

Title	Is TB testing associated with increased blood interferon-gamma levels?
Authors	Kennedy, Aileen 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?', <i>Frontiers in Veterinary Science</i> , 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	© 2017, Kennedy, O'Mahony, Byrne, MacSharry and Sayers. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms. - https://creativecommons.org/licenses/by/4.0/
Download date	2024-04-22 21:58:07
Item downloaded from	https://hdl.handle.net/10468/5153



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

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'Mahony², Noel Byrne¹, John Mac Sharry³, Riona G.**
4 **Sayers^{1*}**

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

6

7

8

9

10

11

12

13

14

15

16

17

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

20

21

	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

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

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

25

26

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

29

Dependent Variable	Coefficient	<i>P</i> Value	95% Conf. Interval	Model (Model <i>P</i> value)
Independent Variable				
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 (<i>P</i> value: <0.001)
Avian PPD DTH response (millimetres)	3.9	<0.001	2.0, 5.8	
Bovine PPD DTH response (millimetres)	10.0	0.001	4.3, 15.7	

30

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

34

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

