Supplemental File-1

This supplemental file presents tables (Tables S1-S15) showing comparison of association of various relevant clinical pathology parameters from a subset of dogs with *A. platys* and *E. canis* POC and PCR test results and Table S16 showing the reference values used in this study. Contingency tables were prepared and analyzed using Fisher's exact test in GraphPad QuickCalcs software. *A. platys* and *E. canis* POC and PCR test results were compared with each of the clinical pathology changes. Exact P values are shown at the bottom of each table. Observations with P values equal to or less than 0.05 is considered significant and marked with an asterisk (*).

List of tables in this file

Table S1 A-D: Packed cell volume (PCV)

Table S1A

	Low PCV	Normal PCV	Total
AP PCR +	18	20	38
AP PCR -	26	73	99
Total	44	93	137

(P = 0.0244)*

Table S1B

	Low PCV	Normal PCV	Total
AP POC+	12	20	32
AP POC -	24	43	67
Total	36	63	99

(P= 1)

Table S1C

	Low PCV	Normal PCV	Total
EC PCR +	18	67	85
EC PCR -	26	26	52
Total	44	93	137

(P= 0.0007)*

Table S1 D

	Low PCV	Normal PCV	Total
EC POC +	30	35	65
EC POC -	6	28	34
Total	36	63	99

(P = 0.0077)*

Low PCV was significantly associated with AP PCR, EC PCR and EC POC positive test results

Table S2 A-D: Red blood cell (RBC) count

Table S2A

	Low RBC count	Normal RBC count	Total
AP PCR +	12	25	37
AP PCR -	28	81	109
Total	40	106	146

(P = 0.5225)

Table S2B

	Low RBC count	Normal	Total
AP POC+	9	22	31
AP POC-	15	53	68
Total	24	75	99

(P = 0.4592)

Table S2C

	Low RBC count	Normal	Total
EC PCR +	19	32	51
EC PCR -	11	74	85
Total	30	106	136

(P = 0.0013)*

Table S2D

	Low RBC count	Normal	Total
EC SNAP+	20	45	65
EC SNAP -	4	30	34
Total	24	75	99

(P = 0.0479)*

Low RBC count was significantly associated with EC PCR and EC POC positive test results

Table S3 A-D: Hemoglobin (Hb) concentration

Table S3A

	Low Hb	Normal–High Hb	Total
AP PCR +	18	20	38
AP PCR -	18	82	100
Total	36	102	138

(P =0.0009)*

Table S3B

	Low Hb	Normal–high Hb	Total
AP POC+	11	21	32
AP POC-	17	51	68
Total	28	72	100

(P =0.3484)

Table S3C

	Low Hb	Normal-high Hb	Total
EC PCR +	24	28	52
EC PCR -	12	76	88
Total	36	104	140

(P =0.0001)*

Table S3D

	Low Hb	Normal-high Hb	Total
EC POC +	24	42	66
EC POC-	4	30	34
Total	28	72	100

(P = 0.01)*

Low hemoglobin concentration is significantly associated with AP PCR, EC PCR and EC POC positive test results

Table S4 A-D Hematocrit values

Table S4A

	Low HCT	Normal	Total
AP PCR +	18	20	38
AP PCR -	20	75	95
Total	38	95	133

(P = 0.0051)*

Table S4B

	Low HCT	Normal	Total
AP POC+	11	20	31
AP POC -	19	47	66
Total	30	67	97

(P = 0.6380)

Table S4C

	Low HCT	Normal	Total
EC PCR +	26	25	51
EC PCR -	12	70	82
Total	38	95	133

(P = 0.0001)*

Table S4D

	Low HCT	Normal	Total
EC POC +	26	38	64
EC POC -	4	29	33
Total	30	67	97

(P = 0.0050)*

Low hematocrit values are significantly associated with AP PCR, EC PCR and EC POC positive test results

Table S5 A-D: Low Plasma protein concentration

Table S5A

	Low plasma protein	Normal	Total
AP PCR +	5	30	35
AP PCR -	10	51	61
Total	15	81	96

(P = 1)

Table S5B

	Low plasma protein	Normal	Total
AP POC+	12	19	31
AP POC -	8	40	48
Total	20	59	79

(P= 0.0359)*

Table S5C

	Low plasma protein	Normal	Total
EC PCR +	8	31	39
EC PCR -	7	50	57
Total	15	81	96

(P = 0.3913)

Table S5D

	Low plasma protein	Normal	Total
EC POC +	8	54	62
EC POC -	1	38	39
Total	9	92	101

(P = 0.1478)

Low Plasma protein concentration was significantly associated with AP POC positive test results.

