Parametro	Conv. Unità	Range di misurazione	Cane*	Gatto*	Cavallo*
A/G ratio***	-	-	0.7 - 1.5	0.5 - 0.8	0.5 - 1.3
ALB	g/dl	0.5 - 8	2.5 - 3.7	2.1 - 3.3	2.5 - 4.0
ALP	U/l	5 - 1300	0 - 150	0 - 115	0 - 290
ALT	U/l	5 - 650	0 - 165	0 - 112	-
AMY	U/l	5 - 4000	0 - 1355	0 - 1600	-
AST	U/l	5 - 650	0 - 69	0 - 41	0 - 433
BUN	mg/dl	3.10 - 126.45	3 - 25	14 - 26	10 - 20
CA	mg/dl	1.6 - 20	9.0 - 12.0	8.5 - 11.5	10.2 - 12.9
CK	U/l	5 - 4000	0 - 292	0 - 317	0 - 400
CL	mmol/l	30 - 185	97 - 126	97 - 133	83 - 99
CREA	mg/dl	0.1 - 20.4	0.6 - 1.2	0.3 - 2.0	0.6 - 1.8
GGT**	U/l	2 - 1200	0 - 10	0 - 10	0 - 25
GLOB***	g/dl	-	2.5 - 3.6	3.6 - 6.1	2.9 - 5.2
GLU	mg/dl	14.4 - 540	62 - 117	65 - 146	68 - 109
K	mmol/l	1.5 - 10.0	3.6 - 5.8	3.0 - 5.3	2.8 - 4.9
LDH	U/l	0 - 1200	-	-	0 - 450
MG	mg/dl	0.5 - 8.0	1.2 - 2.2	1.5 - 2.5	1.6 - 3.0
NA	mmol/l	90 - 200	140 - 152	143 - 155	134 - 149
PHOS	mg/dl	0.09 - 40	2.5 - 5.6	3.0 - 7.0	2.0 - 4.7
TBIL (Bilirubina Totale)	mg/dl	0.06 - 15	0 - 0.3	0 - 0.3	0 - 2.6
TBA (Acidi Biliari Totali)**	µmol/l	1 - 120	0 - 20	0 - 18	0 - 12
TC (Colesterolo)**	mg/dl	11.6 - 463	120 - 390	70 - 150	90 - 170
TCO2	mmol/l	5 - 50	14 - 25	13 - 23	20 - 34
TP (Proteine Totali)	g/dl	0.5 - 13.5	5.0 - 7.3	5.7 - 9.4	6.5 - 8.5
TG (Trigliceridi)	mg/dl	26 - 614	28 - 190	23 - 139	0 - 80
UA	mg/dl	0.2 - 22	-	-	-

* Produttore
** Klinische Labordiagnostik in der Tiermedizin. 7th edition. A. Moritz. Schattauer (2014)
***Parametro calcolato
****Veterinary Hematology and Clinical Chemistry. Thrall MA. 2nd ed.. Blackwell Publishing (2006)
***** Clinical Biochemistry of Domestic Animals, Kaneko et al. 6th ed., Academic Press (2008)

Parametro	Unità SI	Range di misurazione	Cane*	Gatto*	Cavallo*
A/G ratio***	-	-	0.7 - 1.5	0.5 - 0.8	0.5 - 1.3
ALB	g/l	5 - 80	25 - 37	21 - 33	25 - 40
ALP	U/l	5 - 1300	0 - 150	0 - 115	0 - 290
ALT	U/l	5 - 650	0 - 165	0 - 112	-
AMY	U/l	5 - 4000	0 - 1355	0 - 1600	-
AST	U/l	5 - 650	0 - 69	0 - 41	0 - 433
BUN	mmol/l	1.10 - 45.03	1.07 - 8.9	4.98 - 9.25	3.56 - 7.12
CA	mmol/l	0.4 - 5.2	2.30 - 3.00	2.13 - 2.90	2.55 - 3.22
CK	U/l	5 - 4000	0 - 292	0 - 317	0 - 400
CL	mmol/l	30 - 185	97 - 126	97 - 133	83 - 99
CREA	µmol/l	10 - 1800	53.0 - 106.0	26.5 - 176.7	53 - 159
GGT**	U/l	2 - 1200	0 - 10	0 - 10	0 - 25
GLOB***	g/l	-	25 - 36	36 - 61	29 - 52
GLU	mmol/l	0.8 - 30	3.44 - 6.49	3.61 - 8.10	3.77 - 6.05
K	mmol/l	1.5 - 10.0	3.6 - 5.8	3.0 - 5.3	2.8 - 4.9
LDH	U/l	0 - 1200	-	-	0 - 450
MG	mmol/l	0.2 - 3.29	0.5 - 0.91	0.62 - 1.03	0.70 - 1.23
NA	mmol/l	90 - 200	140 - 152	143 - 155	134 - 149
PHOS	mmol/l	0.03 - 12.92	0.80 - 1.80	1.00 - 2.30	0.65 - 1.52
TBIL (Bilirubina Totale)	µmol/l	1 - 250	0 - 5.1	0 - 5.1	0 - 44.2
TBA (Acidi Biliari Totali)**	µmol/l	1 - 120	0 - 20	0 - 18	0 - 12
TC (Colesterolo)**	mmol/l	0.3 - 12	3.12 - 10.13	1.82 - 3.90	2.34 - 4.42
TCO2	mmol/l	5 - 50	14 - 25	13 - 23	20 - 34
TP (Proteine Totali)	g/l	5 - 135	50 - 73	57 - 94	65 - 85
TG (Triglceridi)	mmol/l	0.3 - 7	0.32 - 2.18	0.26 - 1.60	0 - 0.92
UA	µmol/l	10 - 1300	-	-	-

