

Taxonomy : *Loxodonta africana* / African elephant

Sex Type : All Sex types

Age Grouping : All Ages

Restraint Type : All Restraint types

HEMATOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Global sp RI	Red Blood Cell count (automated)	*10 ⁶ cells/ μ L	2.04 - 3.76	2.74	2.68	0.80	4.71	10716	281	Whole Blood
Global sp RI	Red Blood Cell count (manual)	*10 ⁶ cells/ μ L	2.07 - 4.22	2.96	2.90	1.15	5.00	548	95	Whole Blood
Global sp RI	Hemoglobin (automated)	g/dL	9.8 - 15.6	12.3	12.1	6.3	18.9	11136	296	Whole Blood
Basic Stats	Hemoglobin Distribution Width (automated)	g/dL	N/A - N/A	2.27	2.25	1.69	3.03	25	12	Whole Blood
Global sp RI	Hematocrit (automated)	%	25.0 - 46.0	34.0	33.4	12.6	58.4	10527	273	Whole Blood
Global sp RI	Hematocrit (manual)	%	29.0 - 45.0	36.3	36.0	19.8	54.0	8466	215	Whole Blood
Global sp RI	Mean Corpuscular Volume (reported)	fL	110.0 - 141.0	123.4	123.0	85.6	158.0	6867	219	Whole Blood
Global sp RI	Mean Corpuscular Volume (calculated)	fL	101.1 - 145.3	125.7	126.1	85.4	165.9	4334	183	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin (reported)	pg	37.0 - 58.0	46.3	45.6	26.1	67.2	6195	199	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin (calculated)	pg	36.6 - 51.7	44.0	44.2	29.2	58.6	4651	187	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin Concentration (reported)	g/dL	30.0 - 46.0	37.7	37.2	20.5	54.9	5938	215	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin Concentration (calculated)	g/dL	30.3 - 40.2	35.1	34.8	25.9	44.0	4936	193	Whole Blood
Basic Stats	Erythrocyte cell hemoglobin concentration average (automated)	g/dL	N/A - N/A	36.8	37.2	33.0	40.3	23	12	Whole Blood
Global sp RI	Red Cell Distribution Width (automated)	%	13.2 - 21.0	15.8	15.4	9.0	23.9	4603	121	Whole Blood
Global sp RI	Red Cell Distribution Width - Standard deviation (automated)	fL	69.5 - 84.4	76.2	75.8	65.6	95.3	2209	34	Whole Blood
Global sp RI	Nucleated Red Blood Cells (automated)	/100 WBC	0 - 2	0	0	0	3	483	91	Whole Blood
Global sp RI	Nucleated Red Blood Cells (manual)	/100 WBC	0 - 1	0	0	0	2	1200	49	Whole Blood
Global sp RI	Reticulocyte percentage (automated)	%	0.1 - 0.4	0.3	0.2	0.1	0.6	935	23	Whole Blood
Global sp RI	Reticulocyte percentage (manual)	%	0.0 - 0.7	0.2	0.2	0.0	1.4	124	29	Whole Blood
Global sp RI	Reticulocyte absolute count (automated)	*10 ³ cells/ μ L	3.500 - 12.315	6.950	6.800	0.000	15.300	597	20	Whole Blood
Global sp RI	Corrected Reticulocyte absolute count (reported.automated)	*10 ³ cells/ μ L	2.668 - 11.642	6.804	7.010	2.580	12.270	55	9	Whole Blood
Global sp RI	Erythrocyte sedimentation rate (automated)	mm/hr	22 - 120	75	78	4	145	520	17	Whole Blood
Global sp RI	Platelet count (automated)	*10 ³ cells/ μ L	23 - 979	285	208	-345	1389	7291	241	Whole Blood
Global sp RI	Platelet count (manual)	*10 ³ cells/ μ L	408 - 1789	1047	1035	0	2381	1881	74	Whole Blood
Global sp RI	Platelet Distribution Width (automated)	%	22.3 - 27.3	24.6	24.6	20.5	28.5	2006	31	Whole Blood
Global sp RI	Platelet Distribution Width - Standard Deviation (automated)	fL	4.2 - 6.0	5.1	5.1	3.3	7.1	2595	39	Whole Blood
Global sp RI	Mean Platelet Volume (automated)	fL	4.0 - 7.4	5.7	5.6	3.3	8.5	3502	87	Whole Blood
Global sp RI	White Blood Cell count (automated)	*10 ³ cells/ μ L	5.4 - 15.2	9.4	9.1	0.0	19.5	12101	302	Whole Blood
Global sp RI	White Blood Cell count (direct.manual)	*10 ³ cells/ μ L	5.40 - 20.36	11.49	11.10	2.20	25.00	1777	76	Whole Blood
Global sp RI	White Blood Cell count (indirect.manual)	*10 ³ cells/ μ L	7.04 - 19.45	13.89	13.97	6.71	20.97	95	8	Whole Blood
Global sp RI	White Blood Cell count (direct.Natt-Herrick.manual)	*10 ³ cells/ μ L	5.40 - 16.28	9.66	9.35	0.00	20.70	13962	310	Whole Blood
Global sp RI	Estimated White Blood Cell count (manual)	*10 ³ cells/ μ L	4 - 19	9	8	0	23	738	74	Whole Blood
Basic Stats	Hemocytometer Count for Indirect WBC count (18 chambers.manual)	cells/18 squares	N/A - N/A	105	15	7	536	15	6	Whole Blood
Global sp RI	Lymphocyte absolute count (automated)	*10 ³ cells/ μ L	0.56 - 8.31	3.34	2.89	0.00	12.55	1843	146	Whole Blood

