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MDPI

Supplementary Materials:

Table S1. Preliminary data to assess for cross-reactivity of haptoglobin, serum amyloid-A (Vet-SAA and SAA-LZ) and C-reactive protein (O-CRP and R-CRP) in the hamadryas baboon.

Protein	Units	Status	*n*	Mean	Median	Min	Max
Haptoglobin	mg/mL	Healthy	4	2.80	2.51	1.25	4.91
		Acutely ill	5	2.66	2.37	1.69	4.69
		Chronically ill	5	1.28	1.22	0.80	2.85
Vet-SAA	mg/L	Healthy	4	10.4	10.9	3.0	16.8
		Acutely ill	5	479.6	419.6	2.6	1396.6
		Chronically ill	5	8.3	4.9	2.3	25.6
SAA-LZ	mg/L	Healthy	4	0.28	0.2	<0.1*	0.7
		Acutely ill	5	<0.1*	<0.1*	<0.1*	0.3
		Chronically ill	5	1.36	<0.1*	<0.1*	6.5
O-CRP	mg/L	Healthy	4	11.8	11.2	8.3	16.5
		Acutely ill	5	33.0	31.7	7.8	44.9
		Chronically ill	5	12.0	10.7	8.7	15.2
R-CRP	mg/L	Healthy	37	10.0	5.1	0.1	97.1
		Acutely ill	12	374.4	140.6	0.1	2116.0

* Below the limit of detection.

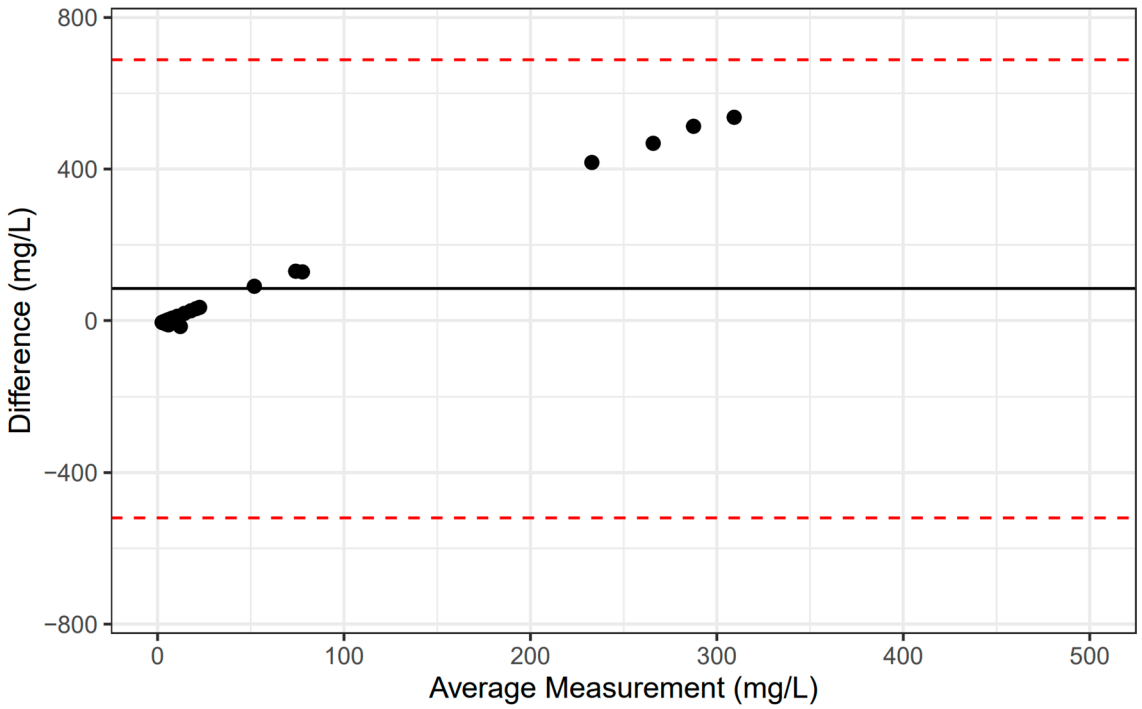

Figure S1. Bland-Altman plot demonstrating poor agreement between C-reactive protein measurements in hamadryas baboons using two different reagents, O-CRP and R-CRP. The solid black line denotes the average difference (84 mg/L), and the red dashed lines denote a 95% confidence interval of the average difference (-519-689 mg/L).

Table S2. Descriptive statistics of serum amyloid A (SAA), C-reactive protein (CRP), and protein electrophoresis fractions in healthy female and male hamadryas baboons. An asterisk indicates statistical significance between females and males, $p \leq 0.05$.

