

Supplemental Figures

“Systemic isotretinoin therapy normalizes exaggerated TLR-2-mediated innate immune responses in acne patients”

Dispenza et al.

Figure S1: Mean (\pm SEM) lesion counts of acne patients on isotretinoin therapy:

Inflammatory and non-inflammatory lesions were counted on the face (excluding the nose) of acne patients prior to ($n = 25$) and during isotretinoin therapy (1 week, $n = 19$; 4 weeks, $n = 19$; 8 weeks, $n = 17$; 20 weeks, $n = 10$) using standard visual counting techniques. The mean (\pm SEM) number of inflammatory lesions at baseline was 41 ± 6.3 , and the mean (\pm SEM) number of noninflammatory lesions was 68 ± 17 . * $P < 0.05$, ** $P < 0.01$, and *** $P < 0.001$ compared with patients' baseline counts.

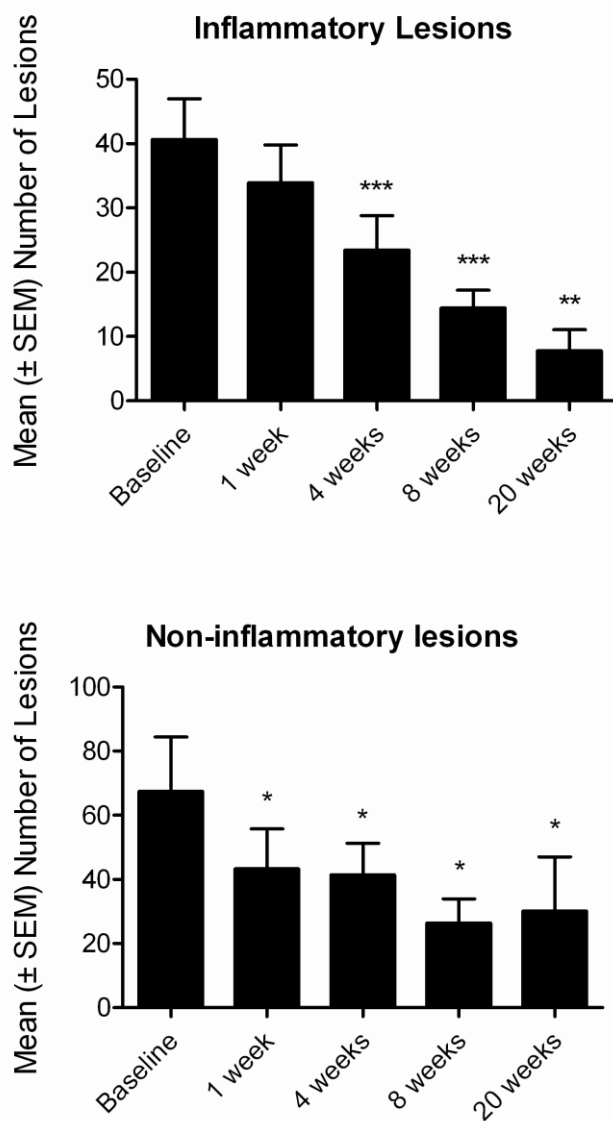


Figure S2: Serum levels of retinoids in acne patients and normal volunteers: Levels of the three retinoic acid isomers in the serum of normal volunteers (n = 19) and acne patients at baseline (n = 25), 1 week (n = 19), 4 weeks (n = 19), 8 weeks (n = 17), and 20 weeks (n = 10) of isotretinoin therapy were analyzed by HPLC/ mass spectrometry. Mean concentrations \pm SEM are displayed. * $P < 0.05$, ** $P < 0.01$, and *** $P < 0.001$ compared with patients' baseline.

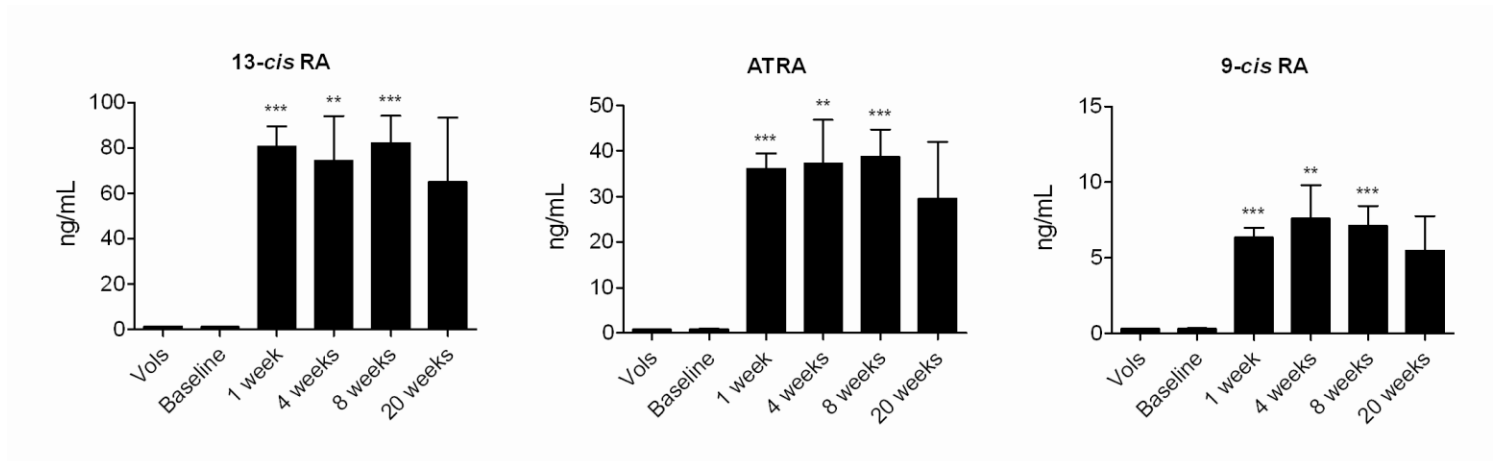


Figure S3: Isotretinoin does not affect peripheral Treg proportions: a) Lymphocytes from normal volunteers (Vols) (n = 11) and from patients at baseline (n = 14), 1 week (n = 13), 4 weeks (n = 11), 8 weeks (n = 10), and 20 weeks (n = 5) of isotretinoin therapy were treated for 5 days with *P. acnes* sonicate or anti-CD3/CD28 antibodies as above, whereupon they were stained with fluorescently-conjugated antibodies to T cell subset specific markers. Plots of CD25 versus Foxp3 expression among CD4+ cells are displayed for one representative patient. b) Mean percentages \pm SEM of CD4+ T cells expressing CD25 and Foxp3 are shown for volunteers and acne patients during isotretinoin therapy.

