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securing healthcare innovation

Haemophilus influenzae (BLNAR) – acute pneumonia

Procedure Summary

- Immunocompetent New Zealand rabbits
- *H. influenzae* 401285, beta-lactamase negative strain, non typable
- Intra-tracheal challenge (10^10 CFU)
- Adjuvant : 2% agar solution
- Reference compounds : Amoxicillin / Clavulanate acid (conventional formulation or Slow Release formulation)
- Simulated human dosing (PK) for 48h

Experimental readouts

- Bacterial load in lung tissue and spleen
- Weight loss, food intake
- Fever
- Clinical disease severity score
- Morbidity and mortality
- Gross pathology of lungs
- Detection of resistant mutants

Optional Services

- Broncho Alveolar Lavage Fluid
- Histology
- Cytokine and chemokine analysis
- Immune cell counts

Reference

- Croisier *et al.*, Scand J Infect Dis, 2007 « Efficacy of human-like Augmentin SR (2000/125 mg) twice daily treatment on *Haemophilus influenzae* experimental pneumonia in rabbits »

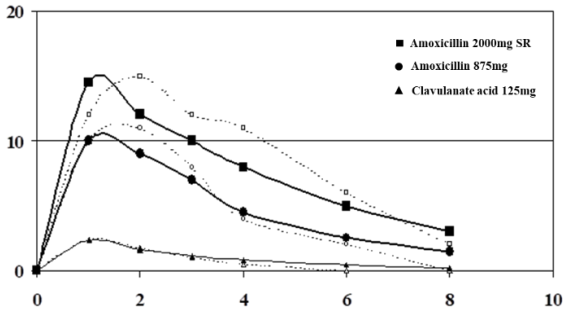
Animal Welfare

- 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.

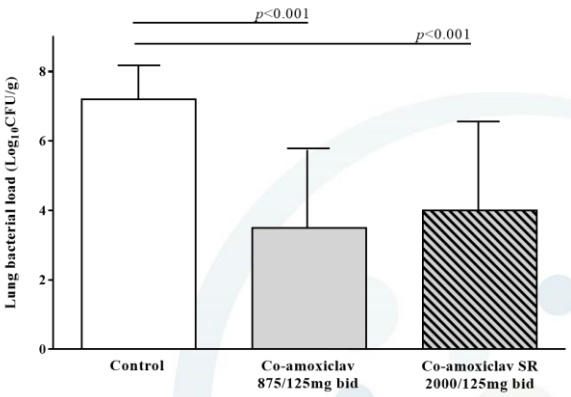
Facilities

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

Serum concentration (µg/mL) curves of Co-amoxiclav (875/125 mg) versus Co-amoxiclav SR (2000/125 mg) in the Rabbit (solid lines) and in Human (dash lines)



Bacterial titers in lungs of untreated and antibiotic treated rabbits infected with *Haemophilus influenzae* BLNAR.



Our scientific team will readily accomodate client-specific alterations and will provide expert advice and guidance for your efficacy studies

For more information please contact : **info@vivexia.fr**