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***** Clinical Biochemistry of Domestic Animals, Kaneko et al. 6th ed., Academic Press (2008)

Parametro	Unità Conv.	Coniglio**	Furetto**	Porcellino d'India**	Ratto***	Topo***	Maiale**	Bovino**	Pecora**	Capra**
A/G ratio	-	-	-	-	-	-	-	-	-	-
ALB	g/dl	3.6 - 5.7	2.8 - 4.4	2.6 - 4.1	4.1 - 5.4	3.0 - 4.0	-	3.0 - 4.2	-	-
ALP	U/l	0 - 397	0 - 141	0 - 418	70 - 132	66 - 262	0 - 170	0 - 300	0 - 100	0 - 340
ALT	U/l	0 - 61	0 - 242	0 - 61	26 - 37	40 - 189	0 - 68	0 - 50	0 - 14	0 - 19
AMYL	U/l	0 - 459	0 - 62	0 - 3159	-	-	0 - 3500	-	-	-
AST	U/l	0 - 28	0 - 142	0 - 90	40 - 53	77 - 383	0 - 35	0 - 80	0 - 75	0 - 65
BUN	mg/dl	5.9 - 23.6	13.2 - 47.5	9.3 - 28.9	16 - 19	21 - 26	9.0 - 23.0	0 - 23	12.0 - 23.0	9.0 - 23.0
CA	mg/dl	12.4 - 15.6	8.0 - 10.4	9.6 - 12.4	10.5 - 13	7.9 - 10.5	9.6 - 14.0	9.2 - 11.2	8.4 - 10.8	8.8 - 11.2
CK	U/l	0 - 958	0 - 730	0 - 2143	0 - 309	-	0 - 2000	0 - 100	0 - 25	0 - 65
CI	mmol/l	93 - 109	108 - 119	94 - 111	85 - 102	99 - 108	102 - 106	95 - 110	100 - 106	-
CREA	mg/dl	0.4 - 1.9	0.2 - 0.8	0 - 0.9	0.5 - 1.4	0 - 0.5	0.5 - 1.5	0.6 - 1.7	0.6 - 1.4	0.5 - 1.2
GGT	U/l	0 - 13	0 - 14	0 - 13	-	-	0 - 45	0 - 50	0 - 32	0 - 23
GLOB***	g/dl	1.3 - 1.7	-	1.9 - 2.5	-	-	-	-	-	-
GLU	mg/dl	105 - 267	54 - 153	89 - 287	114 - 143	196 - 278	70 - 115	40 - 60	40 - 60	40 - 55
K	mmol/l	3.7 - 6.3	3.9 - 5.9	4.5 - 8.8	5.3 - 7.5	5.3 - 6.3	4.0 - 5.0	3.5 - 4.5	3.5 - 4.5	-
LDH*****	U/l	0 - 571	0 - 1780	0 - 515	-	-	361 - 705	162 - 412	238 - 440	132 - 392
MG	mg/dl	2.2 - 4.0	2.2 - 3.8	-	-	-	1.2 - 3.2	1.9 - 3.2	1.9 - 2.8	2.5 - 3.0
NA	mmol/l	139 - 149	140 - 169	130 - 150	143 - 150	138 - 186	140 - 160	135 - 157	149 - 160	-
PHOS	mg/dl	2.5 - 9.8	3.1 - 9.6	3.2 - 21.6	5.0 - 13.0	5.6 - 9.2	6.5 - 10.2	5.0 - 7.1	4.0 - 6.0	4.5 - 7.0
TBIL (Bilirubina Totale)	mg/dl	0 - 0.1	0 - 0.2	0 - 0.1	0 - 0.6	-	0 - 0.3	0 - 0.3	0 - 0.4	0 - 0.4
TBA (Acidi Biliari Totali)**	µmol/l	-	-	-	-	-	-	-	-	-
TC (Colesterolo)**	mg/dl	12.0 - 103	92 - 274	12 - 65	36 - 100	-	77 - 128	75 - 120	45 - 75	77 - 130
TCO2	mmol/l	-	-	-	-	-	-	-	-	-
TP (Proteine Totali)	g/dl	5.9 - 7.4	5.4 - 7.7	4.4 - 6.6	6.4 - 8.5	5.0 - 7.0	0 - 8.6	6.0 - 8.0	5.5 - 7.5	6.5 - 7.5
TG (Trigliceridi)	mg/dl	39 - 293	43 - 245	29 - 206	-	-	0 - 44	15 - 45	5.0 - 30.0	-
UA	mg/dl	-	-	-	-	-	-	-	-	-

