

Figure S1: Viability of SF and Th cells treated with JAKi. **(A)** SF were stimulated with ThCM in the presence or absence of different concentrations of tofacitinib, baricitinib or upadacitinib. After 5 days of culture, cells were harvested, stained with Annexin V and propidium iodide and cell viability was determined by flow cytometry. **(B)** Th cells were stimulated with anti-CD3 and anti-CD28 antibodies and treated with different concentrations of JAKi as indicated. On day 6, Th cells were harvested and stained with Annexin V and propidium iodide. Treatment of Th cells with 2µM staurosporin (stauro) within the last 24 hours of culture served as a positive control for cell apoptosis. Data are shown as mean + SEM.

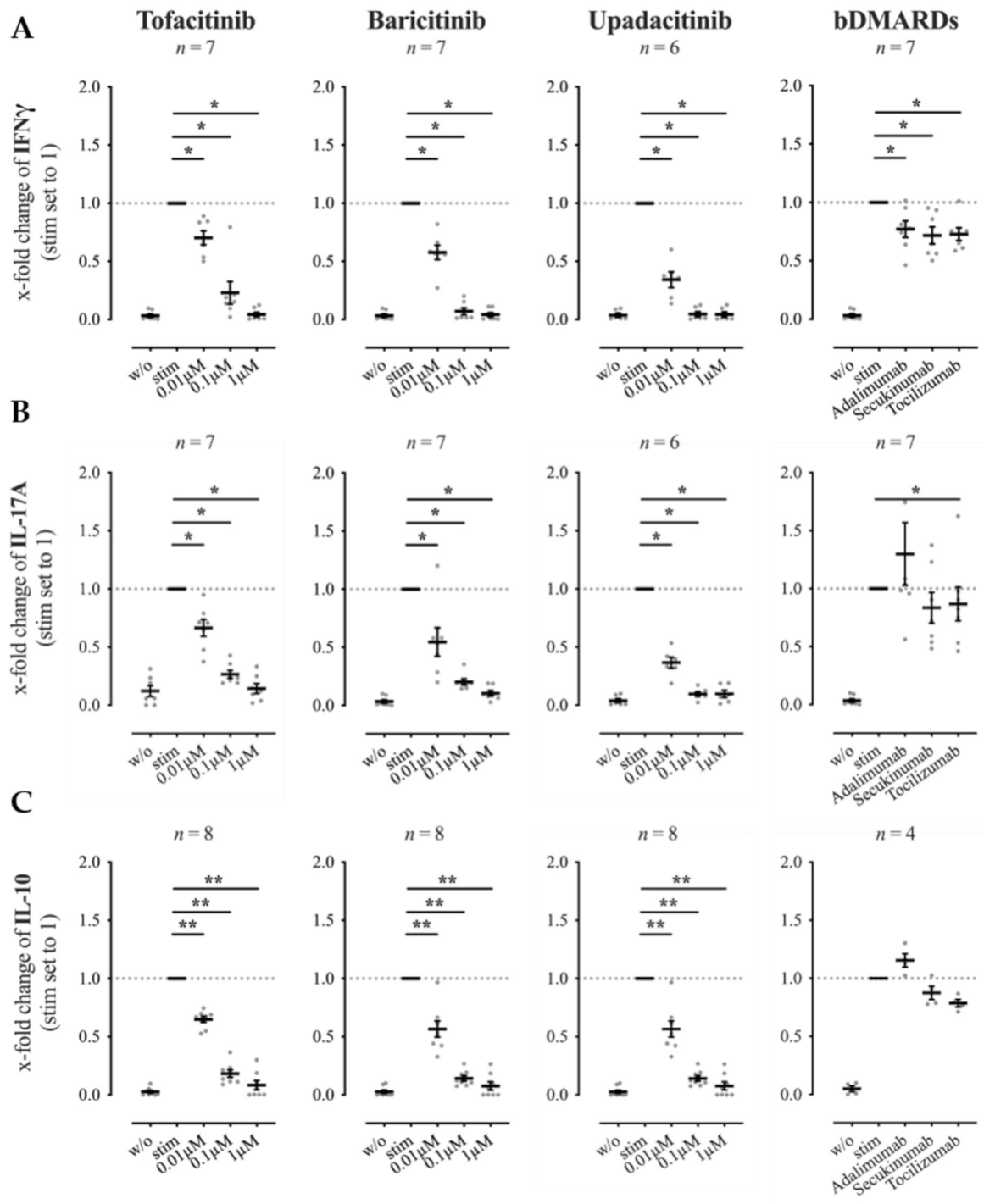


Figure S2. Effects of tofacitinib, baricitinib, upadacitinib and bDMARDs on IFN γ (A), IL-17A (B) and IL-10 (C) expression by Th cells in mono-culture. Th cells were cultured with or without stimulation by anti-CD3/ anti-CD28 antibodies and treated with drugs as indicated. Supernatants were harvested on day 6 and cytokine concentrations were quantified