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Anti-inflammatory effect of the monoterpene myrtenol is dependent on the direct modulation of neutrophil migration and oxidative stress

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ACCEPTED MANUSCRIPT

ANTI-INFLAMMATORY EFFECT OF THE MONOTERPENE MYRTENOL IS DEPENDENT ON THE DIRECT MODULATION OF NEUTROPHIL MIGRATION AND OXIDATIVE STRESS

Running title: Myrtenol, modulates chronic inflammation

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Abstract

Myrtenol is a bicyclic monoterpene with anti-inflammatory properties. However, the mechanisms involved are partially unknown. Here, we investigated the effect of myrtenol during experimental chronic arthritis and the possible modulating activity of oxidative stress and neutrophil migration. Complete Freund's Adjuvant (CFA)-sensitized rats were treated with vehicle (1 mL/kg, po), myrtenol (12.5, 25 or 50 mg/kg, po), indomethacin (10 mg/kg, po) or dexamethasone (0.4 mg/kg) followed by intra-articular injection of CFA (0.5 mg/mL, 50 μL per joint). Then, paw edema and articular

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