Title	Is TB testing associated with increased blood interferon-gamma levels?
Authors	Kennedy, Aideen E.;O'Mahony, Jim;Byrne, Noel;MacSharry, John;Sayers, Riona G.
Publication date	2017-10-23
Original Citation	Kennedy, A. E., O'Mahony, J., Byrne, N., MacSharry, J. and Sayers, R. G. (2017) 'Is TB testing associated with increased blood interferon-gamma levels?', Frontiers in Veterinary Science, 4, 176 (9pp). doi: 10.3389/fvets.2017.00176
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://www.frontiersin.org/articles/10.3389/fvets.2017.00176/full - 10.3389/fvets.2017.00176
Rights	
Download date	2025-08-01 06:28:33
Item downloaded from	https://hdl.handle.net/10468/5153

Supplementary Material

1

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

3 **Aideen E. Kennedy[1,2], Jim O'Mahony[2], Noel Byrne[1], John Mac Sharry[3], Riona G.**
4 **Sayers[1*]**

5 *Corresponding Author: riona.sayers@teagasc.ie

6

7

8

9

10

11

12

13

14

15

16

17

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

22

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

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