





Klebsiella pneumoniae NDM-1 - Thigh infection

Procedure Summary

- Neutropenic CD-1 mice, eight weeks old females
- Klebsiella pneumoniae NDM-1 strain (ATCC BAA 2470)
- Neutropenic status induced by 2 cyclophosphamide intraperitoneal (IP) administrations at D-4; 150mg/kg and D-1; 100mg/kg
- Bacterial challenge by intramuscular route
- Reference compound: Tigecycline (IV); Test compound (IV)

Experimental readouts

- CFU determination of NDM-1 strain in thighs
- Weight loss
- Survival rate
- Clinical score

Optional Services

- Histology
- Cytokine and chemokine analysis
- Pharmacokinetics

Literature / reference

 Craig et al., Antimicrob. Agents Chemother. 2008 "In vivo pharmacodynamics of ceftobiprole against multiple bacterial pathogens in murine thigh and lung infection models"

Animal Welfare

 Each experimental protocol is approved by the local ethics committee for animal experimentation of Grand Campus Dijon (Burgundy, France) and performed in accordance to the current recommendations of the European Institute of Health EU Directive 86/609

Facilities

 These assays are performed at our BSL2 laboratory / zootechnical center in Dijon, France

Evaluation of the efficacy of various treatments on the residual bacterial load in the neutropenic mouse model of thigh infection by *Klebsiella pneumoniae* NDM-1 (p<0.001***).