Global sp RI	Lymphocyte absolute count (manual)	*10 ³ cells/ μ L	0.91 - 7.22	3.04	2.70	0.00	9.75	1770	61	Whole Blood
Global sp RI	Lymphocyte absolute count (calculated)	*10 ³ cells/ μ L	0.596 - 8.462	3.388	2.850	0.015	13.547	8000	234	Whole Blood
Global sp RI	Reactive Lymphocytes absolute count (manual)	*10 ³ cells/ μ L	0.03 - 0.46	0.17	0.13	0.00	0.54	81	7	Whole Blood
Global sp RI	Monocyte absolute count (automated)	*10 ³ cells/ μ L	0.050 - 5.910	1.820	0.950	0.000	14.820	1972	134	Whole Blood
Global sp RI	Monocyte absolute count (manual)	*10 ³ cells/ μ L	0.070 - 10.360	4.883	4.800	0.000	13.860	1530	63	Whole Blood
Global sp RI	Monocyte absolute count (calculated)	*10 ³ cells/ μ L	0.087 - 7.026	2.790	2.870	0.000	14.219	7903	234	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (automated)	*10 ³ cells/ μ L	1.08 - 7.39	3.31	2.94	0.00	10.14	1776	125	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (manual)	*10 ³ cells/ μ L	0.95 - 6116.25	1226.30	4.25	0.00	9514.00	894	59	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (calculated)	*10 ³ cells/ μ L	1.196 - 7.024	3.149	2.848	0.012	8.859	5939	227	Whole Blood
Global sp RI	Band form Neutrophil absolute count (automated)	*10 ³ cells/ μ L	0.00 - 1.16	0.23	0.10	0.00	1.56	523	84	Whole Blood
Global sp RI	Band form Neutrophil absolute count (manual)	*10 ³ cells/ μ L	0.00 - 0.53	0.13	0.09	0.00	0.72	469	34	Whole Blood
Global sp RI	Band form Neutrophil absolute count (calculated)	*10 ³ cells/ μ L	0.000 - 1.681	0.325	0.130	0.000	2.020	2062	161	Whole Blood
Global sp RI	Heterophil absolute count (manual)	*10 ³ cells/ μ L	1.000 - 5.378	2.748	2.600	0.100	6.900	897	29	Whole Blood
Global sp RI	Heterophil absolute count (calculated)	*10 ³ cells/ μ L	0.920 - 4.183	2.138	2.021	0.364	5.465	1767	24	Whole Blood
Global sp RI	Immature heterophil absolute count (reported)	*10 ³ cells/ μ L	0.000 - 0.000	0.004	0.000	0.000	1.000	1101	10	Whole Blood
Global sp RI	Eosinophil absolute count (automated)	*10 ³ cells/ μ L	0.000 - 3.361	0.806	0.120	0.000	6.468	1874	128	Whole Blood
Global sp RI	Eosinophil absolute count (manual)	*10 ³ cells/ μ L	0.000 - 0.480	0.136	0.103	0.000	0.650	1386	62	Whole Blood
Global sp RI	Eosinophil absolute count (calculated)	*10 ³ cells/ μ L	0.000 - 0.440	0.134	0.103	0.000	0.570	5675	215	Whole Blood
Global sp RI	Basophil absolute count (automated)	*10 ³ cells/ μ L	0.000 - 0.100	0.010	0.000	0.000	0.200	2057	131	Whole Blood
Global sp RI	Basophil absolute count (manual)	*10 ³ cells/ μ L	0.000 - 0.400	0.096	0.060	0.000	0.600	1241	56	Whole Blood
Global sp RI	Basophil absolute count (calculated)	*10 ³ cells/ μ L	0.000 - 0.298	0.069	0.060	0.000	0.432	2955	161	Whole Blood
Global sp RI	Lymphocyte percentage (automated)	%	9.3 - 73.0	33.7	30.0	1.0	90.3	2417	165	Whole Blood
Global sp RI	Lymphocyte percentage (manual)	%	7.0 - 72.0	33.2	29.0	0.0	93.0	12817	265	Whole Blood
Global sp RI	Reactive Lymphocytes percentage (manual)	%	0.5 - 4.1	1.5	1.0	0.5	5.0	109	14	Whole Blood
Global sp RI	Monocyte percentage (automated)	%	0.6 - 58.0	18.5	9.9	0.0	81.0	2434	164	Whole Blood
Global sp RI	Monocyte percentage (manual)	%	1.0 - 67.0	33.2	38.0	0.0	91.0	12641	261	Whole Blood
Basic Stats	Azurophil percentage (manual)	%	N/A - N/A	1.6	0.0	0.0	36.0	23	11	Whole Blood
Global sp RI	Segmented Neutrophil percentage (automated)	%	10.0 - 80.5	36.4	33.4	0.4	90.6	2506	162	Whole Blood
Global sp RI	Segmented Neutrophil percentage (manual)	%	13.0 - 63.0	32.1	30.0	0.0	80.0	8684	251	Whole Blood
Global sp RI	Band form Neutrophil percentage (automated)	%	0.0 - 10.0	1.3	0.0	0.0	16.0	525	108	Whole Blood
Global sp RI	Band form Neutrophil percentage (manual)	%	0.0 - 6.0	1.0	0.0	0.0	8.0	5404	217	Whole Blood
Global sp RI	Heterophil percentage (automated)	%	13.0 - 43.0	25.5	25.0	0.0	60.0	3319	71	Whole Blood
Global sp RI	Heterophil percentage (manual)	%	13.0 - 43.0	25.5	25.0	0.0	60.0	3283	66	Whole Blood
Global sp RI	Immature heterophil percentage (manual)	%	0.0 - 0.0	0.0	0.0	0.0	5.0	1193	14	Whole Blood
Global sp RI	Eosinophil percentage (automated)	%	0.0 - 36.9	10.5	2.0	0.0	55.9	2272	160	Whole Blood
Global sp RI	Eosinophil percentage (manual)	%	0.0 - 5.0	1.3	1.0	0.0	8.0	10656	255	Whole Blood
Global sp RI	Basophil percentage (automated)	%	0.0 - 1.0	0.1	0.0	0.0	1.6	2127	155	Whole Blood
Global sp RI	Basophil percentage (manual)	%	0.0 - 3.0	0.5	0.0	0.0	4.0	8300	230	Whole Blood

TOXICOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	N/A - N/A	99	99	64	120	16	10	Serum or plasma
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	N/A - N/A	99	99	64	120	16	10	Serum
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.50 - 3.50	1.41	1.20	0.50	5.00	119	48	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.50 - 3.52	1.42	1.20	0.50	5.00	117	48	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.22 - 2.32	0.76	0.59	0.15	2.93	177	55	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.22 - 2.32	0.76	0.59	0.15	2.93	177	55	Serum or plasma
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.56 - 35.81	9.83	6.70	0.80	43.70	185	58	Serum
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.58 - 35.68	9.88	6.80	0.80	43.70	191	58	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µg/dL	N/A - N/A	95.32	95.50	85.00	110.00	16	10	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	68.70 - 122.45	94.28	94.00	52.00	136.00	193	63	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	68.70 - 122.45	94.28	94.00	52.00	136.00	193	63	Serum
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.73 - 1.55	1.04	1.00	0.69	1.71	151	60	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.73 - 1.55	1.04	1.00	0.69	1.71	151	60	Serum
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/ml	N/A - N/A	1.08	1.00	0.82	1.50	15	10	Serum or plasma
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/ml	N/A - N/A	1.08	1.00	0.82	1.50	15	10	Serum
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	68 - 136	109	110	45	152	265	65	Serum
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	68 - 136	109	110	45	152	271	65	Serum or plasma