by ELISA. Results are presented as x-fold change with stimulated Th cells set to 1 (mean concentrations \pm SEM in pg/ml: IFN γ : 18068.31 ± 2731.63 ; IL-17A: 3033.54 ± 915.55 ; IL-10: 5194.79 ± 1416.66). bDMARDs shown were used at a concentration of 100 μ g/mL. Data shown as mean \pm SEM, significance tested using Wilcoxon signed-rank test, $p^{**} = <0.01$, $p^{*} = <0.05$.

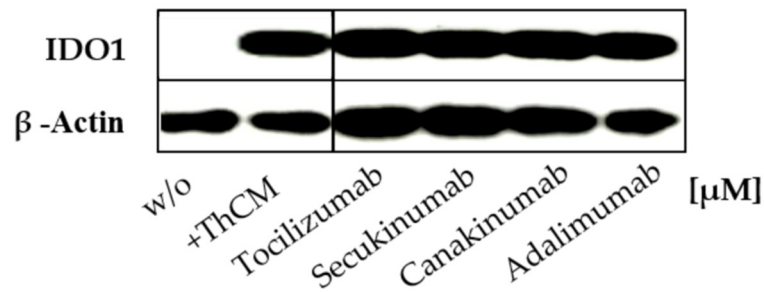
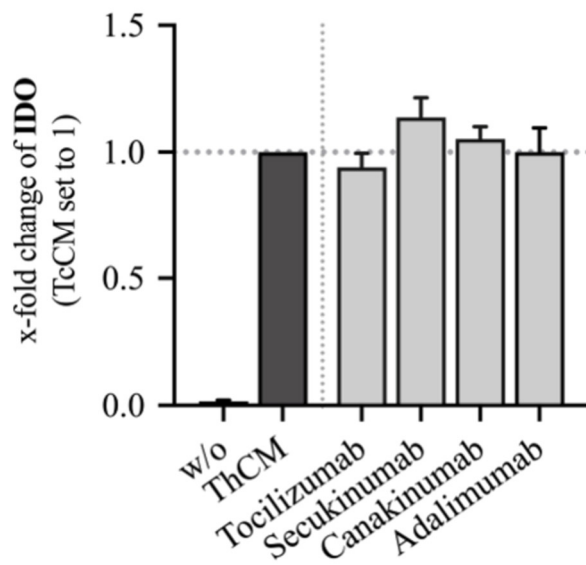
A**B**

Figure S3. Effects of tocilizumab, secukinumab, canakinumab or adalimumab on the expression of IDO1 by SF stimulated with ThCM. SF were left untreated (w/o) or stimulated with ThCM and treated with tocilizumab ($n = 7$), secukinumab ($n = 12$), canakinumab ($n = 7$) or adalimumab ($n = 7$). On day 4, SF were harvested and whole cell extracts were subjected to western blot analysis. Shown are the results from one representative experiment (A) and the x-fold change of IDO1 relative to β -actin expression with SF stimulated with ThCM set as 1 detected in all experiments (B). Data shown as mean + SEM, significance tested using Wilcoxon signed-rank test.