

CENTRAL NERVOUS SYSTEM

Elevated Plus Maze (EPM)

The elevated plus maze relies upon rodents' proclivity toward dark, enclosed spaces (approach) and an unconditioned fear of heights/open spaces (avoidance). The rodent explores the entire apparatus however, it shows preference to the enclosed arms. Anxiolytic drugs increase time spent in the open arms without modifying ambulation (measured as closed arms entries)¹.

Species: *Rattus norvegicus* (Sprague Dawley)

Number of animals/group: 6-7 animals

Route of administration: upon request

Treatment mode: upon request

Main read-outs: open-arms time (%), number of closed arms entries.

Facultative read-outs: Freezing time, defecation and urination number, risk-assessment.

Validation Data

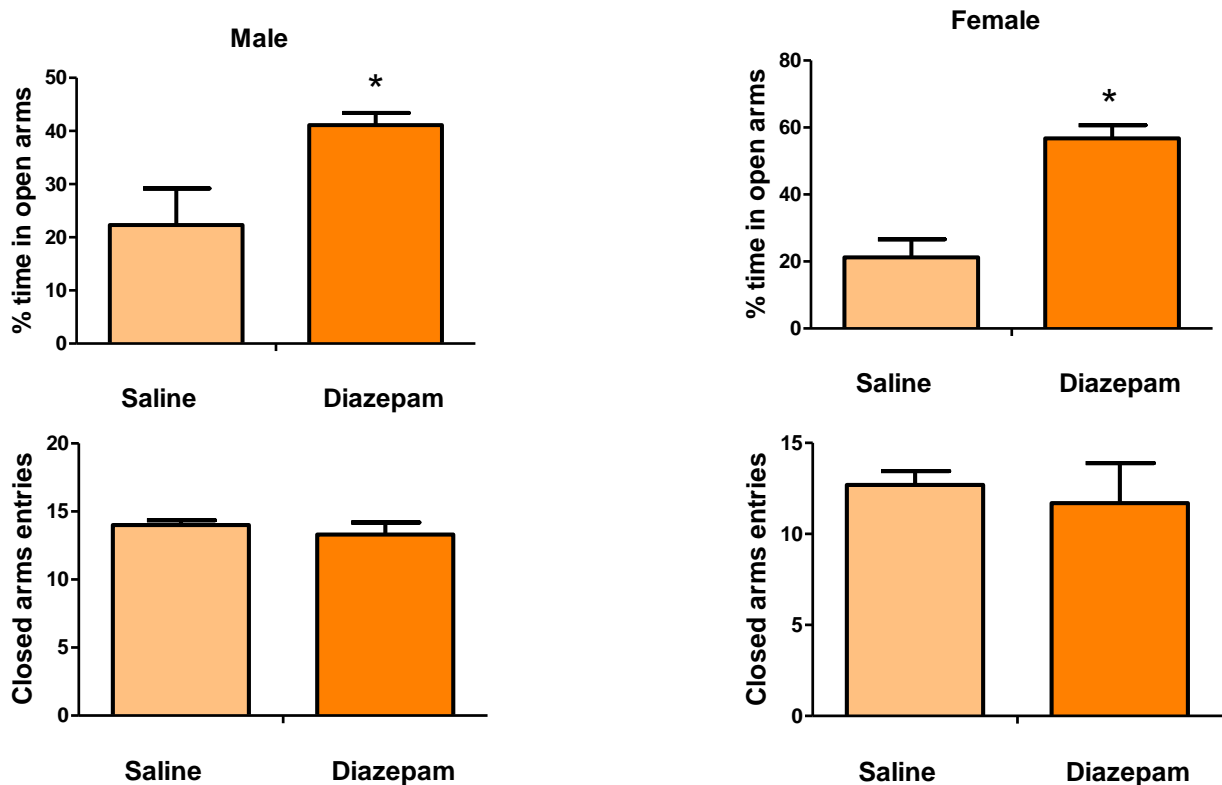


Figure: Effects of diazepam (1.0 mg/kg, i.p.) in the EPM test, on both male and female rats. Each column represents mean \pm SEM. Non-paired t-Student test was used for statistical analysis *, $P < 0.05$.

To avoid bias and to allow reproducibility all *in vivo* experiments follow the ARRIVE guidances². Rat colony originated from Charles River Laboratories is bred and maintained in SPF conditions. Raw data are inspected by quality assurance unity. The experimental procedures were approved by the CIEnP Committee on the Ethical Use of Animals.

References:

¹ Pellow S, Chopin P, File SE, Briley M. Validation of open:closed arm entries in an elevated plus maze as a measure of anxiety in the rat. *J Neurosci Methods*. 14:149–167, 1985.

² Kilkenny C, Browne WJ, Cuthill IC, Emerson M, Altman DG. Animal research: reporting in vivo experiments: The ARRIVE guidelines. *PLoS Biol*. 8 (6): e1000412, 2010.