

1 Supplementary table 1. Cellular markers. Means and standard deviations for the different sampling times before and during drying off.

Marker	Acronym	Units	Sampling times					
			DO <sup>†</sup> -7d	DO	DO+7d	DO+28d	DO+42d	CA <sup>‡</sup> -7d
White cells count	WBC	Cells/ $\mu$ l	8.45 $\pm$ 1.35	8.82 $\pm$ 1.21	8.02 $\pm$ 1.38	8.91 $\pm$ 1.42	8.37 $\pm$ 1.81	9.64 $\pm$ 2.04
Neutrophil granulocytes	PMN	Cells/ $\mu$ l	40.99 $\pm$ 7.92	35.71 $\pm$ 11.01	34.07 $\pm$ 5.05	35.00 $\pm$ 6.99	39.07 $\pm$ 6.38	45.46 $\pm$ 13.47
Monocytes	MON	Cells/ $\mu$ l	4.39 $\pm$ 3.63	5.33 $\pm$ 4.24	6.30 $\pm$ 2.58	5.06 $\pm$ 3.36	4.93 $\pm$ 3.36	4.77 $\pm$ 2.98
Lymphocyte	LYM	Cells/ $\mu$ l	47.73 $\pm$ 8.48	52.13 $\pm$ 11.12	53.23 $\pm$ 7.76	52.56 $\pm$ 7.81	48.64 $\pm$ 11.27	43.00 $\pm$ 11.35
CD4+ lymphocytes	CD4+	%	23.10 $\pm$ 7.18	30.00 $\pm$ 5.89	30.31 $\pm$ 7.49	32.50 $\pm$ 7.65	27.90 $\pm$ 5.20	28.87 $\pm$ 6.95
CD8+ lymphocytes	CD8+	%	17.05 $\pm$ 4.58	19.85 $\pm$ 4.64	19.65 $\pm$ 4.09	20.47 $\pm$ 6.23	18.39 $\pm$ 4.56	16.77 $\pm$ 6.86
WC1 <sup>+</sup> $\gamma\delta$ T cell	WC1	%	5.26 $\pm$ 3.63	6.65 $\pm$ 4.27	5.21 $\pm$ 1.28	7.01 $\pm$ 2.12	5.29 $\pm$ 1.43	5.56 $\pm$ 1.65
Necrosis	NEC	%	16.34 $\pm$ 6.17	13.27 $\pm$ 6.87	12.27 $\pm$ 5.27	9.98 $\pm$ 4.33	10.63 $\pm$ 5.47	9.26 $\pm$ 4.83
Apoptosis	APO	%	6.64 $\pm$ 2.27	5.68 $\pm$ 2.61	5.79 $\pm$ 2.36	5.25 $\pm$ 1.73	6.51 $\pm$ 1.82	4.94 $\pm$ 1.57
CD4+/CD8+ ratio	CD4+/CD8+	ratio	1.34 $\pm$ 0.47	1.62 $\pm$ 0.54	1.58 $\pm$ 0.44	1.74 $\pm$ 0.53	1.43 $\pm$ 0.31	1.88 $\pm$ 0.75
PMN/LYM ratio	P/L	ratio	0.88 $\pm$ 0.32	0.65 $\pm$ 0.26	0.66 $\pm$ 0.18	0.68 $\pm$ 0.18	0.71 $\pm$ 0.21	1.31 $\pm$ 0.93
PMN/MON	P/M	ratio	13.10 $\pm$ 12.60	5.83 $\pm$ 2.25	6.64 $\pm$ 3.60	17.72 $\pm$ 17.55	10.49 $\pm$ 10.21	12.84 $\pm$ 9.73

2 <sup>†</sup> DO: drying off

3 <sup>‡</sup> CA: calving

4 Supplementary table 2. Cellular markers. Means and standard deviations for the different sampling times immediately before and after calving.

Marker	Acronym	Units	Sampling times					
			CA <sup>†</sup> -3d	CA+3d	CA+7d	CA+14d	CA+21d	CA+28d
White cells count	WBC	Cells/ $\mu$ l	9.74 $\pm$ 2.72	8.94 $\pm$ 2.48	7.73 $\pm$ 1.64	7.95 $\pm$ 2.08	7.33 $\pm$ 1.73	7.29 $\pm$ 1.32
Neutrophil granulocytes	PMN	Cells/ $\mu$ l	47.13 $\pm$ 12.55	40.71 $\pm$ 11.37	36.79 $\pm$ 10.62	41.59 $\pm$ 13.32	41.31 $\pm$ 9.42	44.36 $\pm$ 9.31
Monocytes	MONO	Cells/ $\mu$ l	6.67 $\pm$ 4.12	8.00 $\pm$ 4.98	8.86 $\pm$ 8.64	6.36 $\pm$ 5.73	5.29 $\pm$ 5.22	5.14 $\pm$ 3.96
Lymphocyte	LYM	Cells/ $\mu$ l	39.93 $\pm$ 13.22	46.50 $\pm$ 10.75	51.86 $\pm$ 10.90	50.09 $\pm$ 10.08	49.66 $\pm$ 9.68	44.71 $\pm$ 8.12
CD4+ lymphocytes	CD4+	%	30.00 $\pm$ 5.82	28.36 $\pm$ 5.94	30.64 $\pm$ 7.45	34.32 $\pm$ 5.48	33.26 $\pm$ 6.94	37.52 $\pm$ 6.81
CD8+ lymphocytes	CD8+	%	16.40 $\pm$ 5.33	13.59 $\pm$ 3.14	13.88 $\pm$ 2.83	15.91 $\pm$ 4.65	16.79 $\pm$ 4.68	18.37 $\pm$ 4.99
WC1 <sup>+</sup> $\gamma\delta$ T cell	WC1	%	5.59 $\pm$ 2.70	4.89 $\pm$ 2.37	5.89 $\pm$ 2.02	4.66 $\pm$ 1.38	4.54 $\pm$ 2.02	4.53 $\pm$ 2.17
Necrosis	NEC	%	9.64 $\pm$ 3.60	7.60 $\pm$ 3.70	9.07 $\pm$ 5.44	9.32 $\pm$ 8.03	7.80 $\pm$ 3.88	9.85 $\pm$ 10.63
Apoptosis	APO	%	6.19 $\pm$ 2.69	4.25 $\pm$ 2.01	6.01 $\pm$ 4.18	4.29 $\pm$ 1.88	4.57 $\pm$ 2.98	4.34 $\pm$ 2.30
CD4+/CD8+ ratio	CD4+/CD8+	ratio	2.09 $\pm$ 0.86	2.16 $\pm$ 0.59	2.30 $\pm$ 0.78	2.25 $\pm$ 0.61	2.09 $\pm$ 0.59	2.05 $\pm$ 0.72
PMN/LYM ratio	P/L	ratio	1.49 $\pm$ 1.16	0.96 $\pm$ 0.39	0.77 $\pm$ 0.36	0.92 $\pm$ 0.46	0.89 $\pm$ 0.41	1.01 $\pm$ 0.38
PMN/MON	P/M	ratio	9.10 $\pm$ 5.80	8.14 $\pm$ 6.72	7.97 $\pm$ 6.87	8.35 $\pm$ 8.79	17.43 $\pm$ 14.77	15.02 $\pm$ 13.42

