Supplemental Table 1. Changes in cytokine and chemokine levels in lung granuloma homogenates and Mtb-infected LNs from anti-IL-10 animals compared to controls.

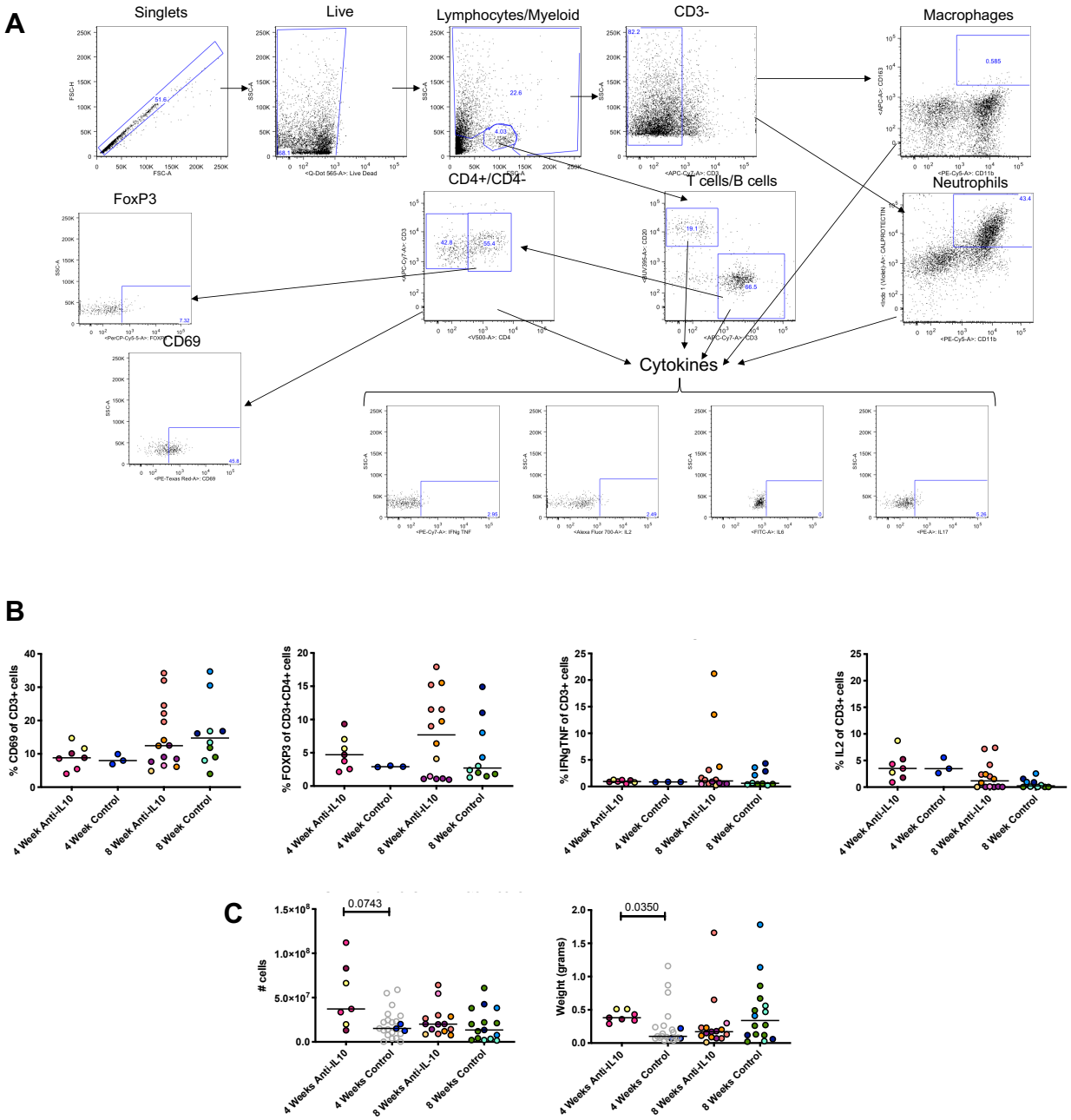
	Lung Granuloma		Mtb-Infected LNs	
Cytokine	**4 Weeks**	**8 Weeks**	**4 Weeks**	**8 Weeks**
G-CSF	Increase[1]	Below LLOQ[3]	No Difference	No Difference
GM-CSF	Below LLOQ	Not Determined[4]	Below LLOQ	Below LLOQ
IFN-alpha	Below LLOQ	Below LLOQ	Below LLOQ	No Difference
IFN-beta	Below LLOQ	Decrease[2]	Not Determined	Not Determined
IL-1beta	No Difference	Decrease	Increase	No Difference
IL-1RA	No Difference	Decrease	No Difference	No Difference
IL-6	No Difference	Decrease	No Difference	No Difference
IL-7	Below LLOQ	Decrease	Below LLOQ	Below LLOQ
IL-8	No Difference	Not Determined	No Difference	No Difference
IL-12p70	Increase	Below LLOQ	No Difference	Below LLOQ
IL-15	Below LLOQ	Below LLOQ	No Difference	Below LLOQ
IL-18	Decrease	No Difference	No Difference	No Difference
IL-23	Increase	No Difference	Below LLOQ	Below LLOQ
IFN-gamma	Below LLOQ	Below LLOQ	Increase	No Difference
IL-2	Increase	Below LLOQ	Increase	Below LLOQ
IL-4	Below LLOQ	Below LLOQ	Below LLOQ	No Difference
IL-5	Below LLOQ	Below LLOQ	Below LLOQ	Below LLOQ
IL-10	Below LLOQ	Below LLOQ	Below LLOQ	Below LLOQ
TNF	No Difference	Below LLOQ	Increase	No Difference
IL-13	Increase	Below LLOQ	Increase	Below LLOQ
IL-17	Below LLOQ	Below LLOQ	No Difference	Below LLOQ
BLC/CXCL13	Below LLOQ	Not Determined	Increase	No Difference
Eotaxin	Below LLOQ	Not Determined	Below LLOQ	Below LLOQ
IP-10	Below LLOQ	Not Determined	Below LLOQ	Below LLOQ
I-TAC	Not Determined	Not Determined	Increase	No Difference
MCP-1	Above LLOQ	Not Determined	No Difference	No Difference
MIG	No Difference	Not Determined	No Difference	No Difference
MIP-1alpha	Decrease	Not Determined	No Difference	No Difference
MIP-1beta	No Difference	Not Determined	No Difference	No Difference
SDF-1alpha	Decrease	Not Determined	Increase	No Difference
sCD40L	Below LLOQ	No Difference	Below LLOQ	No Difference

