

## ***In vivo* Pharmacology: Lipopolysaccharide (LPS) Induced Bone Resorption in Mice**

Species, strain, sex: mouse, C57Bl/6, male  
No. of animals per group: n=10  
Pharmacological control: Methotrexate  
Routes of administration: PO, IP, SC, IV, IM  
Treatment mode: prophylactic, therapeutic  
Duration of dosing: upon request

Subcutaneous administration of LPS, a constituent of the cell wall of Gram-negative bacteria, induces neutrophil accumulation, osteoclastogenesis and systemic production of various biomarkers of bone resorption.

### **Main read-outs:**

- systemic biomarkers of bone resorption

### **Facultative read outs:**

- haematology
- histopathology
- immunohistochemistry

The activity of test compounds is evaluated 4 days after LPS administration by measuring concentrations of bone resorption bio-markers in serum (main read-out). Tibias and other selected tissues can be sampled at the end of the study to be subsequently analyzed or sent to the sponsor, as requested.