CHEMISTRY/FLUID ANALYSIS										
Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Symmetric dimethylarginine (high precision liquid chromatography - mass spectrometry)	µg/dL	N/A - N/A	6.2	6.0	1.0	13.0	18	10	Serum or plasma
Basic Stats	Gamma Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	16.7	14.5	6.3	29.5	35	13	Serum
Global sp RI	Beta-1 Globulin (capillary zone electrophoresis)	g/dL	0.45 - 1.13	0.72	0.70	0.35	1.14	64	28	Serum or plasma
Global sp RI	Albumin (capillary zone electrophoresis)	g/dL	1.87 - 3.98	3.19	3.12	1.79	4.08	79	29	Serum or plasma
Global sp RI	Combined Beta Globulin (capillary zone electrophoresis)	g/dL	0.74 - 2.83	1.65	1.62	0.72	3.19	58	28	Serum
Basic Stats	Phosphorus (fluid.inductively coupled plasma - atomic emission spectrometry)	mg/dL	N/A - N/A	4.5	4.4	3.1	5.8	23	11	Serum or plasma
Basic Stats	Alpha-1 Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	2.5	2.0	0.7	4.6	32	13	Serum or plasma
Basic Stats	Alpha-2 Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	1.25	1.19	0.90	1.80	23	3	Plasma
Basic Stats	Albumin (capillary zone electrophoresis)	g/dL	N/A - N/A	3.07	2.99	2.68	3.68	23	3	Plasma
Global sp RI	25-hydroxycholecalciferol (fluid.liquid chromatography - tandem mass spectrometry)	ng/mL	2 - 17	8	7	1	17	68	16	Serum
Basic Stats	Phosphorus (fluid.inductively coupled plasma - atomic emission spectrometry)	mg/dL	N/A - N/A	4.5	4.4	3.1	5.8	23	11	Serum
Basic Stats	Symmetric dimethylarginine (high precision liquid chromatography - mass spectrometry)	µg/dL	N/A - N/A	6.2	6.0	1.0	13.0	18	10	Serum
Global sp RI	Combined Beta Globulin (capillary zone electrophoresis)	g/dL	0.78 - 2.44	1.66	1.67	0.72	3.19	81	29	Serum or plasma
Basic Stats	Magnesium (fluid.inductively coupled plasma - atomic emission spectrometry)	mg/dL	N/A - N/A	2.75	2.80	2.20	3.41	29	15	Serum
Basic Stats	Alpha-1 Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	2.5	2.0	0.7	4.6	32	13	Serum
Global sp RI	Creatinine (dry chemistry)	mg/dL	0.8 - 1.6	1.2	1.2	0.7	1.7	190	35	Serum
Basic Stats	Sodium (fluid.inductively coupled plasma - atomic emission spectrometry)	mEq/L	N/A - N/A	129	129	120	141	26	9	Serum or plasma
Basic Stats	Combined Beta Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	20.2	21.1	9.2	29.8	35	13	Serum or plasma

Basic Stats	Combined Beta Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	1.67	1.69	1.18	2.06	23	3	Plasma
Basic Stats	Magnesium (fluid.inductively coupled plasma - atomic emission spectrometry)	mg/dL	N/A - N/A	2.75	2.80	2.20	3.41	29	15	Serum or plasma
Basic Stats	Albumin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	45.0	45.8	34.5	57.5	35	13	Serum
Global sp RI	Alpha-2 Globulin (capillary zone electrophoresis)	g/dL	0.76 - 1.64	1.13	1.10	0.47	1.80	81	29	Serum or plasma
Global sp RI	Symmetric dimethylarginine (ELISA)	µg/dL	2.0 - 9.9	5.1	5.0	2.0	10.0	40	15	Serum
Global sp RI	Iron (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	24 - 139	74	71	2	174	620	122	Serum
Basic Stats	Gamma Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	16.7	14.5	6.3	29.5	35	13	Serum or plasma
Global sp RI	Albumin (capillary zone electrophoresis)	g/dL	1.82 - 4.04	3.23	3.23	1.79	4.08	56	28	Serum
Global sp RI	25-hydroxycholecalciferol (fluid.liquid chromatography - tandem mass spectrometry)	ng/mL	2 - 17	8	7	1	17	68	16	Serum or plasma
Global sp RI	Alpha-2 Globulin (capillary zone electrophoresis)	g/dL	0.61 - 1.57	1.08	1.07	0.47	1.64	58	28	Serum
Global sp RI	Alpha-1 Globulin (capillary zone electrophoresis)	g/dL	0.05 - 0.37	0.16	0.13	0.04	0.37	78	29	Serum or plasma
Basic Stats	Beta-2 Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	0.98	0.96	0.67	1.27	23	3	Plasma
Basic Stats	Alpha-1 Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	0.13	0.14	0.04	0.18	22	3	Plasma
Global sp RI	Beta-2 Globulin (capillary zone electrophoresis)	g/dL	0.42 - 1.55	0.95	0.92	0.42	1.56	40	26	Serum
Global sp RI	Iron (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	24 - 138	74	71	2	174	626	122	Serum or plasma
Global sp RI	Gamma Globulin (capillary zone electrophoresis)	g/dL	0.44 - 2.41	1.20	1.15	0.40	2.48	57	28	Serum
Global sp RI	Pre-Albumin (capillary zone electrophoresis)	g/dL	0.10 - 0.50	0.33	0.35	0.09	0.51	59	26	Serum or plasma
Basic Stats	Gamma Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	1.19	1.26	0.64	1.50	23	3	Plasma
Basic Stats	Pre-Albumin (capillary zone electrophoresis)	g/dL	N/A - N/A	0.40	0.41	0.30	0.51	23	3	Plasma
Basic Stats	Alpha-2 Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	13.3	13.4	6.4	16.4	34	12	Serum
Basic Stats	Beta-1 Globulin (capillary zone electrophoresis)	g/dL	N/A - N/A	0.69	0.69	0.51	0.81	24	4	Plasma
Basic Stats	Pre-Albumin (capillary zone electrophoresis)	g/dL	N/A - N/A	0.28	0.29	0.09	0.42	36	25	Serum
Basic Stats	Alpha-2 Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	13.3	13.4	6.4	16.4	34	12	Serum or plasma
Global sp RI	Lipase (DGGR ester.colorimetry.automated)	U/L	4 - 8	5	5	3	9	91	13	Serum
Basic Stats	Beta-1 Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	9.2	9.1	6.2	13.0	17	7	Serum or plasma
Basic Stats	Albumin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	45.0	45.8	34.5	57.5	35	13	Serum or plasma
Global sp RI	Alpha-1 Globulin (capillary zone electrophoresis)	g/dL	0.05 - 0.37	0.17	0.13	0.05	0.37	55	28	Serum
Global sp RI	Beta-2 Globulin (capillary zone electrophoresis)	g/dL	0.46 - 1.43	0.96	0.95	0.42	1.56	63	27	Serum or plasma
Global sp RI	Lipase (DGGR ester.colorimetry.automated)	U/L	4 - 8	5	5	3	9	92	14	Serum or plasma
Basic Stats	Beta-2 Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	13.9	13.2	1.9	20.3	17	7	Serum or plasma
Global sp RI	Symmetric dimethylarginine (ELISA)	µg/dL	2.0 - 9.9	5.1	5.0	2.0	10.0	40	15	Serum or plasma
Global sp RI	Creatinine (dry chemistry)	mg/dL	0.8 - 1.6	1.2	1.2	0.7	1.7	193	35	Serum or plasma
Global sp RI	Beta-1 Globulin (capillary zone electrophoresis)	g/dL	0.36 - 1.61	0.76	0.73	0.35	1.63	41	27	Serum
Global sp RI	Gamma Globulin (capillary zone electrophoresis)	g/dL	0.48 - 2.33	1.20	1.16	0.40	2.48	80	29	Serum or plasma
Basic Stats	Sodium (fluid.inductively coupled plasma - atomic emission spectrometry)	mEq/L	N/A - N/A	129	129	120	141	26	9	Serum
Basic Stats	Combined Beta Globulin (capillary zone electrophoresis.percentage of total protein)	%	N/A - N/A	20.2	21.1	9.2	29.8	35	13	Serum
Global sp RI	Sodium (automated)	mEq/L	119 - 137	130	131	113	143	612	64	Plasma
Global sp RI	Sodium (automated)	mEq/L	116 - 137	128	128	114	139	94	54	Whole Blood
Global sp RI	Sodium (automated)	mEq/L	118 - 138	129	129	108	150	7572	273	Serum
Global sp RI	Potassium (automated)	mEq/L	3.9 - 5.8	4.8	4.7	3.0	6.5	7515	272	Serum
Global sp RI	Potassium (automated)	mEq/L	3.4 - 5.5	4.5	4.5	3.2	5.8	95	54	Whole Blood

