

## Supplementary Material

# Seroprevalence of *Mycobacterium avium* subsp. *paratuberculosis* in Swiss dairy herds and risk factors for a positive herd status and withinherd prevalence

M. Ottardi<sup>1</sup>, I. Lechner<sup>2</sup>, J. Wang<sup>2</sup>, S. Schmitt<sup>3</sup>, M. Schneeberger<sup>3</sup>, R.M. Schmid<sup>1</sup>, R. Stephan<sup>3</sup>, M. Meylan<sup>1\*</sup>

### \* Correspondence:

Mireille Meylan

mireille.meylan@unibe.ch

#### 1 Supplementary Table S1

**Table S1.** Results of the univariable logistic regression model assessing possible associations between risk factors and herd serostatus (seropositive or seronegative for paratuberculosis) in 163 Swiss dairy herds (9 seropositive, 154 seronegative); variables with p<0.2 are indicated in bold and were carried forward for the multivariable regression model

Variable	Coefficient	$OR^1$	$SE^2$	95% CI <sup>3</sup>	p value
Type(s) of production on the farm Dairy with fattening of own or purchased animals (vs. exclusively dairy)	1.13	3.1	1.14	0.33-28.77	0.323
Presence of a bull in the herd Purchased (vs. no or born on the farm)	-0.4	0.7	0.82	0.13-3.35	0.627
Origin of the farm's water supply Private well (vs. communal water only)	0.12	1.1	0.69	0.29-4.35	0.865
Contact of heifers with animals from other herds during the grazing period Yes (vs. no)	-0.16	0.9	0.73	0.20-3.53	0.824
Contact of lactating cows with animals from other herds during grazing Yes (vs. no)	2.25	9.5	1.28	0.78-116.15	0.078
Contact of dry cows with animals from other herds during the grazing period Yes (vs. no)	1.32	3.7	1.15	0.39-35.76	0.254
Pre-weaned calves sharing alpine pasture with animals from other herds Yes (vs. no)	-13.74	<0.001	1696.73	0-Inf	0.994

<sup>&</sup>lt;sup>1</sup>Clinic for Ruminants, Vetsuisse Faculty, University of Bern, CH-3012 Bern

<sup>&</sup>lt;sup>2</sup>SAFOSO AG, CH-3097 Liebefeld

<sup>&</sup>lt;sup>3</sup>Institute for Food Safety and Hygiene, Section of Veterinary Bacteriology, Vetsuisse Faculty, University of Zürich, CH-8057 Zürich

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Post-weaned calves sharing alpine pasture with animals from other herds Yes	-15.88	< 0.001	1390.63	0-Inf	0.991
(vs. no)					
Heifers sharing alpine pasture with animals from other					
herds	-1.47	0.2	0.71	0.06-0.92	0.038
Yes	-1.4/	0.2	0.71	0.00-0.92	0.050
(vs. no)					
Lactating cows sharing alpine pasture with animals from					
other herds	-0.58	0.6	1.08	0.07-4.68	0.595
Yes	-0.56	0.0	1.00	0.07-4.00	0.575
(vs. no)					
Dry cows sharing alpine pasture with animals from other					
herds	-15.88	< 0.001	1390.63	0-Inf	0.991
Yes	-13.66	<b>\0.001</b>	1370.03	0-1111	0.771
(vs. no)					
Participation to cattle shows					
Yes	-0.22	0.8	0.73	0.19-3.34	0.765
(vs. no)					
Purchase of breeding animals					
Yes	0.01	1	0.73	0.24- 4.20	0.989
(vs. no)					
Source of animals for purchase					
Purchase from ≥1 farm	1.2	3.3	0.82	0.67-16.51	0.142
(vs. no purchase)					
Information requested about the source farms prior to					
purchase	-0.82	0.4	1.12	0.05-3.95	0.462
Yes	0.02	0.1	1.12	0.05 5.55	0.102
(vs. no)					
Heifers raised on rearing farm					
Yes	-0.58	0.6	0.82	0.11-2.79	0.48
(vs. no)					
Herd size (all cows ≥2 years)	1.6	5	0.8	1.03-23.89	0.046

<sup>1</sup>OR: Odd Ratio <sup>2</sup>SE: Standard Error <sup>3</sup>CI: Confidence Interval See also Tables I and II for definitions of the variables