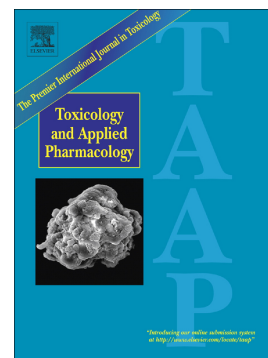


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# Effects of Opioid and Nonopioid Analgesics on Canine Wheal Formation and Cultured Human Mast Cell Degranulation.<sup>1 2</sup>

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<sup>1</sup> Abbreviations: A: Area; hMC: human mast cells; ID: intradermal; IL: interleukin; IM: intramuscular; IT: intrathecal; IV: intravenous; MrgX: Mas-related, gen-like receptors; NMDA: n-methyl d-aspartate; PAR: proteinase activated receptors; PBS: phosphate buffered saline

<sup>2</sup> Portions of the data shown in this paper were presented in a poster at the Society for Neuroscience annual meeting, Washington DC, November 2017.

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