polymyxin*- and *carbapenem-resistant Enterobacteriaceae* (CRE). NOSO-502 has proven to be effective *in vivo* in *Enterobacteriaceae* infection models and demonstrated antibacterial activity *in vitro* against multi-drug resistant clinical isolates (KPC, NDM and OXA among others).

The second program will develop a second-generation Odilorhabdin clinical drug candidate for the treatment of hospital-acquired pneumonia and ventilation-associated pneumonia (HAP/VAP), under the name NOSO-2G. Focus here will be on lead optimisation, and profiling for candidate selection and further development.

"We are delighted to see that such a renowned industrial biotech partner has decided to support the development of our new class of antibiotics," said Philippe Villain-Guillot, co-founder and chief executive officer of Nosopharm "We are very much looking forward to advancing our first drug candidate into the clinics and to expand our drug development to a second candidate."



It's exciting to see the development of an entirely new antibiotic class, which is crucial in these times of rising antibiotic resistance," said Dr Cord Dohrmann from Evotec. "We are thrilled to play a key role this partnership and we believe that the unique combination of our infectious disease expertise and drug discovery and early development platforms, the lead candidates will soon enter the clinic and bring hope to physicians and their patients living with nosocomial infections caused by multidrug-resistance bacteria."

Nosopharm expects CTA-filing to take place in 2021 and to launch first-in-human studies with NOSO-502 in 2021. The clinical candidate selection process for NOSO-2G is expected in 2022.

Antibiotic-resistant bacteria were estimated to be responsible for 670,000 infections and 33,110 attributable deaths in the EU and the European Economic Area (EEA) in 2015. From a global perspective, antimicrobial resistance could kill up to ten million people every year by 2050, which could cost up to €94 trillion (\$100tn). In February 2017, the WHO published a list of priority pathogens for the development of new antibiotics. Carbapenem-resistant Gram-negative bacteria (*Enterobacteriaceae*, *Pseudomonas aeruginosa*, *Acinetobacter baumannii*) were at the top of that list, with critical priority. In 2017 in the EU/EEA, carbapenem-resistance rates for *Klebsiella pneumoniae* (*Enterobacteriaceae*), *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* were 7.2%, 17.4%, and 33.4%, respectively.

### **About Evotec SE**

Evotec is a drug discovery alliance and development partnership company focused on rapidly progressing innovative product approaches with leading pharmaceutical and biotechnology companies, academics, patient advocacy groups and venture capitalists. We operate worldwide and our more than 2,700 employees provide the highest quality stand-alone and integrated drug discovery and development solutions. We cover all activities from target-to-clinic to meet the industry's need for innovation and efficiency in drug discovery and development (EVT Execute). The Company has established a unique position by assembling top-class scientific experts and integrating state-of-the-art technologies as well as substantial experience and expertise in key therapeutic areas including neuronal diseases, diabetes and complications of diabetes, pain and inflammation, oncology, infectious diseases, respiratory diseases and fibrosis. On this basis, Evotec has built a broad and deep pipeline of approx. 100 co-owned product opportunities at clinical, pre-clinical and discovery stages (EVT Innovate). Evotec has established multiple long-term alliances with partners including, Bayer, Boehringer Ingelheim, Celgene, CHDI, Novartis, Novo Nordisk, Pfizer, Sanofi, Takeda, UCB and others. For additional information please go to [www.evotec.com](http://www.evotec.com) and follow us on Twitter @Evotec.

### **About Nosopharm**

Nosopharm is a biotechnology company specialized in the research and development of new antimicrobial molecules. Nosopharm discovered and developed NOSO-502, a first-in-class antibiotic for the treatment of multidrug-resistant hospital-acquired infections. It has developed a unique expertise in the discovery of natural bioactive products stemming from the *Xenorhabdus* and *Photorhabdus* microbial genera and in the medicinal chemistry of Odilorhabdins, the new class of antibiotics to which NOSO-502 belongs. Founded in 2009, Nosopharm is based in Lyon, France, and has a staff of seven. To date, the company has raised a total of €4.3M (\$5.2M) in private equity and received €3.8M (\$4.6M) in grants from



Bpifrance, IMI, DGA, Region Languedoc-Roussillon and FEDER.

[www.nosopharm.com](http://www.nosopharm.com)

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