



# BEAUFORT COTTAGE LABORATORIES REFERENCE RANGES

## NEONATAL THOROUGHBRED FOALS (<36 HOURS OLD)

### Clinical Pathology Reference Ranges – Means & Ranges

Test	Abbreviation	Units	Mean	Range
Total erythrocytes	RBC	x10 <sup>12</sup> /l	9.4	6.9-11.8
Packed cell volume	PCV	l/l	0.36	0.30-0.44
Haemoglobin	Hb	g/dl	13.2	10.2-15.4
Mean cell volume	MCV	fl	38.8	31.7-44.9
Mean cell haemoglobin concentration	McHc	g/dl	36.1	31.7-39.4
Mean cell haemoglobin	McH	pg	14.0	11.2-16.4
Total leucocytes	WBC	x10 <sup>9</sup> /l	8.8	6.2-12.4
Segmented neutrophils	Segs	x10 <sup>9</sup> /l	6.7	4.1-9.5
	Segs	%	75	58-85
Lymphocytes	Lymphs	x10 <sup>9</sup> /l	1.8	1.0-3.1
	Lymphs	%	21	14-37
Monocytes	Monos	x10 <sup>9</sup> /l	0.19	0.1-0.5
	Monos	%	2	0.5-5
Eosinophils	Eos	x10 <sup>9</sup> /l	0.1	0.1-0.2
	Eos	%	1	1-2
Platelets	Plts	x10 <sup>9</sup> /l	220	140-315
Plasma viscosity	PV	mPa	1.44	1.34-1.59
Total Protein	TSP	g/l	54	41-66
Albumin	Alb	g/l	31	25-35
Globulin	Glob	g/l	24	15-36
Alpha 1 globulin	x1 glob	g/l	0.9	0.5-1.5
Alpha 2 globulin	x2 glob	g/l	5.0	4.0-5.6
Beta 1 globulin	x1 glob	g/l	5.1	3.1-7.2
Beta 2 globulin	x2 glob	g/l	3.3	1.3-6.0
Gamma globulin	x glob	g/l	6.5	4.8-10.1
Immunoglobulin G	IgG	g/l	11.7	6.9-18.6
Plasma fibrinogen	Fib	g/l	1.9	0.5-3.9
Serum amyloid A	SAA	mg/l	2.2	0-26
Aspartate amino transferase	AST	iu/l	157	111-206
Creatinine kinase	CK	iu/l	414	165-761
Lactate dehydrogenase	LD	iu/l	860	615-1110
LD isoenzyme 1	LD1	% total LD	5	2-7
LD isoenzyme 2	LD2	% total LD	20	17-24
LD isoenzyme 3	LD3	% total LD	42	36-46
LD isoenzyme 4	LD4	% total LD	28	21-34

Test	Abbreviation	Units	Mean	Range
LD isoenzyme 5	LD5	% total LD	5	2-10
Gamma glutamyl transferase	GGT	iu/l	21	10-32
Glutamate dehydrogenase	GLDH	iu/l	25	8-43
Serum alkaline phosphatase	SAP	iu/l	3341	2424-4544
Intestinal alkaline phosphatase	IAP	iu/l	824	528-1200
	IAP	% total SAP	23.7	<26
Urea	Urea	mmol/l	5.7	2.9-8.4
Creatinine	Creat	µmol/l	133	97-188
Bromsulphalein half time clearance	BSP	Seconds		
Glucose	Glu	mmol/l	3.1	2.1-4.1
Total bilirubin	TBili	µmol/l	55	16-94
Direct bilirubin	DBili	µmol/l	20	6-34
Bile acids	BACids	µmol/l		0-8.0
Cholesterol	Chol	mmol/l		
Triglycerides	Trigs	mmol/l		
Lipase	Lip	mmol/l		
Amylase	Amyl	iu/l		
Calcium	Ca	mmol/l	2.9	2.7-3.2
Fractional urinary clearance	Ca	%		
Phosphate	PO4	mmol/l	2.0	1.6-2.5
Fractional urinary clearance	PO4	%	0.3	0.02-0.53
Magnesium	Mg	mmol/l	0.8	0.6-1.1
Fractional urinary clearance	Mg	%		
Copper (serum)	Cu	µmol/l		
Copper (plasma)	Cu	µmol/l		
Zinc	Zn	µmol/l		
Sodium	Na	mmol/l	135	129-140
Fractional urinary clearance	Na	%		
Potassium	K	mmol/l	4.3	3.8-5.0
Fractional urinary clearance	K	%		
Chloride	Cl	mmol/l	97	90-103
Fractional urinary clearance	Cl	%		
Cortisol	Cort	nmol/l		
Fasting Insulin	Ins	µiu/ml		
Tri-iodothyronine	T3	nmol/l	8.4	<14
Thyroxine	T4	nmol/l	400	<800
Troponin	cTnl	ng/ml	0.46	0.18-0.79
Selenium	Se	µmol/l		