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Trans-Chalcone attenuates pain and inflammation in experimental acute gout arthritis in mice

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Running title: *Trans*-chalcone attenuates gout arthritis

SUPPLEMENTARY DATA

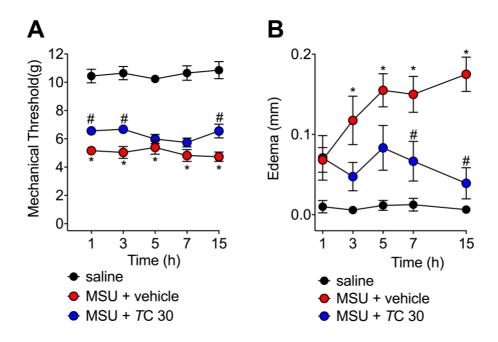


Figure S1. Effect of trans-chalcone post-treatment in MSU-induced mechanical hyperalgesia and edema. Mice were treated *Trans*-Chalcone (TC, 30 mg/kg, p.o., 100 µl) or vehicle (Tween 80 20% plus saline) 30 minutes after MSU (100 µg/10 µl/knee) or saline stimulus in the femur-tibial joint of swiss mice. (A) Mechanical hyperalgesia and (B) edema were evaluated 1, 3, 5, 7, and 15h after MSU injection. Results are expressed as mean \pm SEM, data represent a total of 12 mice per group that were obtained in two independent experiment with 6 mice per experiment. (*p < 0.05 vs. control group; #p < 0.05 vs. vehicle group, two-way ANOVA followed by Tukey's post-test).

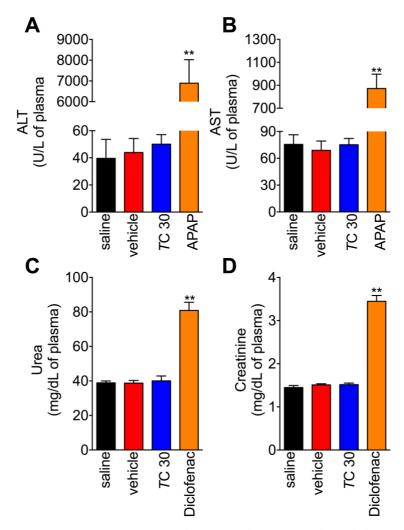


Figure S2. Trans-chalcone does not induce kidney or liver injury. Blood was collected 15.5h after treatment with trans-chalcone (TC, 30 mg/kg, p.o.) or vehicle (Tween 80 20% plus saline) to assess: (A) alanine transaminase (ALT), (B) aspartate aminotransferase (AST) levels in plasma samples. Acetaminophen stimulus (APAP, 650 mg/kg, p.o.) was used as a control drug for liver injury and samples were collected after 10h after stimulus. (C) Urea and (D) creatinine levels in plasma samples. Diclofenac stimulus (200 mg/kg, p.o) was used as a control drug for kidney injury and samples were collected 24h after stimulus. Results are expressed as mean \pm SEM, data represent a total of 12 mice per group that were obtained in two independent experiment with 6 mice per experiment. (**p < 0.05 vs. all groups, one ANOVA followed by Tukey's post-test).

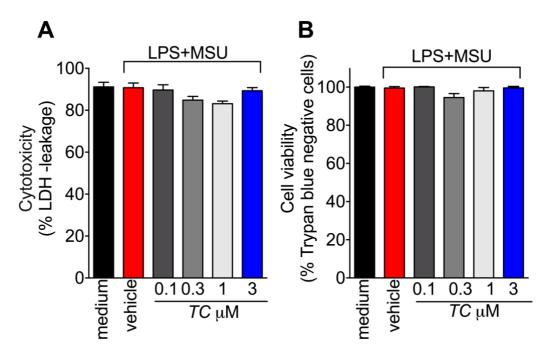


Figure S3. *Trans*-chalcone does not induce cytotoxicity or alters cell viability. BMDMs were pre-treated with 0.1-3 μM before 500 ng/mL of LPS (*before* priming) and after 3h were secondarily stimulated with MSU (450 mg/ml, activation). (A) Supernatants were collected 5h after MSU stimulation in BMDMs cells to assess LDH levels and (B) Trypan Blue assay to determine cell viability. The results were expressed as % of LDH release or dead cells from total cells counted by comparing with the positive control (vehicle group).