

## *In vivo* Pharmacology

# Oxazolone Induced Chronic Delayed Type Hypersensitivity (DTH) In Mice

Species, strain, sex: mouse, Balb/c, male  
 Number of animals per group: n=8  
 Pharmacological control: Dexamethasone  
 Routes of administration: topical, PO, IP, SC, IV, IM  
 Treatment mode: prophylactic, therapeutic  
 Duration of dosing: upon request

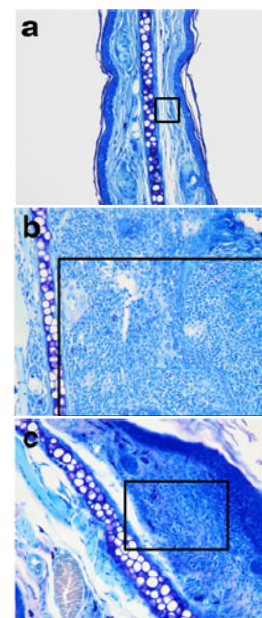
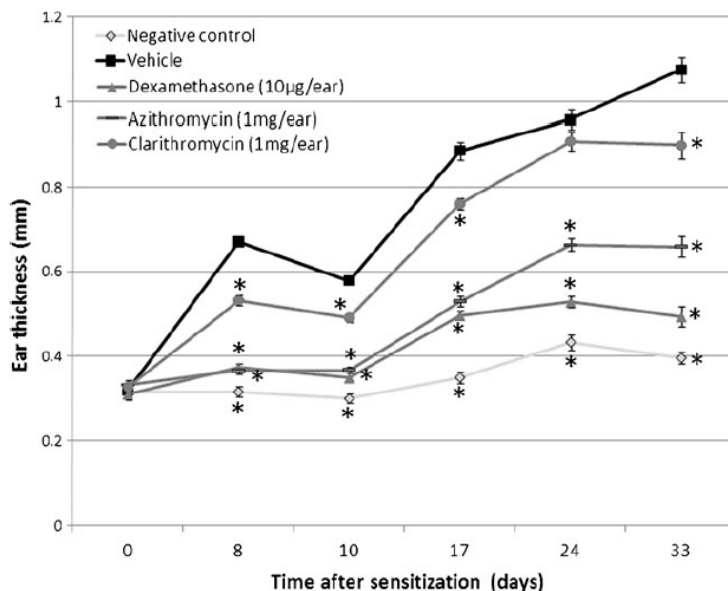
Chronic inflammation is induced by OXA sensitization and multiple challenges. It is characterized by Th1 and Th2 inflammatory reaction observed as increased cytokine concentration in ear tissue and IgE concentration in serum. Anti-inflammatory activity of test compounds is evaluated throughout the study (main read-outs), while ear and other selected tissues are collected at the end of the study to be subsequently analyzed or sent to the sponsor, as requested.

### Main read-outs:

- ear thickness
- body weight

### Facultative read outs:

- inflammatory mediators in serum and ear homogenates
- histopathological analysis of ear tissue
- immunohistochemistry of ear tissue



Histopathological analysis of ear tissue at the end of the experiment:

- a – negative ctrl
- b – vehicle
- c - dexamethasone

### References

Ivetić Tkalčević V, Čužić S, Dominis Kramarić M, Parnham MJ, Eraković Haber V. Topical azithromycin and clarithromycin inhibit acute and chronic skin inflammation in sensitized mice, with apparent selectivity for Th2-mediated processes in delayed type hypersensitivity. *Inflammation* (2011) 35:192