[1] Statistically significant increase in samples from anti-IL-10 treated animals relative to samples from controls.
[2] Statistically significant decrease in samples from anti-IL-10 treated animals relative to samples from controls.
[3] Greater than 50% of samples being below the lower limit of quantification for the assay.
[4] Cytokine/chemokines not assayed for in that particular sample.

Supplemental Table 2. Parameters used in computational simulation of granulomas.

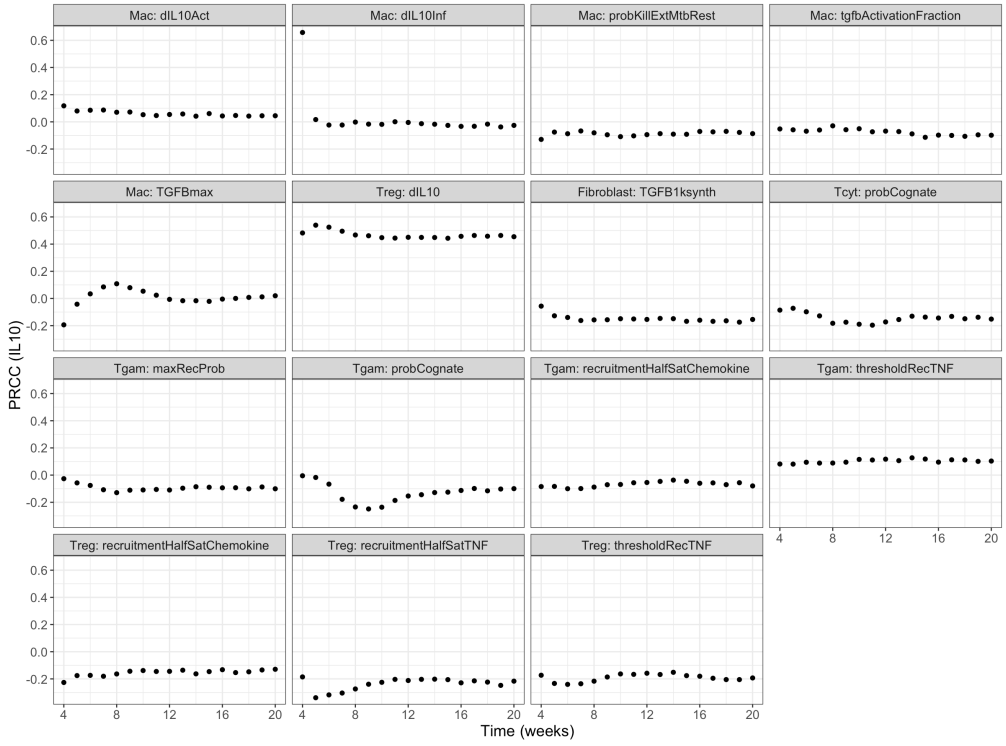
Parameter	Definition	min	max	Units
Fibroblast: IL10ProlifMax	Amount of IL10 that restricts fibroblast proliferation completely	0.000	0.000	Moles
Fibroblast: initNumber	Initial number of resting fibroblasts on the grid	10.000	20.000	
Mac: dIL10Act	Secretion rate of IL10 by activated macrophage	0.051	0.200	Molecules/sec
Mac: dIL10Inf	Secretion rate of IL10 by infected macrophage	0.051	0.199	Molecules/sec
Mac: maxRecProb	Maximum recruitment probability for macrophages	0.027	0.040	
Mac: nrExtMtbUptakeAct	Total number of extracellular bacteria an activated macrophage can uptake/kill	4.000	6.000	
Mac: probKillExtMtbRest	Total number of extracellular bacteria a resting macrophage can uptake/kill	0.100	0.499	
Mac: tgfbActivationFraction	Fraction of latent TGFB that becomes active	0.001	0.099	
Mac: tgfbBindingRate	Fraction of active TGFB that is bound by macrophage	0.046	0.046	
Mac: TGFBmax	Max amount of TGFB for inhibiting bacterial killing by macrophage	1.032	995.632	Molecules
Myofibroblast: maxCollagen	Maximum amount of collagen that can be secreted into a compartment"	1.006	9.986	Molecules
Tcell: tgfbBindingRate	Fraction of active TGFB that is bound by T cell	0.000	0.099	
Tcell: TGFBmax	Max amount of TGFB for inhibiting T-cell proliferation	0.101	0.500	Molecules
Tcyt: maxRecProb	Maximum recruitment probability for T cells	0.051	0.250	
Tcyt: probCognate	Probability a recruited cytotoxic T cell is cognate	0.050	0.499	
Tcyt: recruitmentHalfSatChemokine	Half-saturation parameter for chemokine-dependent cytotoxic T-cell recruitment	0.002	7.591	
Tcyt: recruitmentHalfSatTNF	Half-saturation parameter for TNF-dependent cytotoxic T-cell recruitment	0.001	1.098	
Tcyt: thresholdRecChemokine	Threshold of chemokine for chemokine-dependent recruitment of cytotoxic T cells	0.050	1.053	
Tcyt: thresholdRecTNF	Threshold of TNF for TNF-dependent recruitment of cytotoxic T cells	0.010	0.244	
Tgam: maxRecProb	Maximum recruitment probability for T cells	0.063	0.250	