Table S6 A-D: High Plasma protein concentration

Table S6A

	High Plasma protein concentration	Normal	Total
AP PCR +	3	30	33
AP PCR -	39	51	90
Total	42	81	123

(P = 0.0002)

Table S6B

	High Plasma protein concentration	Normal	Total
AP POC+	12	19	31
AP POC -	20	40	60
Total	32	59	91

(P = 0.6481)

Table S6C

	High Plasma protein concentration	Normal	Total
EC PCR +	13	31	44
EC PCR -	29	50	79
Total	42	81	123

(P = 0.5521)

Table S6D

	High Plasma protein concentration	Normal	Total
EC POC+	30	29	59
EC POC -	2	30	32
Total	32	59	91

(P = 0.0001)

High plasma protein concentration is significantly associated with AP PCR and EC POC positive test results

Table S7 A-D: Leukopenia

Table S7 A

	Leukopenia	Normal	Total
AP PCR +	3	31	34
AP PCR -	9	82	91
Total	12	113	125

(P = 1)

Table S7 B

	Leukopenia	Normal	Total
AP POC+	4	27	31
AP POC -	5	55	60
Total	9	82	91

(P = 0.4837)

Table S7 C

	Leukopenia	Normal	Total
EC PCR +	6	40	46
EC PCR -	6	73	79
Total	12	113	125

(P = 0.3554)

Table S7 D

	Leukopenia	Normal	Total
EC POC+	8	54	62
EC POC-	1	38	39
Total	9	92	101

(P= 0.1478)

Table S8 A-D: Leukocytosis

Table S8 A

	Leukocytosis	Normal	Total
AP PCR +	5	31	36
AP PCR -	3	84	87
Total	8	115	123

(P = 0.0466)*

Table S8 B

	Leukocytosis	Normal	Total
AP POC+	1	27	28
AP POC -	8	55	63
Total	9	82	91

(P = 0.2655)

Table S8 C

	Leukocytosis	Normal	Total
EC PCR +	6	40	46
EC PCR -	7	73	80
Total	13	113	126

(P = 0.5456)

Table S8 D

	Leukocytosis	Normal	Total
EC POC+	4	53	57
EC POC -	3	28	31
Total	7	81	88

(P = 0.6933)

Leukocytosis is significantly associated with AP PCR positive test results.

Table S9 A-D: Lymphopenia

Table S9 A

	Lymphopenia	Normal	Total
AP PCR +	2	31	33
AP PCR -	13	84	97
Total	15	115	130

(P = 0.3526)

Table S9 B

	Lymphopenia	Normal	Total
AP POC+	4	24	28
AP POC -	8	57	65
Total	12	81	93

(P = 0.7486)

Table S9 C

	Lymphopenia	Normal	Total
EC PCR +	6	38	44
EC PCR -	9	77	86
Total	15	115	130

(P = 0.5761)

Table S9 D

	Lymphopenia	Normal	Total
EC POC +	9	53	62
EC POC -	28	3	31
Total	37	56	93

(P = 0.0001)

Lymphopenia is significantly associated with EC POC positive test results.

Table S10 A-D: Lymphocytosis

Table S10 B

	Lymphocytosis	Normal	Total
AP PCR +	5	31	36
AP PCR -	3	84	87
Total	8	115	123

(P = 0.0466)*

Table S10 B

	Lymphocytosis	Normal	Total
AP POC+	4	24	28
AP POC-	3	57	60
Total	7	81	88

(P=0.2024)

Table S10 C

	Lymphocytosis	Normal	Total
EC PCR +	8	38	46
EC PCR -	0	77	77
Total	8	115	123

(P = 0.0003)*

Table S10 D

	Lymphocytosis	Normal	Total
EC POC +	4	53	57
EC POC -	3	28	31
Total	7	81	88

(P = 0.6933).

