Optimisation of the Cytostabactamides, a novel class of broad spectrum antibiotics from mycobacteria

Nosoconial bacterial infections due to non-fermenting gram-negatives (A. baumannii, P. aeruginosa).

Family of novel and patented Cytostabactamides with broad-spectrum antibacterial activity, acting through inhibition of gyrase complex

Seeking collaboration to accelerate the exploration and further derivatization of Cytostabactamides through medicinal chemistry; licensing opportunity

DZIF Principal Investigator: Rolf Müller

Helmholtz Institute for Pharmaceutical Research Saarland (HIPS)

Vaccination against Staphylococcus aureus bacteremia and complications

Adjunctive therapy and/or prophylaxis of Staphylococcus aureus bacteremia and complications in high-risk patient groups. Novel and proprietary exoproteome antigens (e.g. protoporphyrinogen oxidase, pOxi)

Seeking collaboration and/or licensing opportunities to accelerate the preclinical and clinical development of our vaccine candidates.

DZIF Principal Investigator: Alexander Klimka, Martin Krünke, University Hospital of Cologne, Institute for Medical Microbiology. Visit ePyster no. EP0243.

Preclinical development of BTZ-043, a novel tuberculosis drug targeting DprE1

Mycobacterium tuberculosis infections

Minimum inhibition concentration (MIC) in vitro

In vivo activity (Mouse model)

Status: GMP manufacturing of pOxi humAb in progress, phase I trial planned.

Stability and protein binding data

Chemical stability: 85%-92% remaining compound in simulated gastric fluid after 1 hour

Plasma protein binding: Human: 30.3% protein binding; Mouse: 46.4% protein binding

Plasma stability: Human and mouse; Significance detection of BTZ 0456 metabolite in the plasma samples indicating transformation of the test compounds into its amino metabolite

Serum stability: Human: 109% recovery; mouse: 85% recovery

DZIF Principal Investigator: Michael Hoelscher

University Hospital of Munich