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Supplementary Material

Is TB testing lowering the risk of clinical Johne's disease in the Republic of Ireland?

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Supplementary Table 1: Univariable analysis examining associations between variables. P-values in bold highlight variables subsequently included in logistic regression models (n=179).

	Breed	**Parity**	**Pre-SICCT IFN**	**Post-SICCT IFN**	**Pre-SICCT MAP**	**Post-SICCT MAP**	**Avian response**	**Bovine response**	**Difference IFN Pre/Post SICCT**
Parity	0.99								
Pre-SICCT IFN	0.75	0.74							
Post-SICCT IFN	**0.07**	0.62	0.56						
Pre-SICCT MAP	0.23	0.12	0.23	0.83					
Post-SICCT Map	0.25	0.92	0.20	0.63	**<0.001**				
Avian response (mm)	0.95	0.42	0.41	0.78	**0.09**	**<0.001**			
Bovine response (mm)	0.79	0.56	**0.09**	0.32	**0.002**	**<0.001**	**<0.001**		
Difference IFN Pre/Post	**0.07**	0.70	**<0.001**	**<0.001**	0.93	0.43	0.90	0.17	
Difference MAP Pre/Post	0.46	0.40	0.36	0.51	0.22	**<0.001**	**<0.001**	**<0.001**	0.39

Supplementary Table 2: Associations between IFN-γ production and independent variables (n=179)

Dependent Variable Independent Variable	**Coefficient**	***P* Value**	**95% Conf. Interval**	**Model (**Model *P* value**)**
IFN-γ Production				
Post-SICCT vs. Pre- SICCT	0.03	<0.001	0.02, 0.04	Testing Time point, Breed, (*P:* <0.001*)*
Non- Friesian vs. Friesians	-0.01	0.088	-0.02, 0.001	

Supplementary Table 3: Significant associations between MAP ELISA response and independent variables (n=179)

Dependent Variable Independent Variable	**Coefficient**	***P* Value**	**95% Conf. Interval**	**Model (**Model *P* value**)**
MAP ELISA Response				
Post-SICCT vs. Pre- SICCT	33.0	<0.001	26.8, 39.3	Testing Time point, Avian PPD DTH response, Bovine PPD DTH response
Avian PPD DTH response (millimetres)	3.9	<0.001	2.0, 5.8	(*P* value: <0.001)
Bovine PPD DTH response (millimetres)	10.0	0.001	4.3, 15.7	

Supplementary Figure 1: Column A shows individual IFN-γ and MAP value recorded for each cow both pre and post-SICCT. Column B shows box plots of IFN-γ and MAP ELISA response both pre- and post-SICCT (n=179)

Supplementary Figure 2: Scatter plot showing the relationship between post SICCT IFN-γ and MAP ELISA antibody response (n=179). IFN-γ *1000 to aid visualization.