

Supplementary Table S6: LHS sensitivity analysis results for the effect of TNF-independent and cellular scale parameters on model outputs at day 200 post-infection. Parameter definitions are presented in Supplementary Table S1.

	D_{chem}	δ_{chem}	τ_{chem}	P_{STAT1}	M_{recr}	T_{moveM}	T_{recr}	$P_{apop/Fas}$	$\tau_{recTgam}$	α_{Bi}	α_{Be}
TNF function-related outputs											
(No. apoptosis) _{Macs}	-	+	+		++	---	---	-	+++	+++	
(No. apoptosis) _{Mr}	-	+			+++	---	---		+++	+++	
(No. apoptosis) _{Mi & Mci}	--	++	+	-	+	---	---		+++	+++	
(No. apoptosis) _{Ma}					+++	---	---	-	+++	+++	
(No. apoptosis) _{T cells}	-	++				---	---	-	++	+++	
(No. NFκB activation) _{Mr}			+		+++	---	---		+++	+++	
(No. NFκB activation) _{Mi}	-	++	+	-	+	---	---		+++	+++	
Cellular-level outputs											
B _{int} (intracellular Mtb)		+++	+	-		---	---		+++	+++	
B _{ext} (extracellular Mtb)	---	+++		---		---	---		+++	+++	++
B _{tot}	---	+++		---		---	---		+++	+++	+
Total Macrophages			+		+++	---	-		+++	+++	
M _r			+		+++	--			+++	++	
M _i		+++	++	-		---	---		+++	+++	
M _{ci}		+++		--		---	---		+++	+++	
M _a		+	+			---	---		+++	+++	
Total T cells			+			---		-	+++	+++	
T _γ	+		+			---		-	+++	+++	
T _c	+		+			---		-	+++	+++	
T _{reg}			+			---			+++	+++	
Tissue-level outputs											
Caseation		++	+	-	+++	---	---		+++	+++	
Granuloma size				-	++	---	---	-	+++	+++	
Tissue concentrations											
[sTNF] _{avg}		+++	+	-		---	---		+++	+++	
[Chemokines] _{avg}			+			---	---		+++	+++	

Only parameters with significant PRCC values are indicated. Significant positive and negative correlations are shown using +/- as follows:

-/+, $0.001 < p\text{-value} < 0.01$

--/++, $0.0001 < p\text{-value} < 0.001$

---/+++, $p\text{-value} < 0.0001$