Global sp RI	Potassium (automated)	mEq/L	3.5 - 5.8	4.5	4.5	2.5	6.5	616	64	Plasma
Global sp RI	Sodium:Potassium ratio (reported)	ratio	22.0 - 34.0	27.6	28.0	18.0	38.0	1142	103	Serum
Global sp RI	Sodium:Potassium ratio (reported)	ratio	24.1 - 38.0	30.6	31.0	23.0	43.0	161	19	Plasma
Global sp RI	Sodium:Potassium ratio (calculated)	ratio	23.8 - 33.3	29.0	28.9	21.5	34.1	241	20	Plasma
Global sp RI	Sodium:Potassium ratio (calculated)	ratio	21.8 - 31.8	27.1	27.2	16.7	37.4	4898	168	Serum
Global sp RI	Chloride (automated)	mEq/L	74 - 102	90	91	74	103	56	35	Whole Blood
Global sp RI	Chloride (automated)	mEq/L	79 - 97	89	88	71	106	6245	248	Serum
Global sp RI	Chloride (automated)	mEq/L	84 - 98	92	92	76	102	432	46	Plasma
Global sp RI	Total Carbon Dioxide (automated)	mEq/L	22.2 - 32.0	27.7	28.0	21.0	32.0	138	29	Plasma
Global sp RI	Total Carbon Dioxide (automated)	mEq/L	18.0 - 31.0	25.0	25.0	12.0	36.0	2578	170	Serum
Global sp RI	Total Carbon Dioxide (automated)	mEq/L	19.4 - 33.0	28.4	29.0	19.0	38.0	96	38	Whole Blood
Global sp RI	Anion Gap (reported)	mEq/L	11.0 - 25.0	17.7	18.0	3.0	35.0	1044	90	Serum or plasma
Global sp RI	Anion Gap (reported)	mEq/L	11.0 - 25.0	17.7	17.9	3.0	35.0	1036	88	Serum
Basic Stats	Anion Gap (reported)	mEq/L	N/A - N/A	16.1	17.0	7.5	27.0	30	17	Whole Blood
Global sp RI	Anion Gap (calculated.Na.Cl.HCO3)	mEq/L	8 - 19	15	15	8	19	45	13	Serum
Global sp RI	Anion Gap (calculated.Na.Cl.HCO3)	mEq/L	8 - 19	15	15	8	19	45	13	Serum or plasma
Global sp RI	Calcium (colorimetry.automated)	mg/dL	9.5 - 12.5	10.9	10.8	8.3	13.6	677	76	Plasma
Global sp RI	Calcium (colorimetry.automated)	mg/dL	9.6 - 12.3	10.9	10.8	7.8	13.9	8569	279	Serum
Global sp RI	Calcium (colorimetry.automated)	mg/dL	10.1 - 13.8	11.2	11.0	10.1	14.0	48	28	Whole Blood
Global sp RI	Calcium (fluid.inductively coupled plasma mass spectrometry)	ppm	96.2 - 123.2	108.8	108.2	78.2	139.3	8574	279	Serum
Global sp RI	Calcium (fluid.inductively coupled plasma mass spectrometry)	ppm	95.7 - 123.2	108.8	108.2	78.2	139.3	9251	286	Serum or plasma
Global sp RI	Phosphorus (colorimetry.automated)	mg/dL	3.3 - 7.0	5.2	5.1	1.9	8.3	560	68	Plasma
Global sp RI	Phosphorus (colorimetry.automated)	mg/dL	3.3 - 7.1	4.9	4.9	0.8	9.1	7348	285	Serum
Global sp RI	Phosphorus (colorimetry.automated)	mg/dL	3.1 - 7.4	4.8	4.6	3.1	7.5	43	23	Whole Blood
Global sp RI	Calcium:Phosphorus ratio (reported)	ratio (US)	1.9 - 4.7	2.9	2.8	1.7	5.4	187	48	Serum
Global sp RI	Calcium:Phosphorus ratio (reported)	ratio (US)	1.9 - 4.7	2.9	2.8	1.7	5.4	196	52	Serum or plasma
Global sp RI	Calcium:Phosphorus ratio (calculated)	ratio (US)	1.8 - 3.5	2.7	2.7	1.6	3.7	249	23	Plasma
Global sp RI	Calcium:Phosphorus ratio (calculated)	ratio (US)	1.8 - 4.3	2.9	2.8	0.1	5.6	4816	175	Serum
Basic Stats	Ionized Calcium (automated)	mg/dL	N/A - N/A	4.29	5.00	1.18	10.70	37	22	Whole Blood
Global sp RI	Ionized Calcium (automated)	mg/dL	0.81 - 11.30	4.48	5.22	0.70	11.90	100	34	Serum or plasma
Global sp RI	Ionized Calcium (automated)	mg/dL	0.81 - 11.32	4.53	5.24	0.70	11.90	94	33	Serum
Global sp RI	Magnesium (automated)	mg/dL	2.13 - 3.46	2.69	2.64	1.30	3.80	107	26	Plasma
Global sp RI	Magnesium (automated)	mg/dL	1.14 - 3.28	2.49	2.52	0.82	4.20	2412	198	Serum
Global sp RI	Glucose (colorimetry.automated)	mg/dL	57 - 124	88	88	36	144	635	73	Plasma
Global sp RI	Glucose (colorimetry.automated)	mg/dL	55 - 115	84	84	29	144	7862	270	Serum
Global sp RI	Glucose (colorimetry.automated)	mg/dL	54 - 132	89	87	48	139	97	55	Whole Blood
Global sp RI	Urea Nitrogen (colorimetry.automated)	mg/dL	1.3 - 15.8	7.2	7.0	1.1	17.0	65	39	Whole Blood
Global sp RI	Urea Nitrogen (colorimetry.automated)	mg/dL	2.0 - 11.5	6.3	6.0	1.0	17.0	616	78	Plasma
Global sp RI	Urea Nitrogen (colorimetry.automated)	mg/dL	2.0 - 15.5	8.4	8.0	0.0	22.1	8220	279	Serum
Global sp RI	Creatinine (automated)	mg/dL	0.7 - 2.1	1.3	1.3	0.0	2.7	7615	283	Serum
Global sp RI	Creatinine (automated)	mg/dL	0.8 - 2.1	1.4	1.3	0.7	2.3	72	44	Whole Blood
Global sp RI	Creatinine (automated)	mg/dL	0.7 - 1.9	1.2	1.2	0.4	2.2	636	74	Plasma
Global sp RI	Urea Nitrogen:Creatinine ratio (reported)	ratio (US)	0.2 - 3.9	1.0	0.5	0.1	5.9	67	21	Plasma
Global sp RI	Urea Nitrogen:Creatinine ratio (reported)	ratio (US)	0.5 - 3.7	1.7	1.5	0.0	5.0	2179	157	Serum
Global sp RI	Urea Nitrogen:Creatinine ratio (calculated)	ratio (US)	1.8 - 13.6	6.7	6.4	0.0	20.1	5566	182	Serum
Global sp RI	Urea Nitrogen:Creatinine ratio (calculated)	ratio (US)	1.8 - 10.6	5.4	5.0	0.8	13.6	248	29	Plasma
Global sp RI	Uric Acid (automated)	mg/dL	0.0 - 0.9	0.2	0.2	0.0	1.1	536	79	Serum
Global sp RI	Uric Acid (automated)	mg/dL	0.0 - 0.9	0.2	0.2	0.0	1.1	538	79	Serum or plasma
Global sp RI	Alanine Aminotransferase (automated)	U/L	0 - 23	7	5	0	28	3769	248	Serum
Global sp RI	Alanine Aminotransferase (automated)	U/L	3 - 28	12	10	0	29	189	44	Plasma
Global sp RI	Aspartate Aminotransferase (automated)	U/L	9 - 38	19	18	0	50	7408	272	Serum
Global sp RI	Aspartate Aminotransferase (automated)	U/L	7 - 49	24	23	0	61	596	65	Plasma
Basic Stats	Aspartate Aminotransferase (automated)	U/L	N/A - N/A	18	17	1	32	34	24	Whole Blood

