



Antabio Announces Successful Completion of Phase 1 Clinical Study of MEM-ANT3310 for Severe Hospital Infections

Labège, France, September 3rd, 2024. Antabio, a private biopharmaceutical company developing novel and highly differentiated antibacterial treatments for critical priority pathogens, with a particular focus on life-threatening respiratory infections, today announced that it has completed the Phase 1 clinical trial for MEM-ANT3310 in healthy volunteers.

Antabio's MEM-ANT3310 is a next generation broad-spectrum antibacterial combination that has been designed to address the growing problem of antimicrobial resistance in severe hospital infections. MEM-ANT3310 combines the well-known carbapenem meropenem (MEM) with ANT3310, a breakthrough serine-beta-lactamase (SBL) inhibitor that provides a unique coverage of priority Gram-negative pathogens including OXA-carbapenem-resistant *Acinetobacter baumannii* (CRAB), KPC- and OXA-carbapenem-resistant Enterobacterales (CRE), and *Pseudomonas aeruginosa* (PA).

The Phase 1 clinical trial included 72 healthy volunteers across three parts and evaluated the safety, tolerability, and pharmacokinetic (PK) profile of Single and Multiple Ascending Doses (SAD/MAD) of the intravenous beta-lactamase inhibitor ANT3310, administered alone. The potential mutual PK interaction between ANT3310 and meropenem was investigated, followed by an assessment of the combination MEM-ANT3310 during multiple intravenous dosing.

ANT3310 was well-tolerated at all doses with no serious adverse events, dose-limiting toxicities or clinically relevant abnormalities reported. The ANT3310 PK parameters were consistent with those determined from studies in rodent and non-rodent species and dose-dependent increases in exposure were observed. ANT3310 and meropenem demonstrated very compatible PK with no mutual PK interaction.

This positive Phase 1 data supports further patient studies of MEM-ANT3310.

“With matching PK and good tolerability, MEM-ANT3310 shows great promise to address serious infections whenever multidrug resistance is a concern in hospitalized patients.” said **Marc Lemonnier, CEO of Antabio**. “With a uniquely broad coverage, we believe MEM-ANT3310 will be very well positioned to meet the urgent medical needs in high-risk patients, especially when multidrug-resistant pathogens or polymicrobial infections are suspected”.

Antabio is currently conducting a Phase 1 PK study of MEM-ANT3310 in subjects with impaired renal function and is planning a second PK study to assess the distribution of MEM-ANT3310 in the lung (epithelial lining fluid) in healthy volunteers.

About MEM-ANT3310

Carbapenems such as meropenem are the cornerstone of therapies for many life-threatening infections. Resistance to carbapenems is considered a critical priority by the World Health Organisation (WHO) and Centre for Disease Control and Prevention (CDC) because it is a major cause of treatment failure, increased mortality, and huge economic costs.

Bacteria resistant to carbapenems produce β -lactamase enzymes that render antibiotics, such as meropenem, ineffective. ANT3310 inhibits a broad range of β -lactamases, including the *Klebsiella pneumoniae* carbapenemases (KPC) and oxacillin-hydrolysing (OXA) type enzymes found in Carbapenem-Resistant *Enterobacteriales* (CRE) and most importantly Carbapenem-Resistant *Acinetobacter baumannii* (CRAB). The combination of this potent β -lactamase inhibitor with the antibiotic meropenem (MEM-ANT3310) therefore provides a critical solution for the treatment of serious infections that may be caused by MDR pathogens, such as hospital-acquired bacterial pneumonia (HABP) and ventilator-associated bacterial pneumonia (VABP).

MEM-ANT3310 has received qualified infectious disease product (QIDP) status from the FDA in 2020 for complicated urinary tract infections (cUTI), complicated intra-abdominal infections (cIAI) and HABP and VABP.

About Antabio

Antabio is a clinical stage biopharmaceutical company developing novel and highly differentiated antibacterial treatments of drug-resistant infections as defined by the CDC and WHO's critical priority pathogens, with a particular focus on life-threatening respiratory infections, including carbapenem-resistant nosocomial pneumonia and chronic pulmonary diseases. The company's lead program, MEM-ANT3310, is being developed for the treatment of hospital-acquired infections such as nosocomial pneumonia caused by carbapenem-resistant *Acinetobacter baumannii* (CRAB) and carbapenem-resistant *Enterobacteriales* (CRE). Antabio's portfolio includes additional innovative preclinical programs addressing areas of highest unmet need in the antibacterial space. **www.antabio.com**.

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