Measurand	Sample Type	Reference	Health Status	Breed(s)	Subjects (n) Samples Frequency	CV$_I$ (%)	CV$_G$ (%)	CV$_A$ (%) source	II Category	RCV (95%) RCV (99%)	Comments
Albumin	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	3.0	3.9	2.0 duplicate	1.1 Intermediate	9.9 13.1	Siemens Advia 1800, Tukey's outlier test (3 exclusions), normal distribution by residuals plot.
Albumin	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	2.7	9.5	2.9 duplicate	2.4 High	11.0 14.5	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Albumin	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	3.2	5.9	1.4 QCM	1.7 High	9.7 12.7	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Alkaline phosphatase (ALP)	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	12.5	33.7	4.8 duplicate	2.5 High	36.8 48.5	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot
Alkaline phosphatase (ALP)	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	8.6	36.2	4.2 duplicate	3.8 High	26.5 34.9	Abbot Architect c4000 normal distribution by residuals histogram and Q-Q plots.
Alkaline phosphatase (ALP)	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	10.2	27.8	1.6 QCM	2.7 High	28.6 37.7	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Alanine aminotransferase (ALT)	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	13.2	23.0	3.8 duplicate	1.7 High	39.5 65.3 48.4 93.8	Siemens Advia 1800, Tukey's outlier test, normal distribution after log transformation, hence RCV varies for decreasing (above) or increasing (below) values.
Alanine aminotransferase (ALT)	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	8.0	30.0	2.9 duplicate	3.5 High	23.6 31.0	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 outlier cat excluded.
Alanine aminotransferase (ALT)	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	16.1	18.8	1.2 QCM	1.2 Intermediate	44.8 58.9	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Aspartate aminotransferase (AST)	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	14.7	15.0	3.7 duplicate	1.0 Intermediate	41.9 55.2	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot.
Aspartate aminotransferase (AST)	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	11.3	19.8	4.6 duplicate	1.6 Intermediate	33.8 44.5	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 outlier cat excluded.
Aspartate aminotransferase (AST)	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	19.1	16.7	1.4 QCM	0.9 Intermediate	53.1 69.9	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 2 outliers excluded for 1 cat.
Bicarbonate	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	5.4	9.6	5.2 duplicate	1.3 Intermediate	20.7 27.3	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot
Bile Acids	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	129.9	46.5	2.9 duplicate	0.4 Low	160.2 474.1	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 outlier cat excluded. 1 sample exclusion for duplicate variance
Calcium	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	2.3	2.5	1.4 duplicate	0.9 Intermediate	7.6 10.0	Siemens Advia 1800, Tukey's outlier test (9 exclusions), normal distribution by residuals plot
Calcium	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	1.6	1.6	2.8 duplicate	0.5 Low	8.9 11.8	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Calcium	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	2.2	4.7	1.0 QCM	1.9 High	6.7 8.8	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Carbon Dioxide	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	8.1	9.7	4.7 QCM	1.0 Intermediate	26.0 34.2	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Chloride	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	1.2	1.2	1.0 duplicate	0.8 Intermediate	4.2 5.5	Siemens Advia 1800, Tukey's outlier test (9 exclusions), normal distribution by residuals plot.
Chloride	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	0.0	1.2	2.0 duplicate	0.6 Low	8.9 11.8	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Chloride	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	1.0	1.0	0.7 QCM	0.8 Intermediate	6.7 8.8	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Cholesterol	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	10.7	22.4	3.4 duplicate	2.0 High	31.2 41.1	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot
Cholesterol	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	5.1	36.1	3.1 duplicate	6.0 High	8.9 11.8	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Cholesterol	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	5.9	17.1	4.0 QCM	2.4 High	8.7 8.8	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Creatine Kinase (CK)	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	31.0	34.0	3.1 duplicate	1.1 Intermediate	39.3 512.5 48.3 842.7	Siemens Advia 1800, Tukey's outlier test, normal distribution after log transformation, hence RCV varies for decreasing (above) or increasing (below) values.
Creatine Kinase (CK)	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	27.4	36.8	2.9 duplicate	1.3 Intermediate	76.4 100.5	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Creatine Kinase (CK)	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	51.7	47.3	3.1 QCM	0.9 Intermediate	143.6 189.0	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier cat excluded
Creatinine	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	6.0	11.4	1.9 duplicate	1.8 High	17.4 22.9	Siemens Advia 1800, Tukey's outlier test (2 exclusions), normal distribution by residuals plot.
