

Table S1: See legend at foot of table on page 5.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	No.	Breed	Age	Synovial structure	Cause of septic synovitis/Diagnosis	AAEP lameness	Serum SAA (mg/l)	Synovia macroscopic	Synovial WBC/ μ l	Synovial neutrophil %	Synovial TP g/dl	PCR pos/neg	LYS U/ml	MPO U/ml	
2	1	Shire	3 y	tarsocrural joint R	Iatrogenic, following joint treatment	5/5 RH	3921	turbid	75580	96	4.1	pos.	2446.64	5.520	
3	2	Quarter Horse	10 y	tarsocrural joint R	Traumatic, multiple lacerations	stiff, post traumatic	381.4	hemor.	~2000	90	nd	pos.	1451.07	3.651	
4	3	Warmblood	14 d	lateral femoro- tibial joint R	Hematogenous, sepsis	3/5 RH	1959		~9000	85	3.2	pos.	1005.52	0.276	
5	4	Warmblood	14 d	femoropatellar joint R	Hematogenous, sepsis	3/5 RH	1959		~7000	85	3	pos.	1438.50	0.925	
6	5	Haflinger	26 y	antebrachio- carpal joint R	Idiopathic/ hemat. (ear infection)	4/5 RF	2173.5	turbid, orange	49230	99	7	pos.	1786.48	2.726	
7	6	Quarter Horse	19 d	tarsocrural joint L	Hematogenous, sepsis	0/5	1561.5	turbid, orange	26150	82	nd	pos.	1058.82	0.086	
8	7	Arabian	17 y	digital flexor tendon sheath LH	Traumatic, foot laceration	4/5 LH	2738.5	hemor.	~20000	95	nd	pos.	1541.38	0.100	
9	8	Warmblood	15 d	tarsocrural joint L	Hematogenous, sepsis	4/5 LH	756.5	turbid, yellow	44900	>95	3	nd	1515.51	0.416	
10	9	Warmblood	11 y	digital flexor tendon sheath RH	Traumatic	4/5 RH	nd	turbid, red/orange	94600	>90	4.1	pos.	1676.31	2.327	
11	10	Warmblood	10 y	tarsocrural joint R	Iatrogenic	4/5 RH	1017.4	turbid, yellow	102120	95	nd	pos.	1555.97	0.207	
12	11	Warmblood	16 y	metacarpo- phalangeal joint I	Idiopathic/hemat., severe cellulitis I F	4/5 FL	1653	turbid, yellow	190330*	>95	5.3	pos.	2135.82	2.594	
13	12	Warmblood	3 y	femoropatellar joint L	Idiopathic/hemat. (scirrhous cord)	4/5 LH	3640.4	hemor., red, viscos.	~3000	91	nd	nd	1282.51	1.222	
14	13	Thoroughbred	2 y	femoropatellar joint L	Traumatic, laceration	5/5 LH	3660.6	turbid, yellow	~9600*	>95	5.4	nd	1051.49	1.813	
15	14	Warmblood	10 y	digital flexor tendon sheath RH	Traumatic, laceration	4/5 RH	7179.4	turbid, purulent	~60000*	94	nd	pos.	38263.92	110.112	
16	15	Standardbred	10 y	tarsocrural joint R	Idiopathic	3/5 RH	410.8	turbid, yellow	78170	>95	6	pos.	1163.40	6.424	
17	16	Standardbred	10 y	tarsocrural joint R	Idiopathic	2/5 RH	77	hemor.	30740	97	6.2	pos.	1852.03	0.238	