Global sp RI	Lactate Dehydrogenase (automated)	U/L	334 - 1890	1048	1116	70	2224	405	35	Plasma
Basic Stats	Lactate Dehydrogenase (automated)	U/L	N/A - N/A	684	535	329	1428	18	10	Whole Blood
Global sp RI	Lactate Dehydrogenase (automated)	U/L	271 - 1963	859	661	11	3688	2825	206	Serum
Global sp RI	Sorbitol Dehydrogenase (automated)	U/L	0.4 - 22.3	8.2	7.7	0.0	26.1	93	16	Serum
Global sp RI	Sorbitol Dehydrogenase (automated)	U/L	0.5 - 22.2	8.0	7.7	0.0	26.1	95	17	Serum or plasma
Global sp RI	Glutamate Dehydrogenase (automated)	U/L	0.0 - 4.0	1.1	1.0	0.0	4.0	80	30	Serum or plasma
Global sp RI	Glutamate Dehydrogenase (automated)	U/L	0.0 - 4.0	1.1	1.0	0.0	4.0	80	30	Serum
Global sp RI	Alkaline Phosphatase (automated)	U/L	33 - 228	94	81	0	286	7898	279	Serum
Global sp RI	Alkaline Phosphatase (automated)	U/L	14 - 342	100	71	8	354	50	28	Whole Blood
Global sp RI	Alkaline Phosphatase (automated)	U/L	37 - 407	129	76	4	530	546	68	Plasma
Global sp RI	Gamma Glutamyltransferase (colorimetry.automated)	U/L	1 - 18	10	10	0	24	5533	259	Serum
Global sp RI	Gamma Glutamyltransferase (colorimetry.automated)	U/L	0 - 17	7	8	0	34	542	63	Plasma
Global sp RI	Amylase (automated)	U/L	257 - 637	398	386	127	688	208	17	Plasma
Global sp RI	Amylase (automated)	U/L	0 - 12386	3289	1308	0	20623	2493	185	Serum
Global sp RI	Lipase (automated)	U/L	0 - 42	10	6	0	59	941	144	Serum or plasma
Global sp RI	Lipase (automated)	U/L	0 - 44	11	6	0	63	935	140	Serum
Global sp RI	Creatine Kinase (automated)	U/L	113 - 644	263	219	19	798	586	61	Plasma
Basic Stats	Creatine Kinase (automated)	U/L	N/A - N/A	270	254	96	578	31	21	Whole Blood
Global sp RI	Creatine Kinase (automated)	U/L	89 - 504	223	198	0	663	5817	247	Serum
Basic Stats	Cardiac Troponin I (chemiluminescence immunoassay)	ng/mL	N/A - N/A	0.0	0.0	0.0	0.0	17	12	Serum or plasma
Basic Stats	Cardiac Troponin I (chemiluminescence immunoassay)	ng/mL	N/A - N/A	0.0	0.0	0.0	0.0	15	10	Serum
Global sp RI	Total Bilirubin (automated)	mg/dL	0.1 - 0.6	0.2	0.2	0.0	0.6	452	66	Plasma
Global sp RI	Total Bilirubin (automated)	mg/dL	0.1 - 0.5	0.2	0.2	-0.1	0.9	7004	270	Serum
Global sp RI	Total Bilirubin (automated)	mg/dL	0.1 - 0.4	0.2	0.2	0.1	0.4	49	28	Whole Blood
Global sp RI	Direct Bilirubin (automated)	mg/dL	0.0 - 0.3	0.1	0.1	0.0	0.4	1036	141	Serum or plasma
Global sp RI	Direct Bilirubin (automated)	mg/dL	0.0 - 0.3	0.1	0.1	0.0	0.4	1027	138	Serum
Global sp RI	Indirect Bilirubin (reported)	mg/dL	0.0 - 0.3	0.1	0.1	0.0	0.4	390	70	Serum
Global sp RI	Indirect Bilirubin (reported)	mg/dL	0.0 - 0.3	0.1	0.1	0.0	0.4	392	70	Serum or plasma
Basic Stats	Total Bile Acids (random.colorimetry)	µg/ml	N/A - N/A	4.8	3.0	0.3	12.5	32	18	Serum
Basic Stats	Total Bile Acids (random.colorimetry)	µg/ml	N/A - N/A	4.8	3.1	0.3	12.5	34	19	Serum or plasma
Global sp RI	Total Protein (colorimetry.automated)	g/dL	6.5 - 9.0	7.7	7.8	4.8	9.8	2138	88	Plasma
Global sp RI	Total Protein (colorimetry.automated)	g/dL	6.4 - 8.9	7.7	7.7	5.1	10.2	8038	283	Serum
Global sp RI	Total Protein (refractometer.manual)	g/dL	6.4 - 9.2	7.6	7.5	5.0	10.5	3683	121	Serum
Global sp RI	Total Protein (refractometer.manual)	g/dL	6.5 - 9.1	7.6	7.6	4.8	10.4	2648	110	Plasma
Global sp RI	Albumin (bromocresol green.automated)	g/dL	2.4 - 3.7	3.1	3.1	2.0	4.0	295	61	Serum
Global sp RI	Albumin (bromocresol green.automated)	g/dL	2.0 - 4.3	3.2	3.2	1.9	4.4	68	29	Plasma
Global sp RI	Albumin (immunoassay)	g/dL	2.0 - 4.3	3.2	3.2	1.9	4.4	68	29	Plasma
Global sp RI	Albumin (immunoassay)	g/dL	2.3 - 5.4	4.0	3.8	1.8	5.5	67	24	Serum
Global sp RI	Globulin (reported)	g/dL	2.0 - 6.5	4.5	4.6	1.0	8.1	6359	232	Serum
Global sp RI	Globulin (reported)	g/dL	2.4 - 6.5	4.3	4.5	1.2	7.9	639	68	Plasma
Global sp RI	Globulin (calculated)	g/dL	2.7 - 6.6	4.4	4.4	1.7	7.5	239	48	Serum or plasma
Global sp RI	Globulin (calculated)	g/dL	2.7 - 6.3	4.3	4.4	1.7	6.7	223	44	Serum
Global sp RI	Albumin:Globulin ratio (reported)	ratio	0.0 - 1.1	0.6	0.6	0.0	1.3	2983	187	Serum
Global sp RI	Albumin:Globulin ratio (reported)	ratio	0.5 - 1.1	0.8	0.7	0.4	1.3	144	35	Plasma
Global sp RI	Albumin:Globulin ratio (calculated)	ratio	0.5 - 0.9	0.7	0.7	0.4	0.9	401	39	Serum or plasma
Global sp RI	Albumin:Globulin ratio (calculated)	ratio	0.5 - 0.9	0.7	0.7	0.4	0.9	394	39	Serum
Global sp RI	Fibrinogen (turbidimetry.automated)	mg/dL	50 - 600	283	295	0	840	993	84	Plasma
Global sp RI	Fibrinogen (turbidimetry.automated)	mg/dL	50 - 600	283	295	0	840	993	84	Serum or plasma
Basic Stats	Fibrinogen (ELISA)	mg/dL	N/A - N/A	330	316	200	500	18	13	Plasma
Basic Stats	Fibrinogen (ELISA)	mg/dL	N/A - N/A	330	316	200	500	18	13	Serum or plasma

