



Outer-Membrane Protein Targeting Antibiotics (OMPTAs) - New hope against antibiotic resistance

- Important step forward for nosocomial pneumonia treatment -

Vienna, Austria, April 24, 2017 – Polyphor today presented promising data for their novel class of antibiotics, the Outer Membrane Protein Targeting Antibiotics (OMPTA). This is the first new class of antibiotic against Gram-negative pathogens to reach advanced clinical development in over 40 years. Murepavadin (POL7080), the first member of the OMPTA class – currently in Phase II and soon expected to enter Phase III – is being developed for the treatment of the most severe *Pseudomonas aeruginosa* (PA) infection – nosocomial pneumonia (including hospital-acquired and ventilator-associated pneumonia) – a disease with a death rate of 20-50%.¹

Early initiation of effective antimicrobial treatment for PA pulmonary infections is critical and a strong predictor of mortality.² However, multi-drug resistant (MDR) PA has become a global problem and, as such, treatment is becoming more challenging with limited options available. Murepavadin, by means of its novel and unique mechanism of action, is extremely active and is being developed as first line treatment for MDR cases.

Dr Ignacio Martin-Loeches, St James' Hospital, Trinity College, Dublin (Ireland) explained, "PA represents a significant threat to the most vulnerable hospital patients, including intensive care patients, those with depleted immune systems such as those with cancer, people with severe burns and premature babies in neonatal units. Treatment options are limited and so this new class of antibiotics is desperately needed."

Data presented today at the 27th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) have shown a high rate of clinical cure (91%) and low rate of mortality (9%) at day 28 in a small patient group (12 patients), when treated with Murepavadin.³ They also demonstrated that multiple doses of Murepavadin were considered to be safe and with acceptable tolerability.³

“Antibiotic resistance is one of the most serious health threats of our time with significant global implications. New treatment options are urgently needed”, highlighted Prof. Antoni Torres, Respiratory Institute Hospital Clinic, Barcelona (Spain). “Today’s announcement that Murepavadin has shown positive benefits in the trials offers hope for the management of this challenging patient group.”

Dr Glenn Dale, Head of Early Development, Antimicrobials, Polyphor added, “Murepavadin’s single pathogen focus prevents a build-up of resistance against other pathogens, which is a common problem with antibiotics. Today’s findings show that our proposed dose of Murepavadin could be a promising new antimicrobial to treat PA.⁴ This year, we expect Murepavadin to enter Phase III trials and take another step to bring it to patients. In addition, our OMPTA platform could bring further new important therapies in the treatment of Gram-negative pathogens.”

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About Polyphor

Polyphor is a clinical stage, privately held Swiss specialty pharma company, focused on the development of macrocycle drugs that address antibiotic resistance and severe respiratory diseases. The company's lead drug candidates include:

- Murepavadin (POL7080, in Phase II entering Phase III / Pivotal registration program), a precision Outer Membrane Protein Targeting Antibiotic (OMPTA) against *Pseudomonas Aeruginosa*.
- POL6014 (in Phase Ib), an inhaled inhibitor of neutrophil elastase for the treatment of cystic fibrosis and other severe lung diseases.
- Balixafortide (POL6326, in Phase Ib), an antagonist of the chemokine receptor CXCR4 for combination treatment in oncology.

Polyphor has discovered the OMPTA class and is further developing it, including a broad-spectrum preclinical candidate, to address infections caused by difficult-to-treat, resistant Gram-negative pathogens – one of the most pressing emerging medical needs. The OMPTA represent the first new class of antibiotics against Gram-negative bacteria reaching advanced clinical stage in the last 40 years.

In addition, Polyphor has an important activity of discovery technology partnerships to assist pharma companies in research programs addressing difficult targets through its proprietary macrocycle technology platform.

Polyphor has several industry partnerships with and financing from the Cystic Fibrosis Foundation Therapeutics, Gilead Sciences, Novartis, Taisho and the Wellcome Trust.

References

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