

In vivo Pharmacology: Mouse Model of Allergic Asthma

Species, strain, sex: BALB/c J mice, males
 No. of animals per group: n=8-10
 Pharmacological control: dexamethasone, days 18–21 ,
 once daily at the dose of 1 mg/kg
 Routes of administration: upon request
 Treatment mode: upon request
 Duration of dosing: upon request

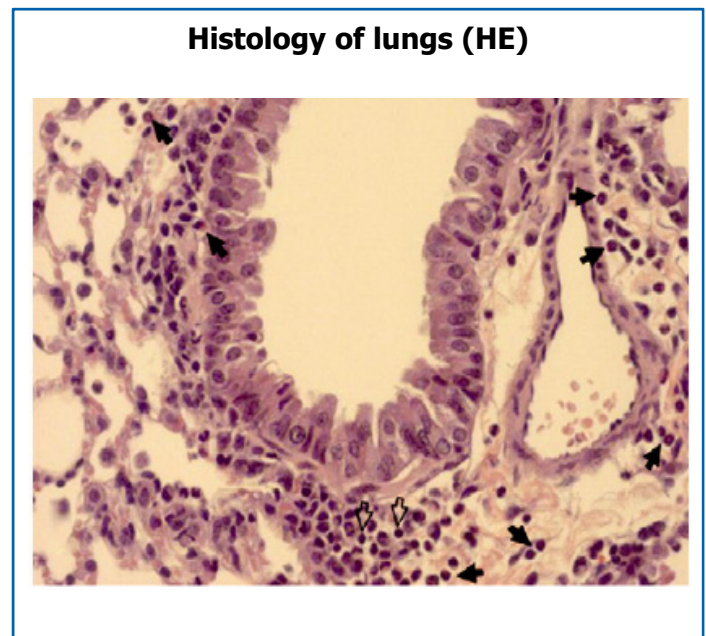
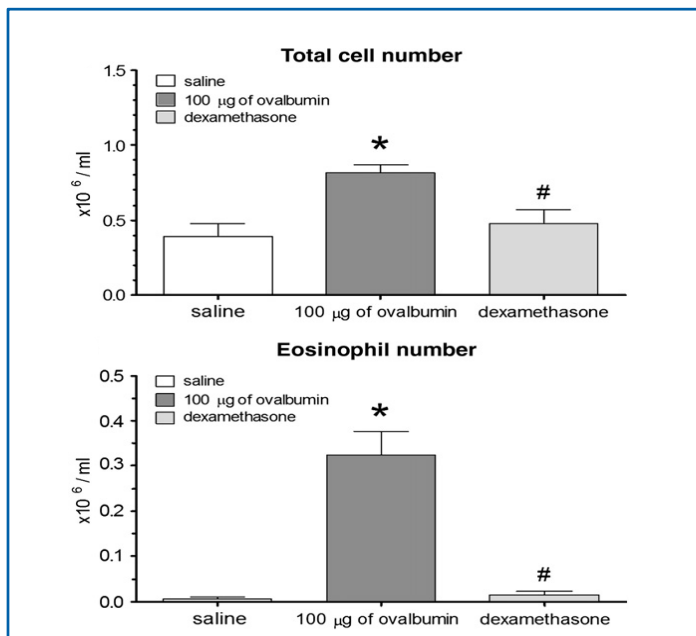
To develop pulmonary eosinophilia, mice are sensitized with chicken egg ovalbumin (OVA) precipitated in aluminium sulphate on experimental days 0 and 14. On experimental day 20 mice are intranasally challenged with OVA, under light anesthesia. Bronchoalveolar lavage samples and lungs are collected at 48h after challenge.

Main read-outs:

- total and relative cell count in bronchoalveolar lavage fluid (BALF)
- histopathological analysis of the lungs

Facultative read-outs:

- cytokines/chemokines: gene expression and protein levels in lung fluid cells/lungs
- phenotypic analysis of lavage cells (FACS analysis)
- immunohistochemistry



References

Hrvačić B, Bošnjak B, Bosnar M, Ferenčić Z, Glojnarčić I, Haber VE. Clarithromycin suppresses airway hyperresponsiveness and inflammation in mouse models of asthma. *Eur J Pharmacol* (2009) 616:236

Bošnjak B, Ivetić Tkalčević V, Durić K, Belamarić D, Čužić S, Ferenčić Z, Brajša K, Glojnarčić I, Antolović R, Hrvačić B. Intranasal challenge with increasing ovalbumin doses differently affects airway hyperresponsiveness and inflammatory cell accumulation in mouse model of asthma. *Inflamm Res* (2009) 58: 773