

POSTER PRESENTATION

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Effects of URB937 on an animal model of migraine pain

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Several studies have suggested the existence of interactions between the endocannabinoids and migraine. URB937, a FAAH inhibitor specific to peripheral tissues, causes analgesia in animal models of pain [1]. In this study, we evaluated whether the URB937 administration may alter nociceptive responses in an animal model of migraine based on nitroglycerin (NTG)-induced hyperalgesia [2]. Rats received systemic NTG and URB937 before being evaluated at the Tail flick test or at the Formalin test. The findings show that URB937 did inhibit NTG-induced hyperalgesia at the Formalin test with only a minimal influence on the hyperalgesia at the Tail flick. The data suggest that availability of anandamide probably at the meningeal level is effective in the migraine pain.

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References

1. Clapper JR, Moreno-Sanz G, Russo R, Guijarro A, Vacondio F, Duranti A, Tontini A, Sanchini S, Sciolino NR, Spradley JM, Hohmann AG, Calignano A, Mor M, Tarzia G, Piomelli D: **Anandamide suppresses pain initiation through a peripheral endocannabinoid mechanism.** *Nat Neurosci* 2010, **13**(10):1265-70.
2. Tassorelli C, Greco R, Wang D, Sandrini M, Sandrini G, Nappi G: **Nitroglycerin induces hyperalgesia in rats—a time-course study.** *Eur J Pharmacol* 2003, **464**(2-3):159-62.

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