Global sp RI	Fibrinogen (heat precipitation.automated)	mg/dL	0 - 1300	418	395	0	1800	216	31	Serum or plasma
Global sp RI	Fibrinogen (heat precipitation.automated)	mg/dL	0 - 1300	418	395	0	1800	216	31	Plasma
Global sp RI	Fibrinogen (heat precipitation.manual)	mg/dL	100 - 500	307	300	60	621	535	29	Serum or plasma
Global sp RI	Fibrinogen (heat precipitation.manual)	mg/dL	100 - 500	307	300	60	621	535	29	Plasma
Global sp RI	Fibrinogen (mechanical coagulation.automated)	mg/dL	152 - 385	240	234	106	400	112	17	Plasma
Global sp RI	Fibrinogen (mechanical coagulation.automated)	mg/dL	152 - 385	240	234	106	400	112	17	Serum or plasma
Global sp RI	C-reactive Protein (automated.immunoturbidity)	mg/dL	0.0 - 8.2	2.1	1.5	0.0	8.3	43	20	Serum
Global sp RI	C-reactive Protein (automated.immunoturbidity)	mg/dL	0.0 - 9.1	2.4	1.7	0.0	9.4	50	20	Serum or plasma
Global sp RI	Serum Amyloid A (immunoturbidity)	µg/ml	0.0 - 74.8	9.1	2.3	0.0	81.6	121	36	Serum
Global sp RI	Serum Amyloid A (immunoturbidity)	µg/ml	0.0 - 104.9	14.0	2.4	0.0	114.9	135	41	Serum or plasma
Global sp RI	Haptoglobin (colorimetry.automated)	mg/ml	0.06 - 2.19	0.88	0.73	0.01	3.65	336	64	Serum
Basic Stats	Haptoglobin (colorimetry.automated)	mg/ml	N/A - N/A	1.38	1.13	0.23	3.05	34	15	Plasma
Global sp RI	Haptoglobin (colorimetry.automated)	mg/ml	0.07 - 2.43	0.92	0.75	0.01	3.65	370	66	Serum or plasma
Global sp RI	Iron (automated)	µg/dL	21 - 137	72	70	2	174	489	83	Serum
Global sp RI	Iron (automated)	µg/dL	22 - 136	72	70	2	174	495	85	Serum or plasma
Global sp RI	Iron (fluid.inductively coupled plasma mass spectrometry)	µg/dL	47 - 143	84	78	41	158	116	52	Serum
Global sp RI	Iron (fluid.inductively coupled plasma mass spectrometry)	µg/dL	47 - 143	84	78	41	158	116	52	Serum or plasma
Global sp RI	Total Iron-Binding Capacity (automated)	µg/dL	132 - 237	174	170	129	240	72	11	Serum
Global sp RI	Total Iron-Binding Capacity (automated)	µg/dL	132 - 237	174	170	129	240	72	11	Serum or plasma
Basic Stats	Prothrombin Time (automated)	sec.	N/A - N/A	11	10	7	15	35	11	Plasma
Basic Stats	Prothrombin Time (automated)	sec.	N/A - N/A	11	10	7	15	35	11	Serum or plasma
Basic Stats	Partial Thromboplastin Time (automated)	sec.	N/A - N/A	16	16	13	20	25	12	Plasma
Basic Stats	Partial Thromboplastin Time (automated)	sec.	N/A - N/A	16	16	13	20	25	12	Serum or plasma
Basic Stats	Quantitative D-dimer (immunoturbidity)	ng/mL	N/A - N/A	56	41	19	122	15	14	Plasma
Basic Stats	Quantitative D-dimer (immunoturbidity)	ng/mL	N/A - N/A	56	41	19	122	15	14	Serum or plasma
Global sp RI	Specific Gravity (fluid.random.refractometer.manual)	ratio	1.002 - 1.041	1.018	1.017	1.000	1.070	625	68	Urine
Global sp RI	Lactate (automated)	mmol/L	0.8 - 4.7	2.1	2.1	0.8	4.8	44	15	Whole Blood
Global sp RI	Osmolality (reported)	mOsmol/kg	228 - 270	251	253	218	285	256	17	Serum
Global sp RI	Osmolality (reported)	mOsmol/kg	230 - 269	253	254	228	269	47	6	Plasma
Global sp RI	Osmolality (freezing point depression.automated)	mOsmol/kg	239 - 275	256	256	227	287	726	74	Serum
Global sp RI	Osmolality (freezing point depression.automated)	mOsmol/kg	239 - 275	257	256	227	287	734	74	Serum or plasma
Global sp RI	Osmolarity (reported)	mOsmol/L	239 - 271	255	254	227	282	501	31	Serum or plasma
Global sp RI	Osmolarity (reported)	mOsmol/L	239 - 271	255	254	227	282	501	31	Serum
Global sp RI	Pre-Albumin (electrophoresis)	g/dL	0.00 - 0.44	0.14	0.15	0.00	0.45	49	20	Plasma
Global sp RI	Pre-Albumin (electrophoresis)	g/dL	0.00 - 0.45	0.15	0.05	0.00	0.51	232	57	Serum
Global sp RI	Albumin (electrophoresis)	g/dL	2.39 - 4.39	3.42	3.48	1.39	5.00	474	84	Serum
Global sp RI	Albumin (electrophoresis)	g/dL	2.15 - 4.38	3.22	3.21	2.04	4.44	50	22	Plasma
Global sp RI	Alpha-1 Globulin (electrophoresis)	g/dL	0.07 - 1.00	0.42	0.21	0.00	1.20	480	86	Serum
Global sp RI	Alpha-1 Globulin (electrophoresis)	g/dL	0.05 - 0.79	0.37	0.20	0.04	0.79	53	23	Plasma
Global sp RI	Alpha-2 Globulin (electrophoresis)	g/dL	0.20 - 1.30	0.81	0.80	0.05	1.60	484	84	Serum
Global sp RI	Alpha-2 Globulin (electrophoresis)	g/dL	0.15 - 1.30	0.81	0.79	0.06	1.31	53	23	Plasma
Global sp RI	Beta-1 Globulin (electrophoresis)	g/dL	0.12 - 1.72	0.87	0.82	0.04	2.17	211	57	Serum or plasma
Global sp RI	Beta-1 Globulin (electrophoresis)	g/dL	0.12 - 1.70	0.87	0.83	0.04	2.17	189	56	Serum
Basic Stats	Beta-1 Globulin (electrophoresis)	g/dL	N/A - N/A	0.87	0.78	0.06	1.73	22	10	Plasma
Global sp RI	Beta-2 Globulin (electrophoresis)	g/dL	0.05 - 1.75	0.88	0.91	0.04	2.00	125	40	Serum or plasma