Tgam: probCognate	Probability a recruited gamma-producing T cell is cognate	0.100	0.496	
Tgam: recruitmentHalfSatChemokine	Half-saturation parameter for chemokine-dependent gamma-producing T-cell recruitment	0.001	2.196	
Tgam: recruitmentHalfSatTNF	Half-saturation parameter for TNF-dependent gamma-producing T-cell recruitment	0.001	1.450	
Tgam: thresholdRecChemokine	Threshold of chemokine for chemokine-dependent recruitment of gamma-producing T cells	0.007	0.197	
Tgam: thresholdRecTNF	Threshold of TNF for TNF-dependent recruitment of gamma-producing T cells	0.010	0.374	
Treg: dIL10	Secretion rate of IL-10 by regulatory T-cells	0.073	0.738	Molecules/sec
Treg: probCognate	Probability a recruited regulatory T cell is cognate	0.051	0.497	
Treg: recruitmentHalfSatChemokine	Half-saturation parameter for chemokine-dependent regulatory T-cell recruitment	0.001	1.634	
Treg: recruitmentHalfSatTNF	Half-saturation parameter for regulatory T-cell recruitment	0.000	2.563	
Treg: thresholdRecChemokine	Threshold of chemokine for chemokine-dependent recruitment of regulatory T cells	0.000	0.023	
Treg: thresholdRecTNF	Threshold of TNF for TNF-dependent recruitment of gamma-producing T cells	0.000	0.186	

Supplemental Figure 1



Supplemental Figure 1. Gating strategy for flow cytometry of lung granulomas and frequencies of T cell types, total number of cells and weights of CFU+ LNs. A) Only samples with greater than 70 CD3 cells were used for analysis. CD4- T cells were used as an approximation for CD8 T cells because of flow antibody panel constraints. B) Frequencies of T cell types by flow cytometry are similar among anti-IL-10 treated and untreated NHPs. Each point represents a CFU+ LN, each color is a NHP. Lines at medians. C) Number of cells counted by hemacytometer and weights of LNs at time of excision. Each point represents a CFU+ LN, each color is a NHP (gray is historical control). Lines at medians. Kruskal-Wallis Test was performed and Dunn's Multiple Comparisons adjusted p-values were reported.

Supplemental Figure 2



Supplemental Figure 2. Parameters that influence IL-10 concentration in granulomas. Longitudinal PRCCs of parameters that are significantly correlated at one or more time points (Z-test, $p < 0.05$, with a magnitude of greater than 0.1), with the concentration of IL-10 in the lung environment over the course of Mtb infection. PRCCs were calculated independently at each time point as described in the Methods.