

ESM3. Linear mixed model table for the February (post-hibernation) anti-*Pd* titer and relative mRNA expression of cytokine genes with Type II Wald chisquare tests (package car). Models were fit by maximum likelihood using function lmer in R. Significant effects are shown in bold.

Response variable	Fixed effects	Type II Wald Chisq	Df	t	Estimate ± SE	Pr(>Chisq)	Random effects	Variance	SD
February titer	Intercept		1	0.77	8.06±1.41		Cage	0	0
	September titer	78.77	1	0.14	1.68±12.33	2.20E-16 ***	Residual	15.30	3.91
	Infection	50.49	1	11.25	28.45±2.53	1.20E-12 ***			
	Time to euthanasia	7.50	1	-6.68	-0.39±0.06	6.15E-03 **			
	Proportion SMI lost	5.51	1	3.76	87.85±23.35	1.89E-02 *			
	September titer x infection	76.22	1	-8.73	-27.79±3.18	2.20E-16 ***			
	September titer x Proportion SMI lost	8.66	1	-2.94	-85.54±29.16	3.25E-03 **			
	September titer x Time to euthanasia	37.55	1	6.127	0.41±0.07	8.931E-10 ***			
	Interleukin-6, wing	Intercept			2.70	2.62±0.96		Cage	0.004
Infection		6.95	1	2.63	0.77±0.29	8.37E-03 **	Residual	0.66	0.81
Proportion SMI lost		7.29	1	-2.70	-7.23±2.68	6.92E-03 **			
Interleukin-1β, wing	Intercept			3.41	2.27±0.66		Cage	0.04	0.21
	Infection	1.01	1	1.01	0.25±0.25	3.14E-01	Residual	0.30	0.55
	Proportion SMI lost	11.45	1	-3.38	-6.22±1.84	7.15E-04 ***			
Interleukin-6, lymph node	Intercept			-1.43	-1.22±0.85		Cage	0	0
	Infection	5.24	1	2.29	0.51±0.22	2.20E-02 *	Residual	0.31	0.56
	Proportion SMI lost	1.56	1	1.25	2.9±2.31	2.11E-01			
Interleukin-17A, lymph node	Intercept			-0.41	-0.35±1.25		Cage	0.003	0.06
	Infection	8.89	1	1.62	1.11±0.37	2.86E-03 **	Residual	0.92	0.96
	Proportion SMI lost	0.01	1	0.2	0.33±3.57	9.26E-01			