

Supplementary Materials

Table S1. Milk weights (kg) from Lactanet data taken approximately every 2 months during the patient's first lactation, by days in milk (DIM).

Milk weight (kg)	DIM
39	36
44	109
36	178
42	241
32	291
29	360
30	410

Table S2. Comprehensive complete blood count with manual differential.

Test	Result	Units	Reference Interval	Comments
WBC	7.4	x 10 ⁹ /L	5.05-13.3	
RBC	6.9	x 10 ¹² /L	4.9-7.5	
Hb	100	g/L	84-120	
HCT	0.28	L/L	0.21-0.30	
MCV	40	fL	36-50	
MCH	14	pg	14-19	
MCHC	358 L	g/L	380-431	
RDW	19.8	%	16-20	
Platelets	414	x 10 ⁹ /L	160-650	Moderate clumping
MPV	7.6 H	fL	4.6-7.4	
T.S. Protein	75	g/L	60-80	
Seg. Neutrophil Count	4.00	x 10 ⁹ /L	1.7-6.0	
Lymphocyte Count	2.22	x 10 ⁹ /L	1.8-8.1	
Monocyte Count	0.74 H	x 10 ⁹ /L	0.1-0.7	
Eosinophil Count	0.44	x 10 ⁹ /L	0.05-1.15	
Anisocytosis	Occasional			
Crenated	1+			

Table S3. Serum biochemistry profile.^a

Test	Result	Units	Reference Interval
Hemolysis	Negative		
Lipemia	Negative		
Calcium	2.51	mmol/L	2.10-2.80
Phosphorus	1.72	mmol/L	1.47-2.63
CaPhos Ratio	1.46		0.6-1.7
Magnesium	1.0	mmol/L	0.82-1.30
Sodium	137	mmol/L	132-145
Potassium	4.5	mmol/L	3.9-5.6
Chloride	97	mmol/L	90-113
Carbon Dioxide	22	mmol/L	17-26
Anion Gap	22 H	mmol/L	13-22
Na:K Ratio	31		26-36
Total Protein	69	g/L	66-86
Albumin	38	g/L	30-42
Globulin	31	g/L	30-53
A:G Ratio	1.23		0.6-1.3
Urea	5.8	mmol/L	3.0-8.0
Creatinine	69	umol/L	34-88
Glucose	4.1	mmol/L	2.5-4.3
Cholesterol	6.63	mmol/L	1.73-7.73
Total Bilirubin	0	umol/L	0-3
Conjugated Bilirubin	0	umol/L	
Free Bilirubin	0	umol/L	0-3
Alkaline Phosphatase	46	U/L	25-127
GGT	24	U/L	11-51

AST	74	U/L	44-153
CK	113	U/L	44-211
GLDH	18	U/L	3-45
BHBA	606	umol/L	324-1296
Non-esterified Fatty Acids	0.28	mmol/L	0.10-0.37
Haptoglobin	0.12	g/L	0.0-0.5
Calculated Osmo	273 L	mmol/L	276-306

^a Bovine reference intervals are based on 60 clinically healthy cows; 50% first lactation, all milking 30-150 days, from 10 Ontario farms.