Protein	Units	Sex	*n*	Mean	Median	Min	Max
SAA	mg/L	F	22	11.3	5.7	1.9	62.6
		M	19	8.9	3.3	1.3	67.1
CRP	mg/L	F	19	12.4	5.0	0.1	97.1
		M	18	7.5	5.6	0.1	39.9
A/G Ratio	g/dL	F	19	1.2	1.1	0.8	1.9
		M	18	1.4	1.4	0.9	1.7
Prealbumin	g/dL	F	19	0.1	0.1	0.1	0.2
		M	18	0.1	0.1	0.1	0.2
	%	F	19	1.5	1.5	0.7	2.2
		M	18	1.5	1.5	0.9	2.4
Albumin	g/dL	F	19	3.4	3.4	2.6	4.1
		M	18	3.5	3.5	3.0	4.0
	%	F	19	51.4	51.2	41.3	64.4
		M	18	56.3	57.3	44.2	61.8
Alpha-1	g/dL	F	19	0.3	0.3	0.2	0.3
		M	18	0.3	0.3	0.2	0.3
	%	F	19	4.0	4.0	3.4	5.2
		M	18	4.1	4.1	3.6	5.2
Alpha-2	g/dL	F*	19	0.8	0.8	0.5	1.1
		M	18	0.6	0.6	0.4	1.1
	%	F	19	12.1	12.3	8.7	15.3
		M	18	10.1	9.4	7.4	15.7
Beta-1	g/dL	F	19	0.7	0.8	0.5	0.9
		M	18	0.6	0.6	0.5	0.9
	%	F	19	10.9	11.1	8.4	12.5
		M	18	10.0	10.0	7.9	12.1
Beta-2	g/dL	F	19	0.5	0.5	0.3	0.7
		M	18	0.4	0.4	0.3	0.6
	%	F	19	7.3	7.3	4.1	9.7
		M	18	6.7	6.7	4.3	9.0
Total beta	g/dL	F	19	1.2	1.3	0.8	1.5
		M	18	1.0	1.0	0.7	1.5
	%	F	19	18.2	18.8	12.5	21.8
		M	18	16.7	16.5	13.7	20.2
Gamma	g/dL	F	19	0.8	0.9	0.4	1.1
		M	18	0.7	0.7	0.4	1.0
	%	F	19	12.8	13.1	7.1	16.8
		M	18	11.3	11.7	7.8	14.2

Table S3. Descriptive statistics of serum amyloid A (SAA), C-reactive protein (CRP), and protein electrophoresis fractions in healthy hamadryas baboons separated by age class; infant (< 2 years old), juvenile (2-4 years old), subadult (5-7 years old), adult (8-25 years old), and geriatric (>25 years old). Statistically significant differences between age classes are denoted by superscript letters A-D. Age classes that are significantly different do not share a superscript letter. Age classes with no superscript letter demonstrated no significant difference from the other age classes for that measured protein. Statistical significance was determined by a p value ≤ 0.05.

Protein	Units	Sex	*n*	Mean	Median	Min	Max
SAA	mg/L	Infant	7	4.6	4.9	1.3	6.6
		Juvenile	11	11.7	3.1	1.3	67.1
		Subadult	10	3.6	2.9	1.4	7.8
		Adult	10	17.6	15.4	2.1	62.6
		Geriatric	3	14.9	17.5	6.0	21.3
CRP	mg/L	Infant^{A}	6	0.3	0.1	0.1	1.0
		Juvenile^{B}	11	9.6	6.0	2.9	39.9
		Subadult^{AB}	10	6.3	4.7	0.1	23.7
		Adult^{B}	7	22.2	6.5	3.4	97.1
		Geriatric^{AB}	3	15.4	9.7	0.1	36.4
A/G Ratio	g/dL	Infant^{A}	6	1.6	1.6	1.4	1.9
		Juvenile^{A}	11	1.4	1.5	1.3	1.6
		Subadult^{B}	10	1.2	1.2	0.9	1.5
		Adult^{C}	7	1.0	1.0	0.8	1.1
		Geriatric^{C}	3	0.9	0.9	0.8	0.9
Prealbumin	g/dL	Infant^{AB}	6	0.1	0.1	0.1	0.1
		Juvenile^{A}	11	0.1	0.1	0.1	0.1
		Subadult^{AB}	10	0.1	0.1	0.1	0.2
		Adult^{B}	7	0.1	0.1	0.1	0.2
		Geriatric^{AB}	3	0.1	0.1	0.1	0.1
	%	Infant	6	1.5	1.6	0.9	2.1
		Juvenile	11	1.4	1.4	1.1	2.0
		Subadult	10	1.4	1.4	0.7	1.9
		Adult	7	1.9	1.8	1.5	2.4
		Geriatric	3	1.5	1.4	1.2	2.0
Albumin	g/dL	Infant^{AB}	6	3.6	3.6	3.0	4.1
		Juvenile^{AB}	11	3.4	3.5	3.0	3.8
		Subadult^{A}	10	3.6	3.6	3.4	4.1
		Adult^{B}	7	3.1	3.2	2.6	3.8
		Geriatric^{B}	3	3.1	3.0	2.8	3.3
	%	Infant^{A}	6	60.4	60.0	56.8	64.4
		Juvenile^{AB}	11	57.4	57.7	54.4	60.8
		Subadult^{B}	10	53.4	53.5	46.0	58.6
		Adult^{C}	7	46.7	46.9	41.3	51.2
		Geriatric^{C}	3	44.8	44.2	42.7	47.4