Global sp RI	Beta-2 Globulin (electrophoresis)	g/dL	0.05 - 1.64	0.83	0.88	0.04	2.00	111	39	Serum
Global sp RI	Combined Beta Globulin (electrophoresis)	g/dL	0.60 - 2.37	1.25	1.20	0.08	3.02	388	72	Serum
Global sp RI	Combined Beta Globulin (electrophoresis)	g/dL	0.20 - 2.54	1.55	1.53	0.13	2.57	44	22	Plasma
Global sp RI	Gamma Globulin (electrophoresis)	g/dL	0.45 - 2.40	1.50	1.47	0.12	3.17	490	85	Serum
Global sp RI	Gamma Globulin (electrophoresis)	g/dL	0.08 - 2.77	1.28	1.19	0.07	2.96	53	23	Plasma
Global sp RI	Total Globulin (electrophoresis)	g/dL	3.50 - 5.16	4.05	4.00	3.50	5.50	85	7	Serum or plasma
Global sp RI	Total Globulin (electrophoresis)	g/dL	3.50 - 5.16	4.05	4.00	3.50	5.50	85	7	Serum
Basic Stats	Pre-Albumin (electrophoresis.percentage of total protein)	%	N/A - N/A	2.2	2.7	0.0	5.6	30	9	Serum or plasma
Basic Stats	Pre-Albumin (electrophoresis.percentage of total protein)	%	N/A - N/A	1.7	0.0	0.0	5.6	21	9	Serum
Basic Stats	Albumin (electrophoresis.percentage of total protein)	%	N/A - N/A	43.9	42.6	37.0	60.8	22	8	Serum or plasma
Basic Stats	Alpha-1 Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	1.5	1.6	0.6	2.5	18	7	Serum or plasma
Basic Stats	Alpha-2 Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	14.5	14.7	11.6	16.5	18	7	Serum or plasma
Basic Stats	Combined Beta Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	23.7	23.2	17.8	31.4	19	7	Serum or plasma
Basic Stats	Gamma Globulin (electrophoresis.percentage of total protein)	%	N/A - N/A	14.4	14.4	3.2	22.0	21	8	Serum or plasma
Basic Stats	Oxygen Partial Pressure (arterial.blood gas measurement.automated)	mmHg	N/A - N/A	113	100	28	236	30	10	Whole Blood
Basic Stats	Oxygen Partial Pressure (venous.blood gas measurement.automated)	mmHg	N/A - N/A	104	88	24	269	33	14	Whole Blood
Global sp RI	Oxygen Saturation (blood gas measurement.reported)	%	70 - 100	95	98	70	100	53	22	Whole Blood
Global sp RI	Partial Pressure Carbon Dioxide (blood gas measurement)	mmHg	32 - 64	46	45	32	65	71	29	Whole Blood
Global sp RI	Bicarbonate (blood gas measurement.reported)	mEq/L	18.1 - 35.3	27.2	28.0	17.7	36.5	53	17	Whole Blood
Global sp RI	pH (arterial.blood gas measurement.37C.automated)	pH	7.3 - 7.6	7.4	7.4	7.3	7.6	44	19	Whole Blood
Basic Stats	pH (venous.blood gas measurement.37C.automated)	pH	N/A - N/A	7.4	7.4	7.3	7.5	27	11	Whole Blood
Basic Stats	Base Excess (arterial.blood gas measurement.reported)	mEq/L	N/A - N/A	1.7	2.0	-6.4	12.0	29	12	Whole Blood
Basic Stats	Base Excess (venous.blood gas measurement.reported)	mEq/L	N/A - N/A	3.4	4.0	-4.6	8.5	29	11	Whole Blood
Global sp RI	Cholesterol (automated)	mg/dL	39 - 100	70	70	31	132	426	45	Plasma
Global sp RI	Cholesterol (automated)	mg/dL	43 - 109	70	68	0	147	5299	260	Serum
Global sp RI	High Density Lipoprotein Cholesterol (automated)	mg/dL	5 - 14	8	8	5	15	54	3	Serum
Global sp RI	High Density Lipoprotein Cholesterol (automated)	mg/dL	5 - 14	8	8	5	15	54	3	Serum or plasma
Global sp RI	Triglyceride (automated)	mg/dL	13 - 133	53	46	0	179	2335	198	Serum or plasma
Global sp RI	Triglyceride (automated)	mg/dL	12 - 133	53	46	0	179	2323	196	Serum
Global sp RI	Specific Gravity (urine.random.automated)	ratio	1.002 - 1.042	1.019	1.020	1.000	1.047	144	46	Urine
Basic Stats	Specific Gravity (urine.random.reagent strip.visual)	ratio	N/A - N/A	1.014	1.015	1.000	1.035	37	21	Urine
Global sp RI	pH (urine.random.reagent strip.visual)	pH	8.0 - 8.0	8.0	8.0	8.0	8.0	285	85	Urine
Global sp RI	Protein (urine.random.automated)	mg/dL	0 - 39	10	5	0	46	111	29	Urine
Global sp RI	Creatinine (urine.random.automated)	mg/dL	10.9 - 300.0	142.2	138.6	3.0	395.9	82	20	Urine
Basic Stats	Protein:Creatinine ratio (urine.random.reported)	ratio (US)	N/A - N/A	0.88	0.88	0.88	0.88	28	8	Urine
Basic Stats	Protein:Creatinine ratio (urine.random.calculated)	ratio (US)	N/A - N/A	0.03	0.01	0.00	0.10	24	8	Urine
Global sp RI	Retinol (liquid chromatography)	µg/dL	1 - 9	4	4	1	10	62	17	Serum or plasma
Global sp RI	Retinol (liquid chromatography)	µg/dL	1 - 9	4	4	1	10	62	17	Serum
Basic Stats	Beta carotene (ultra precision liquid chromatography)	µg/ml	N/A - N/A	1.806	1.120	0.003	4.020	29	10	Serum or plasma
Basic Stats	Beta carotene (ultra precision liquid chromatography)	µg/ml	N/A - N/A	1.393	1.027	0.003	3.590	18	9	Serum
Global sp RI	Cobalamin (colorimetry.automated)	ng/L	357 - 1448	948	969	346	1907	87	4	Serum
Global sp RI	Cobalamin (colorimetry.automated)	ng/L	357 - 1448	948	969	346	1907	87	4	Serum or plasma
Global sp RI	25-hydroxycholecalciferol (fluid.chemiluminescence immunoassay)	ng/mL	2 - 17	8	7	1	17	68	16	Serum