* Produttore
** Klinische Labordiagnostik in der Tiermedizin. 7th edition. A. Moritz. Schattauer (2014)
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***** Clinical Biochemistry of Domestic Animals, Kaneko et al. 6th ed., Academic Press (2008)

Element RC

VALORI DI RIFERIMENTO

Parametro	Unità SI	Coniglio**	Furetto**	Porcellino d'India**	Ratto***	Topo***	Maiale**	Bovino**	Pecora**	Capra**
A/G ratio	-	-	-	-	-	-	-	-	-	-
ALB	g/l	36 - 57	28 - 44	26 - 41	41 - 54	30 - 40	-	30 - 42	-	-
ALP	U/l	0 - 397	0 - 141	0 - 418	70 - 132	66 - 262	0 - 170	0 - 300	0 - 100	0 - 340
ALT	U/l	0 - 61	0 - 242	0 - 61	26 - 37	40 - 189	0 - 68	0 - 50	0 - 14	0 - 19
AMYL	U/l	0 - 459	0 - 62	0 - 3159	-	-	0 - 3500	-	-	-
AST	U/l	0 - 28	0 - 142	0 - 90	40 - 53	77 - 383	0 - 35	0 - 80	0 - 75	0 - 65
BUN	mmol/l	2.1 - 8.4	4.7 - 16.9	3.31 - 10.28	5.69 - 6.76	7.47 - 9.25	3.2 - 8.19	0 - 8.19	4.27 - 8.19	3.2 - 8.19
CA	mmol/l	3.1 - 3.9	2.0 - 2.6	2.4 - 3.1	2.63 - 3.25	1.97 - 2.62	2.4 - 3.5	2.3 - 2.8	2.1 - 2.7	2.2 - 2.8
CK	U/l	0 - 958	0 - 730	0 - 2143	0 - 309	-	0 - 2000	0 - 100	0 - 25	0 - 65
CI	mmol/l	93 - 109	108 - 119	94 - 111	85 - 102	99 - 108	102 - 106	95 - 110	100 - 106	-
CREA	µmol/l	35.3 - 167.8	17.7 - 70.7	0 - 79.5	44.2 - 123.7	0 - 44,2	39.8 - 132.5	53 - 150,2	53 - 123.7	44.2 - 106
GGT	U/l	0 - 13	0 - 14	0 - 13	-	-	0 - 45	0 - 50	0 - 32	0 - 23
GLOB***	g/l	13 - 17	-	19 - 25	-	-	-	-	-	-
GLU	mmol/l	5.8 - 14.8	3.0 - 8.5	5.0 - 16.0	6.3 - 7.9	10.8 - 15.3	3.9 - 6.4	2.2 - 3.3	2.2 - 3.3	2.2 - 3.1
K	mmol/l	3.7 - 6.3	3.9 - 5.9	4.5 - 8.8	5.3 - 7.5	5.3 - 6.3	4.0 - 5.0	3.5 - 4.5	3.5 - 4.5	-
LDH*****	U/l	0 - 571	0 - 1780	0 - 515	-	-	361 - 705	162 - 412	238 - 440	132 - 392
MG	mmol/l	0.91 - 1.65	0.91 - 1.57		-	-	0.5 - 1.32	0.79 - 1.32	0.79 - 1.16	1.03 - 1.24
NA	mmol/l	139 - 149	140 - 169	130 - 150	143 - 150	138 - 186	140 - 160	135 - 157	149 - 160	-
PHOS	mmol/l	0.81 - 3.16	1.0 - 3.1	1.03 - 6.97	1.61 - 4.19	1.97 - 3.26	2.1 - 3.29	1.61 - 2.29	1.29 - 1.94	1.45 - 2.26
TBIL (Bilirubina Totale)	µmol/l	0 - 1.7	0 - 3.4	0 - 1.7	0 - 10.2	-	0 - 4.3	0 - 5.1	0 - 6.8	0 - 6.8
TBA (Acidi Biliari Totali)**	µmol/l	-	-	-	-	-	-	-	-	-
TC (Colesterolo)**	mmol/l	0.31 - 2.68	2.39 - 7.12	0.31 - 1.69	0.94 - 2.60	-	2.0 - 3.32	1.95 - 3.12	1.17 - 1.95	2.0 - 3.338
TCO2	mmol/l	-	-	-	-	-	-	-	-	-
TP (Proteine Totali)	g/l	59 - 74	54 - 77	44 - 66	64 - 85	50 - 70	0 - 86	60 - 80	55 - 75	65 - 75
TG (Trigliceridi)	mmol/l	0.45 - 3.37	0.49 - 2.82	0.33 - 2.37	-	-	0 - 0.51	0.17 - 0.52	0.06 - 0.34	-
UA	µmol/l	-	-	-	-	-	-	-	-	-