Alpha-1	g/dL	Infant	6	0.3	0.3	0.2	0.3
		Juvenile	11	0.2	0.3	0.2	0.3
		Subadult	10	0.3	0.3	0.2	0.3
		Adult	7	0.3	0.3	0.2	0.3
		Geriatric	3	0.3	0.3	0.3	0.3
	%	Infant	6	4.5	4.4	3.8	5.2
		Juvenile	11	4.1	4.2	3.8	4.5
		Subadult	10	3.9	4.0	3.6	4.1
		Adult	7	4.0	4.1	3.4	4.6
		Geriatric	3	3.8	3.7	3.5	4.2
Alpha-2	g/dL	Infant^{AB}	6	0.6	0.6	0.5	0.7
		Juvenile^{A}	11	0.5	0.6	0.4	0.7
		Subadult^{B}	10	0.8	0.7	0.6	1.1
		Adult^{B}	7	0.9	0.9	0.7	1.0
		Geriatric^{AB}	3	1.0	1.0	0.9	1.1
	%	Infant^{ABC}	6	10.4	10.9	8.2	12.1
		Juvenile^{AB}	11	9.2	8.9	7.4	12.7
		Subadult^{C}	10	11.4	10.9	9.4	15.3
		Adult^{CD}	7	12.9	13.0	10.5	14.8
		Geriatric^{D}	3	14.6	14.1	13.9	15.7
Beta-1	g/dL	Infant^{A}	6	0.5	0.5	0.5	0.7
		Juvenile^{A}	11	0.6	0.6	0.5	0.7
		Subadult^{B}	10	0.7	0.7	0.6	0.9
		Adult^{B}	7	0.8	0.8	0.7	0.9
		Geriatric^{B}	3	0.8	0.8	0.8	0.8
	%	Infant^{A}	6	9.2	8.8	7.9	11.3
		Juvenile^{AB}	11	9.7	9.8	8.2	10.9
		Subadult^{BC}	10	10.7	10.6	9.4	12.2
		Adult^{C}	7	11.8	12.0	11.1	12.5
		Geriatric^{C}	3	11.5	11.5	11.1	11.8
Beta-2	g/dL	Infant^{A}	6	0.3	0.3	0.3	0.4
		Juvenile^{B}	11	0.4	0.4	0.3	0.5
		Subadult^{BC}	10	0.5	0.5	0.4	0.6
		Adult^{C}	7	0.6	0.6	0.5	0.7
		Geriatric^{C}	3	0.6	0.6	0.6	0.6
	%	Infant^{A}	6	5.2	5.3	4.1	6.5
		Juvenile^{B}	11	6.7	6.6	6.0	8.0
		Subadult^{B}	10	7.0	6.9	5.4	9.0
		Adult^{C}	7	8.5	8.1	7.2	9.7
		Geriatric^{C}	3	8.8	8.5	8.4	9.5
Total beta	g/dL	Infant^{A}	6	0.9	0.8	0.7	1.0
		Juvenile^{A}	11	1.0	1.0	0.8	1.1

		Subadult[B]	10	1.2	1.2	1.0	1.5
		Adult[B]	7	1.4	1.4	1.2	1.5
		Geriatric[B]	3	1.4	1.4	1.4	1.4
	%	Infant[A]	6	14.4	14.5	12.5	15.6
		Juvenile[AB]	11	16.4	16.2	14.4	18.5
		Subadult[BC]	10	17.7	17.5	14.8	20.0
		Adult[D]	7	20.2	20.2	18.3	21.8
		Geriatric[CD]	3	20.3	20.2	19.6	21.0
Gamma	g/dL	Infant[A]	6	0.5	0.5	0.4	0.8
		Juvenile[AB]	11	0.7	0.7	0.5	0.8
		Subadult[BC]	10	0.8	0.8	0.6	1.1
		Adult[C]	7	1.0	1.0	0.8	1.1
		Geriatric[C]	3	1.0	1.0	1.0	1.1
	%	Infant[A]	6	8.7	8.1	7.1	12.9
		Juvenile[AB]	11	11.5	11.8	8.4	13.3
		Subadult[BC]	10	12.2	12.5	8.8	16.8
		Adult[C]	7	14.2	14.5	11.7	16.4
		Geriatric[BC]	3	15.1	14.2	14.2	16.8