Global sp RI	25-hydroxycholecalciferol (fluid.chemiluminescence immunoassay)	ng/mL	2 - 17	8	7	1	17	68	16	Serum or plasma
Global sp RI	25-hydroxycholecalciferol (fluid.high precision liquid chromatography)	ng/mL	1 - 14	7	6	1	14	43	5	Serum
Global sp RI	25-hydroxycholecalciferol (fluid.high precision liquid chromatography)	ng/mL	1 - 14	7	6	1	14	43	5	Serum or plasma
Global sp RI	25-hydroxycholecalciferol (fluid.radioimmunoassay)	ng/mL	3 - 26	10	10	3	31	57	17	Serum or plasma
Global sp RI	25-hydroxycholecalciferol (fluid.radioimmunoassay)	ng/mL	3 - 26	10	10	3	31	56	17	Serum
Global sp RI	Alpha-Tocopherol (fluid.high precision liquid chromatography)	µg/ml	0.133 - 2.724	0.785	0.590	0.080	3.280	225	79	Serum
Global sp RI	Alpha-Tocopherol (fluid.high precision liquid chromatography)	µg/ml	0.127 - 2.719	0.783	0.592	0.080	3.280	228	80	Serum or plasma
Global sp RI	Alpha-Tocopherol (fluid.ultra precision liquid chromatography)	µg/ml	0.16 - 2.83	1.06	0.90	0.05	4.10	527	74	Serum
Global sp RI	Alpha-Tocopherol (fluid.ultra precision liquid chromatography)	µg/ml	0.16 - 2.83	1.06	0.90	0.05	4.10	535	75	Serum or plasma

ENDOCRINOLOGY / REPRODUCTION										
Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Global sp RI	Total Triiodothyronine (radioimmunoassay)	ng/mL	0.21 - 199.70	50.32	0.87	0.00	234.80	89	11	Serum
Global sp RI	Total Triiodothyronine (radioimmunoassay)	ng/mL	0.21 - 199.70	50.32	0.87	0.00	234.80	89	11	Serum or plasma
Global sp RI	Total Thyroxine (automated)	µg/dL	6.30 - 21.95	11.73	10.70	0.75	24.40	179	26	Serum
Global sp RI	Total Thyroxine (automated)	µg/dL	6.30 - 21.95	11.71	10.70	0.75	24.40	180	26	Serum or plasma
Basic Stats	Total Thyroxine (radioimmunoassay)	µg/dL	N/A - N/A	7.3	7.4	1.7	10.3	34	7	Serum or plasma
Basic Stats	Total Thyroxine (radioimmunoassay)	µg/dL	N/A - N/A	7.3	7.4	1.7	10.3	34	7	Serum
Basic Stats	Free Thyroxine (automated)	ng/dL	N/A - N/A	1.9	2.2	0.1	4.1	19	8	Serum or plasma
Basic Stats	Free Thyroxine (automated)	ng/dL	N/A - N/A	1.9	2.2	0.1	4.1	19	8	Serum
Global sp RI	Parathyroid Hormone (radioimmunoassay)	pg/mL	4.1 - 11.5	7.7	7.5	3.8	12.3	55	9	Serum or plasma
Global sp RI	Parathyroid Hormone (radioimmunoassay)	pg/mL	4.1 - 11.5	7.7	7.5	3.8	12.3	54	9	Serum