Supplementary Table 1. Results of the univariable logistic regression analyses of predictors of purulent vaginal discharge in Jersey cows[1,2].

Variables	β-coefficient (± SE)	Odds ratio (95% CI)	*P* – value
Year (Year 1)	Ref.	Ref.	< 0.01
Year 2	0.091 ± 0.191	1.10 (0.75, 1.59)	
Year 3	-0.208 ± 0.186	0.81 (0.56, 1.17)	
Year 4	-0.671 ± 0.270	0.51 (0.30, 0.87)	
Previous gestation length		0.98 (0.96, 1.00)	
Linear	-1.534 ± 0.393		< 0.01[†]
Quadratic	0.003 ± 0.001		< 0.01[‡]
Previous days in the close-up diet		0.97 (0.96, 0.98)	
Linear	-0.126 ± 0.019		< 0.01[†]
Quadratic	0.001 ± 0.001		< 0.01[‡]
Parity (Primiparous)	Ref.	Ref.	0.82
Multiparous	-0.022 ± 0.099	0.98 (0.81, 1.19)	
Season (Mild)	Ref.	Ref.	0.05
Cold	0.221 ± 0.130	1.25 (0.97, 1.61)	
Hot	0.346 ± 0.144	1.41 (1.07, 1.87)	
Male calf	0.146 ± 0.100	1.16 (0.95, 1.41)	0.14
Stillbirth	0.982 ± 0.209	2.67 (1.77, 4.02)	< 0.01
Twin	1.295 ± 0.228	3.65 (2.33, 5.71)	< 0.01
Dystocic calving	1.354 ± 0.173	3.87 (2.76, 5.44)	< 0.01
Retained fetal membrane	1.930 ± 0.172	6.89 (4.92, 9.66)	< 0.01
Metritis	1.776 ± 0.125	5.91 (4.62, 7.55)	< 0.01

[1]No purulent vaginal discharge: no mucus, clear mucus, or the amount of pus present in the retrieved exudate was < 50% of the total retrieved content; purulent vaginal discharge: retrieved exudate contained ≥ 50% of pus.

[2]Effects of continuous variables were assessed as one-unit offsets from the mean.

[†]Linear effect.

[‡]Quadratic effect

Supplementary Table 2. Results of the univariable logistic regression analyses of metabolites and scores of body condition and locomotion as predictors of purulent vaginal discharge in Jersey cows[1,2].

Variables	β-coefficient (± SE)	Odds ratio (95% CI)	*P* – value
Non-esterified fatty acid, mmol/L			
Week -2 relative to calving	3.12 ± 1.586	22.66 (1.01, 507.12)	0.05
Week -1 relative to calving	2.23 ± 1.460	9.26 (0.53, 161.88)	0.13
Week 0 relative to calving	-0.979 ± 0.834	0.38 (0.07, 1.93)	0.24
Week 1 relative to calving	-1.149 ± 1.124	0.31 (0.04, 2.87)	0.31
Week 2 relative to calving	-1.630 ± 1.312	0.20 (0.02, 2.56)	0.21
β-hydroxybutyrate, mmol/L			
Week 0 relative to calving	-0.137 ± 0.992	0.87 (0.13, 6.09)	0.89
Week 1 relative to calving	-1.735 ± 0.876	0.18 (0.03, 0.98)	0.05
Week 2 relative to calving			
Linear	-5.690 ± 2.604	5.40 (0.13, 223.73)	0.03[†]
Quadratic	3.811 ± 2.173		0.08[‡]
Locomotion score ≥ 3			
Week -3 relative to calving	-0.336 ± 1.096	0.72 (0.08, 6.13)	0.76
Week 0 relative to calving	-1.254 ± 0.867	0.29 (0.05, 1.56)	0.15
Week 4 relative to calving	0.542 ± 1.04	1.72 (0.22, 13.26)	0.60
Body condition score			
Week -3 relative to calving	-0.594 ± 0.470	0.55 (0.22, 1.39)	0.21
Week 0 relative to calving	-1.215 ± 0.636	0.30 (0.09, 1.03)	0.06
Week 4 relative to calving	-1.142 ± 0.538	0.32 (0.11, 0.92)	0.03

[1]No purulent vaginal discharge: no mucus, clear mucus, or the amount of pus present in the retrieved exudate was < 50% of the total retrieved content; purulent vaginal discharge: retrieved exudate contained ≥ 50% of pus.

[2]Effects of continuous variables were assessed as one-unit offsets from the mean.

[†]Linear effect.

[‡]Quadratic effect