



Nosopharm shares scientific data on Odilorhabdins, a novel antibacterial class with the potential to combat antibiotic resistance

During the ICAAC, Washington DC, September 5-9, Nosopharm will welcome partner enquiries to co-develop Odilorhabdins

Nîmes, France, September 3, 2014 - Nosopharm, a specialist in the research and development of new anti-infective drugs, announces today its in vitro and in vivo findings for a novel antibacterial class, Odilorhabdins, which has the potential to combat antibiotic resistance.

This new scientific data will be shared at the 54th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) on September 5-9 in Washington DC. Philippe Villain-Guillot, CEO of Nosopharm, will deliver a presentation entitled 'Odilorhabdins: A new class of antibiotics acting against gram-negative pathogens', which forms a part of the symposium (session 046) 'Time for a revival of natural products?'. The presentation will be held on Saturday, Sep 6, 2014, 5:45pm - 6:15pm in room 206¹.

Odilorhabdin was discovered and developed by Nosopharm as part of a three-year program (OOPERA: Odilorhabdin: Preclinical optimization and study to combat antibiotic resistance) that began in 2013, with EUR 1.6 million (USD 2.2 million) project funding. Nosopharm uses its own biotechnological platform, which has a well-established track record in antimicrobial discovery. The Odilorhabdin work is based on the medicinal mining of the bacterial genera *Xenorhabdus* and *Photorhabdus*. This novel antibacterial class is currently at the preclinical stage.

"The ICAAC Program Committee's invitation is an important opportunity for Nosopharm to share its in vitro and in vivo scientific data", said Philippe Villain-Guillot. "It will show the international scientific community that Odilorhabdin is original, and more crucially, that it displays real anti-infective therapeutic potential."

The presentation targets physicians, clinicians, academic and industrial researchers, opinion leaders and business developers. The content covers *Xenorhabdus* and *Photorhabdus*: a promising bioresource for antibiotics, followed by an overview of Odilorhabdins, including their in vitro and in

¹ <http://www.abstractsonline.com/Plan/ViewAbstract.aspx?mID=3529&sKey=dc4aa526-9c85-4a82-8c02-9346633e3377&cKey=987a17c8-6de6-444a-b789-6a22c6765419&mKey=5d6b1802-e453-486b-bcbb-b11d1182d8bb>



vivo antibacterial activity, chemical structures and a summary of their mode of action.

In addition, Nosopharm is poised to collaborate with key pharmaceutical partners to develop the drug. "Our presentation at ICAAC is also a launchpad for future partner discussions", said Philippe Villain-Guillot. "Our next objective is an R&D (preclinical and clinical) and commercialization partnership with a biotech or a pharma company by mid-2015. We welcome a broad range of enquiries from within the industry."

Clinicians widely anticipate that novel therapeutic antibacterials (with efficacy against gram-negative pathogens) will have the potential to treat multidrug-resistant bacterial infections. According to the European Medicines Agency (EMA) and the European Center for Disease Prevention and Control (ECDC), antibiotic-resistant pathogens are the cause of nearly 400,000 hospital-acquired infections and more than 25,000 deaths in the European Union each year. Although many pharmaceutical companies hope to strengthen their pipeline in this area, it remains the case that novel antibiotic classes of this kind are still very rare.

About Nosopharm SAS

Founded in February 2009, Nosopharm is based in Nîmes, France and currently has a staff of seven. Nosopharm is a biotechnology company specializing in the research and development of new anti-infective drugs. The company has designed an innovative anti-infective technological platform based on the exploitation of microbial biodiversity for pharmacological applications. It has unique expertise in the screening and characterization of bioactive secondary metabolites produced by a novel microbial resource: the bacterial genera *Xenorhabdus* and *Photorhabdus*. Further information at <http://www.nosopharm.com>

About Odilorhabdins /NOSO-95

NOSO-95 is a first-in-class antibacterial molecule, the first member of the new Odilorhabdin class. It was discovered from a bacteria of the genus *Xenorhabdus*. NOSO-95 is active against the multiresistant Gram-negative pathogens of most concern: *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter spp.*, *Pseudomonas aeruginosa* and *Acinetobacter baumannii*. It demonstrated an in vitro and in vivo therapeutic proof-of-concept, thus supporting its high potential to cure life-threatening hospital-acquired infections. Currently, NOSO-95 is undergoing a lead optimization program to help it progress into IND-enabling studies.



About *Xenorhabdus* and *Photorhabdus*

Xenorhabdus and *Photorhabdus* represent a high-value bioresource for drug discovery. They are gammaproteobacteria from the *Enterobacteriaceae* family. *Xenorhabdus* and *Photorhabdus* are symbiotic bacteria of the entomopathogenic nematodes from the genus *Steinernema* and *Heterorhabditis*. These bacteria have an original life cycle that requires the production of a great diversity of bioactive secondary metabolites. This prolificity is genetically supported by the high content of PKS and NRPS genes in their genomes. So far, more than a hundred new bioactive molecules produced by *Xenorhabdus* and *Photorhabdus* have been described.

Media and analyst contact:

Andrew Lloyd & Associates

Sarah Morgan / Sandra Régnavaque

sarah@ala.com - sandra@ala.com

Tel: +44 1273 675 100
