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PORCINE HEALTH MANAGEMENT

ERRATUM Open Access

Erratum to: A novel octavalent combined Erysipelas, Parvo and Leptospira vaccine provides (cross) protection against infection following challenge of pigs with 9 different *Leptospira interrogans* serovars

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Erratum

The tables and their references published in the original version of this article [1] were regretfully incorrectly typeset. The correct tables and table citations have been updated in the original article. The correct tables have also been published in this Erratum for quick reference.

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Reference

1. Jacobs A, Harks F, Hoeijmakers M, Segers R. Porcine Health Manag. 2015;1:16.

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Table 1 Average MAT titres after vaccination and challenge. Pigs were vaccinated twice (4-week interval) and challenged with different *Leptospira* serovar (sv) and serogroup (sg) challenge strains, 6 weeks after first vaccination. MAT titres homologous to challenge strain

			avg MAT titres ± SD (log_2), weeks after first vaccination			
n	Group	Challenge with	0	4	6	10
9	vaccine	sv Canicola	<2	<2	9.6 ± 2.0	9.6 ± 1.3
10	control	sg Canicola	<2	<2	<2	10.3 ± 1.1
10	vaccine	sv Copenhageni	<2	<2	3.8 ± 1.2	9.6 ± 1.0
10	control	sg Icterohaemorrhagiae	<2	<2	<2	10.3 ± 0.7
10	vaccine	sv Icterohaemorrhagiae	<2	<2	<2	91 ± 3.3
10	control	sg Icterohaemorrhagiae	<2	<2	<2	8.7 ± 1.4
10	vaccine	sv Bananal / Liangguan	<2	<2	6.9 ± 1.4	9.3 ± 0.8
9	control	sg Grippotyphosa	<2	<2	<2	91 ± 0.8
8	vaccine	sv Grippotyphosa	<2	<2	4.6 ± 2.4	7.6 ± 1.3
10	control	sg Grippotyphosa	<2	<2	<2	2.0 ± 1.8
10	vaccine	sv Bratislava	<2	6.9 ± 1.2	10.4 ± 0.8	10.5 ± 1.1
9	control	sg Australis	<2	<2	<2	9.9 ± 1.2
9	vaccine	sv Pomona	<2	<2	5.0 ± 4.0	6.7 ± 3.2
10	control	sg Pomona	<2	<2	<2	9.6 ± 0.8
10	vaccine	sv Vughia	<2	<2	<2	8.5 ± 0.8
10	control	sg Tarassovi	<2	<2	<2	9.5 ± 1.0
10	vaccine	sv Tarassovi	<2	<2	2.0 ± 3.2	8.0 ± 1.3
10	control	sg Tarassovi	<2	<2	<2	4.3 ± 1.3

Table 2 Reisolation of Leptospira from blood. Pigs were vaccinated twice (4-week interval) and challenged with different *Leptospira* serovar (sv) and serogroup (sg) challenge strains, 6 weeks after first vaccination. A pig was considered infected if at least once a positive blood isolation was found. n.a. = not applicable

			Reisolation of Leptospira from blood on post-challenge day							# pigs infected	# blood isolations
n	Group	Challenge with	0	1	2	3	4	7	10		
9	vaccine	sv Canicola	0	0	0	0	0	0	0	0**	n. a.
10	control	sg Canicola	0	10	10	10	10	1	0	10	n. a.
10	vaccine	sv Copenhageni	0	0	0	0	0	0	0	0**	n. a.
10	control	sg Icterohaemorrhagiae	0	10	10	8	4	1	0	10	n. a.
10	vaccine	sv Icterohaemorrhagiae	0	2	0	0	0	0	0	2**	2**
10	control	sg Icterohaemorrhagiae	0	9	6	2	0	0	0	9	17
10	vaccine	sv Bananal / Liangguan	0	0	0	0	0	0	0	0**	n. a.
9	control	sg Grippotyphosa	0	6	8	6	2	0	0	8	n. a.
8	vaccine	sv Grippotyphosa	0	0	0	0	0	0	0	0**	n. a.
10	control	sg Grippotyphosa	0	6	1	0	0	0	0	6	n. a.
10	vaccine	sv Bratislava	0	0	0	0	0	0	0	0**	n. a.
9	control	sg Austrais	0	6	4	0	0	0	0	6	n. a.
9	vaccine	sv Pomona	0	0	0	0	0	0	0	0**	n. a.
10	control	sg Pomona	0	10	10	10	9	2	0	10	n. a.
10	vaccine	sv vughia	0	0	0	0	0	0	0	0**	n. a.
10	control	sg Tarassovi	0	10	9	1	1	0	0	10	n. a.
10	vaccine	sv Tarassovi	0	2	0	0	0	0	0	2	2*
10	control	sg Tarassovi	0	6	2	1	1	0	0	6	10

*$p < 0.05$. **$p < 0.01$

Table 3 Reisolation of Leptospira from urine and kidney. Pigs were vaccinated twice (4-week interval) and challenged with different *Leptospira* serovar (sv) and serogroup (sg) challenge strains, 6 weeks after first vaccination. Urine was sampled regularly and kidney samples were collected during necropsy 4w after challenge. A pig was considered shedding if at least once a positive urine isolation was found

			Reisolation of Leptospira from urine on post-challenge day						# pigs shedding	# kidney positive
n	Group	Challenge with	0	14	17	21	24	28		
9	vaccine	sv Canicola	0	0	0	0	0	0	0**	0**
10	control	sg Canicola	0	9	9	9	7	6	10	6
10	vaccine	sv Copenhageni	0	0	0	0	0	0	0	0
10	control	sg Icterohaemorrhagiae	0	0	0	0	1	1	1	0

**$p < 0.01$

Table 4 Leptospira strains used for vaccine / challenge

Species	Serogroup	Serovar	Strain	Originally isolated from
Leptospira interrogans	Canicola	Portland-vere[a]	Ca-I 2-000	human blood, 1964, Jamaica
Leptospira interrogans		Canicola[b]	Moulton	pig urine, 2004, Netherlands
Leptospira interrogans	Icterohaemorrhagiae	Copenhageni[a]	Ic-02-001	rat, kidney, 1978, USA
Leptospira interrogans		Copenhageni[b]	CF1	dog, 1969, Puerto Rico
Leptospira interrogans		Icterohaemorrhagiae[b]	Verdun	human, 1917, France
Leptospira kirschneri	Grippotyphosa	Dadas[a]	Gr-01-005	kidney aborted piglet, 1983, USA
Leptospira kirschneri		Bananal/Lianguang[b]	11808	shrew, 1972, USA
Leptospira kirschrneri		Grippotyphosa[b]	142	horse eye, 1997 Germany
Leptospira interrogans	Australis	Bratislava[a]	As-05-073	pig placenta, 1989, USA
Leptospira interrogans		Bratislava[b]	X35IM-001	pig, 1990, USA
Leptospira interrogans	Pomona	Pomona[a]	Po-01-000	human blood, 1937, Australia
Leptospira interrogans		Pomona[b]	02-0162	not known
Leptospira santarosai	Tarassovi	Gatuni[a]	X345	human blood, 1938, Russia
Leptospira weilii		Vughia[b]	L100	pig kidney, 2001, China
Leptospira borgpetersenii		Tarassovi[b]	Perepelitsin	human blood, 1941, Russia

[a]vaccine strain
[b]challenge strain