* Produttore
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***Parametro calcolato
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***** Clinical Biochemistry of Domestic Animals, Kaneko et al. 6th ed., Academic Press (2008)

Parametro	Unità Conv.	Pappagallo Cenerino*	Pappagallo Amazzone*	Parrocchetto Ondulato*	Cacatua*	Ara*	Piccione Viaggiatore*	Tartaruga*	Iguana*
A/G ratio***		-	-	-	-	-	-	-	-
ALB	g/dl	1.6 - 3.2	1.9 - 3.5	-	1.8 - 3.1	1.2 - 3.1	1.3 - 2.2	1.3 - 3.0	1.0 - 1.6
ALP	U/l	20 - 160	15 - 150	10 - 80	15 - 255	20 - 230	-	36 - 156	-
ALT	U/l	5 - 12	5 - 11	-	5 - 11	5 - 12	19 - 48	-	-
AMY	U/l	210 - 530	205 - 510	-	-	150 - 550	-	-	-
AST	U/l	100 - 365	130 - 350	145 - 350	145 - 355	100 - 300	45 - 123	14 - 18	-
BUN	mg/dl	3.0 - 5.4	3.1 - 5.3	-	3.0 - 5.1	3.0 - 5.6	2.4 - 4.2	19 - 33	6 - 15
CA	mg/dl	8.5 - 13.0	8.5 - 13.0	6.5 - 11.0	8 - 13	8.5 - 13.0	7.6 - 10.4	10 - 14.5	9.0 - 25.1
CK	U/l	165 - 412	55 - 345	90 - 300	95 - 305	100 - 300	-	-	-
CL	mmol/l	-	-	-	-	-	-	-	-
CREA	mg/dl	0.1 - 0.4	0.1 - 0.4	0.1 - 0.4	0.1 - 0.4	0.1 - 0.5	0.26 - 0.4	0.1 - 0.4	0.1 - 0.7
GGT	U/l	1 - 10	1 - 12	1 - 10	1 - 45	1 - 30	0 - 2.9	5 - 20	-
GLOB***	g/dl	-	-	-	2.5 - 3.8	-	0.6 - 1.3	1.6 - 4.0	-
GLU	mg/dl	190 - 350	190 - 345	190 - 390	185 - 355	145 - 345	232 - 369	-	150 - 280
K	mmol/l	2.9 - 4.6	3.0 - 4.5	2.2 - 3.9	2.5 - 4.5	2 - 5	3.9 - 4.7	-	-
LDH	U/l	-	-	-	-	-	-	-	-
MG	mg/dl	-	-	-	-	-	2.7 - 4.4	-	-
NA	mmol/l	157 - 165	125 - 155	139 - 165	130 - 155	140 - 165	141 - 149	-	-
PHOS	mg/dl	3.2 - 5.4	3.1 - 5.5	3.0 - 5.2	2.5 - 5.5	2 - 12	1.8 - 4.1	-	3.5 - 9.8
TBIL (Bilirubina Totale)	mg/dl	-	-	-	-	-	-	0.1 - 0.6	0.4 - 1.0
TBA (Acidi Biliari Totali)	µmol/l	13 - 90	18 - 60	15 - 70	25 - 87	6 - 35	22 - 60	-	-
TC (Colesterolo)**	mg/dl	160 - 425	180 - 305	145 - 275	145 - 355	100 - 390	-	-	110 - 341
TCO2	mmol/l	13 - 25	13 - 26	14 - 25	14 - 25	14 - 25	-	-	-
TP (Proteine Totali)	g/dl	-	-	-	-	-	2.1 - 3.3	3.0 - 7.0	2.8 - 6.9
TG (Trigliceridi)	mg/dl	-	-	-	-	-	-	-	-
UA	mg/dl	5.0 - 10.0	2.0 - 10.0	5.0 - 14.0	4.0 - 11.0	3.0 - 11.0	3.0 - 13	-	2.0 - 6.0