Creatinine	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	10.2	32.5	2.2 duplicate	3.1 High	28.9 38.1	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Creatinine	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	11.3	23.4	1.2 QCM	2.1 High	31.5 41.5	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
γ glutamyl transferase (GGT)	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	0.0	0.0	0.0 duplicate	N/A	0.0 0.0	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot
Globulin	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	4.1	11.3	2.0 duplicate	2.5 High	12.7 16.8	Siemens Advia 1800, Tukey's outlier test (3 exclusions), normal distribution by residuals plot.
Glucose	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	6.8	8.1	2.6 duplicate	1.1 Intermediate	16.9 20.5 25.8 34.8	Siemens Advia 1800, Tukey's outlier test, normal distribution after log transformation, hence RCV varies for decreasing (above) or increasing (below) values.
Glucose	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	7.8	4.0	2.7 duplicate	0.5 Low	22.9 30.1	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 outlier cat excluded.
Glucose	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	12.7	5.9	1.1 QCM	0.5 Low	35.3 46.5	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier cat excluded
Iron	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	23.0	21.5	3.1 QCM	0.9 Intermediate	64.3 84.7	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier cat excluded.
Magnesium	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	3.7	4.0	4.0 duplicate	0.7 Intermediate	15.2 20.0	Siemens Advia 1800, Tukey's outlier test, normal distribution by residuals plot.
Magnesium	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	3.3	3.6	2.5 duplicate	0.9 Intermediate	11.5 15.1	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Magnesium	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	5.1	6.3	1.4 QCM	1.2 Intermediate	14.7 19.3	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Phosphate	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	8.5	11.8	1.6 duplicate	1.4 Intermediate	24.0 31.6	Siemens Advia 1800, Tukey's outlier test (7 exclusions), normal distribution by residuals plot.
Phosphate	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	6.1	11.1	2.4 duplicate	1.7 High	18.2 23.9	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots.
Phosphate	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	9.8	9.3	1.1 QCM	0.9 Intermediate	27.3 36.0	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.
Potassium	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	3.6	4.9	1.8 duplicate	1.2 Intermediate	11.2 14.7	Siemens Advia 1800, Tukey's outlier test (1 exclusion), normal distribution by residuals plot.
Potassium	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	5.2	3.5	1.8 duplicate	0.6 Low	15.3 20.1	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Potassium	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	6.8	5.3	1.1 QCM	0.8 Intermediate	19.1 25.1	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Sodium	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	0.9	0.6	0.9 duplicate	0.5 Low	3.5 4.6	Siemens Advia 1800, Tukey's outlier test (9 exclusions), normal distribution by residuals plot.
Sodium	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	0.0	0.8	1.9 duplicate	0.4 Low	5.3 6.9	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Sodium	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	1.1	0.7	0.7 QCM	0.5 Low	3.6 4.8	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Total bilirubin	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	87.5	94.3	39.8 duplicate	1.0 Intermediate	83.8 518.5 90.9 1000.6	Siemens Advia 1800, Tukey's outlier test, normal distribution after log transformation, hence RCV varies for decreasing (above) or increasing (below) values.
Total protein	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	8.3	14.0	5.4 duplicate	1.4 Intermediate	27.4 36.1	Siemens Advia 1800, Tukey's outlier test (3 exclusions), normal distribution by residuals plot.
Total protein	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	3.5	9.3	2.5 duplicate	2.2 High	11.9 15.7	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Total protein	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	2.9	5.4	1.2 QCM	1.7 Intermediate	8.7 11.5	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots. 1 outlier sample excluded for 1 cat.
Triglycerides	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 6 various	9.9	18.6	2.6 QCM	1.8 High	28.4 37.3	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. All samples from last day excluded since outliers.
Urea	Plasma (heparin)	30	healthy	Domestic shorthair	14 6 weekly	10.4	15.5	1.9 duplicate	1.5 Intermediate	29.4 38.7	Siemens Advia 1800, Tukey's outlier test (1 exclusion), normal distribution by residuals plot.
Urea	Serum	38	healthy	5 x DSH, 1x Balinese 1x Bengal	7 5 weekly	6.3	7.5	3.1 duplicate	1.1 Intermediate	19.5 25.6	Abbot Architect c4000 normal distribution by residuals histogram and QQ plots. 1 sample exclusion for duplicate variance.
Urea	Plasma (heparin)	41	healthy	Laboratory cats bred not specified	14 7 various	11.3	14.6	1.9 QCM	1.3 Intermediate	31.8 41.8	Ortho Clinical Vitros 350 Sampling at days 1, 2, 7, 14, 31, 42, and 100. Normality by Q-Q plots.