5 <sup>†</sup> CA: calving

6 Supplementary table 3. Humoral markers. Means and standard deviations for the different sampling times before and during drying off.

Marker	Acronym	Units	Sampling times					
			DO <sup>†</sup> -7d	DO	DO+7d	DO+28d	DO+42d	CA <sup>‡</sup> -7d
Interferon- $\gamma$	IFN	RE <sup>⊙</sup>	1.17±0.19	1.18±0.18	1.21±0.17	1.20±0.20	1.27±0.13	1.21±0.15
Tumor Necrosis Factor- $\alpha$	TNF	RE	1.13±0.10	1.16±0.11	1.13±0.14	1.14±0.10	1.14±0.13	1.12±0.09
Interleukin 1 $\beta$	IL1	RE	1.09±0.09	1.13±0.09	1.14±0.10	1.08±0.11	1.09±0.13	1.08±0.12
Interleukin 6	IL6	RE	1.04±0.09	1.09±0.05	1.07±0.08	1.03±0.10	1.02±0.11	1.05±0.09
Interleukin 8	IL8	RE	1.15±0.09	1.13±0.09	1.14±0.10	1.11±0.10	1.09±0.09	1.13±0.07
Lysozyme	LYS	$\mu\text{g/ml}$	42.18±27.67	39.90±24.36	29.18±28.29	27.05±27.51	56.82±70.58	29.46±26.45
N-Acetyl- $\beta$ -glucosaminidase	NAG	units	23.52±13.16	17.91±8.33	20.77±19.19	11.59±12.10	13.62±13.38	13.90±14.67

7 <sup>†</sup> DO: drying off

8 <sup>‡</sup> CA: calving

9 <sup>⊙</sup> RE= relative expression.

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11 Supplementary table 4. Humoral markers. Means and standard deviations for the different sampling times immediately before and after calving.

Marker	Acronym	Units	Sampling times					
			CA <sup>†</sup> -3d	CA+3d	CA+7d	CA+14d	CA+21d	CA+28d
Interferon- $\gamma$	IFN	RE $\Theta$	1.21 $\pm$ 0.20	1.22 $\pm$ 0.18	1.38 $\pm$ 0.25	1.31 $\pm$ 0.16	1.25 $\pm$ 0.15	1.17 $\pm$ 0.15
Tumor Necrosis Factor- $\alpha$	TNF	RE	1.09 $\pm$ 0.10	1.14 $\pm$ 0.10	1.13 $\pm$ 0.16	1.21 $\pm$ 0.13	1.18 $\pm$ 0.07	1.10 $\pm$ 0.11
Interleukin 1 $\beta$	IL1	RE	1.17 $\pm$ 0.28	1.17 $\pm$ 0.25	1.21 $\pm$ 0.18	1.21 $\pm$ 0.14	1.12 $\pm$ 0.09	1.06 $\pm$ 0.11
Interleukin 6	IL6	RE	1.02 $\pm$ 0.06	1.16 $\pm$ 0.10	1.07 $\pm$ 0.13	1.16 $\pm$ 0.18	1.08 $\pm$ 0.08	1.08 $\pm$ 0.10
Interleukin 8	IL8	RE	1.10 $\pm$ 0.16	1.17 $\pm$ 0.11	1.34 $\pm$ 0.17	1.34 $\pm$ 0.11	1.23 $\pm$ 0.09	1.14 $\pm$ 0.12
Lysozyme	LYS	$\mu$ g/ml	36.29 $\pm$ 34.75	35.59 $\pm$ 45.03	38.71 $\pm$ 34.23	29.01 $\pm$ 27.49	26.21 $\pm$ 16.39	38.82 $\pm$ 44.95
N-Acetyl- $\beta$ -glucosaminidase	NAG	units	14.85 $\pm$ 15.53	21.74 $\pm$ 21.94	16.96 $\pm$ 19.48	12.17 $\pm$ 13.86	13.89 $\pm$ 14.86	11.52 $\pm$ 10.37

12 <sup>†</sup> CA: calving

13  $\Theta$  RE= relative expression.

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