Lymphocytosis is significantly associated with AP PCR and EC PCR positive test results

Table S11 A-D: Monocytosis

Table S11 A

	Monocytosis	Normal	Total
AP PCR +	2	31	33
AP PCR -	2	85	87
Total	4	116	120

(P = 0.3032)

Table S11 B

	Monocytosis	Normal	Total
AP POC+	0	26	26
AP POC -	2	60	62
Total	2	86	88

(P = 1)

Table S11 C

	Monocytosis	Normal	Total
EC PCR +	4	42	46
EC PCR -	0	74	74
Total	4	116	120

(P = 0.0199)*

Table S11 D

	Monocytosis	Normal	Total
EC POC+	2	54	56
EC POC -	0	32	32
Total	2	86	88

(P= 0.5319)

Monocytosis is significantly associated with EC PCR positive test results.

Table S12 A-D: Neutropenia

Table S12 A

	Neutropenia	Normal	Total
AP PCR +	1	32	33
AP PCR -	3	89	92
Total	4	121	125

(P= 1)

Table S12 B

	Neutropenia	Normal	Total
AP POC+	0	31	31
AP POC -	2	58	60
Total	2	89	91

(P=0.5458)

Table S12 C

	Neutropenia	Normal	Total
EC PCR +	1	45	46
EC PCR -	3	76	79

(P = 1)

Table S12 D

	Neutropenia	Normal	Total
EC POC +	1	61	62
EC POC -	1	28	29
Total	2	89	91

(P = 0.5382)

Table S13 A-D: Neutrophilia

Table S13 A

	Neutrophilia	Normal	Total
AP PCR +	5	32	37
AP PCR -	8	89	97
Total	13	121	134

(P = 0.3466)

Table S13 B

	Neutrophilia	Normal	Total
AP POC+	1	31	32
AP POC-	1	58	59
Total	2	89	91

(P= 1)

Table S13 C

	Neutrophilia	Normal	Total
EC PCR +	6	45	51
EC PCR -	7	76	83
Total	13	121	134

(P = 0.5579)

Table S13 D

	Neutrophilia	Normal	Total
EC POC+	4	61	65
EC POC -	5	28	33
Total	9	89	98

(P = 0.1594)

Table S14 A-D: Eosinophilia

Table S14 A

	Eosinophilia	Normal	Total
AP PCR +	14	24	38
AP PCR -	15	85	100
Total	29	109	138

(P = 0.0090)*

Table S14 B

	Eosinophilia	Normal	Total
AP POC+	11	21	32
AP POC-	11	57	68
Total	22	78	100

(P = 0.0679)

Table S14 C

	Eosinophilia	Normal	Total
EC PCR +	16	36	52
EC PCR -	13	73	86
Total	29	109	138

(P = 0.0332)*

Table S14 D

	Eosinophilia	Normal	Total
EC POC+	15	51	66
EC POC -	7	27	34
Total	22	78	100

(P = 1)

Eosinophilia is significantly associated with AP PCR and EC PCR positive test results.

Table S15 A-D: Thrombocytopenia

Table S15 A

	Thrombocytopenia	Normal	Total
AP PCR +	26	11	37
AP PCR -	46	53	99
Total	72	64	136

(P = 0.0199)*

Table S15 B

	Thrombocytopenia	Normal	Total
AP POC+	28	4	32
AP POC -	28	38	66
Total	56	42	98

(P = 0.0001)*

Table S15 C

	Thrombocytopenia	Normal	Total
EC PCR +	44	8	52
EC PCR -	28	56	84
Total	72	64	136

(P = 0.001)*

Table S15 D

	Thrombocytopenia	Normal	Total
EC POC +	44	22	66
EC POC -	12	20	32
Total	56	42	98

(***P = 0.0088)****

Thrombocytopenia is significantly associated with AP PCR, EC PCR, AP POC and EC POC positive test results.

Table S16: Reference values for the clinical pathology parameters

Parameter	Reference values
Packed cell volume (PCV)	37-55 (%)
Red Blood cell count (RBC)	5.5-8.5 ($x10^{12}$/L)
Hemoglobin (HGB)	12-18 (g/dL)
Hematocrit (HCT)	37-55(%)
Mean corpuscular volume (MCV)	60-77 (fL)
Mean Corpuscular hemoglobin concentration (MCHC)	31-39 (g/dL)
Total protein (TP)	6-7.5 (g/dL)
White blood cell count (WBC)	6-17 ($x10^9$/L)
Lymphocytes	1-4.8($x10^9$/L)
Monocytes	0.20-1.5 ($x10^9$/L)
Neutrophils	3-12 ($x10^9$/L)
Eosinophils	0-0.8 ($x10^9$/L)
Basophils	0.0.4 ($x10^9$/L)