* Avian Medicine and Surgery, Robert Altmann and Reptile Medicine and Surgery, Douglas Mader, WB, Saunders Company

*** parametro calcolato

Parametro	Unità SI	Pappagallo Cenerino*	Pappagallo Amazzone*	Parrocchetto Ondulato*	Cacatua*	Ara*	Piccione Viaggiatore*	Tartaruga*	Iguana*
A/G ratio***		-	-	-	-	-	-	-	-
ALB	g/l	15.7 - 32.3	19.0 - 35.2	-	18 - 31	12.4 - 31.1	13 - 22	13 - 30	10 - 16
ALP	U/l	20 - 160	15 - 150	10 - 80	15 - 255	20 - 230	-	36 - 156	-
ALT	U/l	5 - 12	5 - 11	-	5 - 11	5 - 12	19 - 48	-	-
AMY	U/l	210 - 530	205 - 510	-	-	150 - 550	-	-	-
AST	U/l	100 - 365	130 - 350	145 - 350	145 - 355	100 - 300	45 - 123	14 - 18	-
BUN	mmol/l	1.07 - 1.92	1.1 - 1.89	-	1.1 - 1.8	1.1 - 2.0	0.9 - 1.5	6.8 - 11.8	2.10 - 5.30
CA	mmol/l	2.13 - 3.25	2.13 - 3.25	1.63 - 2.75	2.0 - 3.25	2.13 - 3.25	1.90 - 2.60	2.50 - 3.63	2.25 - 6.28
CK	U/l	165 - 412	55 - 345	90 - 300	95 - 305	100 - 300	-	-	-
CL	mmol/l	-	-	-	-	-	-	-	-
CREA	µmol/l	8.8 - 35.3	8.8 - 35.3	8.8 - 35.3	8.8 - 35.3	8.8 - 44.20	23.0 - 35.3	8.8 - 35.30	8.80 - 61.80
GGT	U/l	1 - 10	1 - 12	1 - 10	1 - 45	1 - 30	0 - 2.9	5 - 20	-
GLOB***	g/l	-	-	-	25 - 38	-	6 - 13	16 - 40	-
GLU	mmol/l	10.54 - 19.42	10.54 - 19.15	10.54 - 21.64	10.27 - 19.70	8.05 - 19.15	12.87 - 20.48	-	8.32 - 15.54
K	mmol/l	2.9 - 4.6	3.0 - 4.5	2.2 - 3.9	2.5 - 4.5	2 - 5	3.9 - 4.7	-	-
LDH	U/l	-	-	-	-	-	-	-	-
MG	mmol/l	-	-	-	-	-	1.1 - 1.8	-	-
NA	mmol/l	157 - 165	125 - 155	139 - 165	130 - 155	140 - 165	141 - 149	-	-
PHOS	mmol/l	1.03 - 1.74	1.0 - 1.77	0.97 - 1.68	0.81 - 1.77	0.65 - 3.87	0.58 - 1.32	-	1.13 - 3.16
TBIL (Bilirubina Totale)	µmol/l	-	-	-	-	-	-	1.7 - 10.2	6.8 - 17.0
TBA (Acidi Biiari Totali)	µmol/l	13 - 90	18 - 60	15 - 70	25 - 87	6 - 35	22 - 60	-	-
TC (Colesterolo)**	mmol/l	4.16 - 11.04	4.68 - 7.92	3.77 - 7.14	3.77 - 9.22	2.60 - 10.13	-	-	2.86 - 8.86
TCO2	mmol/l	13 - 25	13 - 26	14 - 25	14 - 25	14 - 25	-	-	-
TP (Proteine Totali)	g/l	-	-	-	-	-	21 - 33	30 - 70	28 - 69
TG (Trigliceridi)	mmol/l	-	-	-	-	-	-	-	-
UA	µmol/l	298 - 565	137 - 595	268 - 833	208 - 625	149 - 655	150 - 765	-	89 - 357

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*** parametro calcolato