Synovitis Group

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		No.	Breed	Age	Synovial structure	Cause of septic synovitis/Diagnosis	AAEP lameness	Serum SAA (mg/l)	Synovia macroscopic	Synovial WBC/ μ l	Synovial neutrophil %	Synovial TP g/dl	PCR pos/neg	LYS U/ml	MPO U/ml
18	Septic	17	Standardbred	10 y	tarsocural joint R	Idiopathic	2/5 RH	<10	turbid, yellow	96000	99	6	pos.	1584.36	4.405
19		18	Standardbred	10 y	tarsocural joint R	Idiopathic	2/5 RH	nd	turbid, red/orange	31440	>95	5	nd	6082.50	7.477
20		19	Warmblood	21 y	cubital joint R	Traumatic, laceration	2/5 RF	nd	turbid, yellow	136000	95	nd	pos.	18500.48	6.505
21		20	Cob	12 d	femoropatellar joint L	Hematogenous, sepsis	3/5 LH	>4700	turbid, yellow	104090	83	5.4	pos.	5386.47	5.372
22		21	Pony	7 y	tarsocural joint L	Traumatic, laceration	3/5 LH	3160.7	hemor.	6940	94	3.4	nd	998.59	3.644
23		22	Warmblood	26 d	tarsocural joint R	Hematogenous, sepsis	3/5 RH	3649.5	turbid, yellow	122000	90	nd	nd	1093.36	0.150
24		23	Warmblood	5 y	femoropatellar joint L	latrogenic	4/5 LH	>4357,3	turbid, yellow	46890	90	nd	pos.	1352.38	4.337
25		24	Warmblood	5 y	femoropatellar joint L	latrogenic	3/5 LH	>4550	turbid, yellow	~6000	87	nd	pos.	5750.97	9.419
26		25	Warmblood	7 y	tarsal sheath R	Traumatic, laceration	2/5 RH	1336	turbid, red/orange	>10000	90	nd	pos.	6330.82	15.579
27		26	Paint	3 y	proximal inter-phalangeal joint LH	Traumatic, laceration	3/5 LH	1562	turbid, yellow	38020	50	5	nd	1392.58	0.639
28		27	Quarter Horse	16 y	tarsocural joint R	Idiopathic	5/5 RH	<10		39300	90	4.2	pos.	1409.98	3.729
29		28	Quarter Horse	17 y	tarsocural joint R	Idiopathic	2/5 RH	nd	red. visc.	~ 15000*	>95	nd	pos.	762.60	1.487
30		29	Quarter Horse	18 y	tarsocural joint R	Idiopathic	0/5	1949	turbid, orange	11490	94	4.6	pos.	1124.27	2.952
31		30	Quarter Horse	19 y	tarsocural joint R	Idiopathic	0/5	1164	turbid, yellow	3870	89	5	pos.	1006.69	1.475

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32		1	Shire	3 y	tarsocrural joint R	control after successful tx of septic syn.	2/5 RH	nd	red. visc, clear	197	10		pos.	430.62	0.092
33		2	Warmblood	19 y	femoropatellar joint L	Flare post intra-synovial treatment	2/5 LH	16.7	red. visc., turbid	2560	14		pos.	228.11	0.086
34		3	Warmblood	11 y	femoropatellar joint L	Polyarthritis, control other joints	2/5 LH	556		2600	70		neg.	381.71	0.086
35		4	Warmblood	9 y	digital flexor tendon sheath RH	Chronic digital flexor tenosynovitis	2/5 RH	nd	clear, red. visc.				nd	0.00	0.089
36		5	Quarter Horse	11 y	tarsal sheath L	Thoroughpin	2/5 LH	nd	clear, red. visc.				neg.	98.59	0.086
37		6	Warmblood	11 y	tarsocrural joint L	control after successful tx of septic syn.	2/5 LH	994	clear, physiol visc	760	44	1.6	neg.	150.78	0.086
38		7	Warmblood	12 y	tarsometatarsal joint R	Bone spavin bilateral	2/5 RH	nd	clear, physiol visc				neg.	47.09	0.088
39		8	Warmblood	11 y	distal inter-phalangeal joint LF	Proximal suspensory desmitis LF	2/5 LF	nd	clear, physiol visc				pos.	76.63	0.091
40		9	Warmblood	3 y	femoropatellar joint L	control after successful tx of septic syn.	1/5 LH	nd	clear, physiol visc				neg.	137.87	0.086
41		10	Frisian	5 y	distal inter-phalangeal joint	OA of the distal interphalangeal joint	3/5 LF	26.2	clear, red. visc.				nd	67.96	0.770
42		11	Warmblood	15 y	distal inter-phalangeal joint LH	Laceration without joint penetration	2/5 LH	13.2	clear, physiol visc	~700	10		nd	210.74	0.086
43		12	Warmblood	11 y	digital flexor tendon sheath RF	Chronic tenosynovitis DFTS	1/5 RF	nd	clear, physiol visc				neg.	47.50	0.125
44		13	Thoroughbred	10 y	tarsocrural joint L	Aseptic tarsocrural synovitis	1/5 LH	<10	hemor.	1080	<5	3	pos.	160.28	0.086
45		14	Thoroughbred	10 y	tarsocrural joint L	Aseptic tarsocrural synovitis	0/5	nd	clear, red. visc.				pos.	187.62	0.115
46		15	Warmblood	6 y	tarsocrural joint R	Fracture med. malleolus	0/5	<10	hemor.	170	15	3.5	pos.	195.20	0.110
47		16	Warmblood	6 y	tarsocrural joint R	Fracture med. malleolus	1/5 RH	<10	orange, min. turbid	5970	59	3.6	pos.	740.16	0.105

Aseptic Synovitis Group

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		No.	Breed	Age	Synovial structure	Cause of septic synovitis/Diagnosis	AAEP lameness	Serum SAA (mg/l)	Synovia macroscopic	Synovial WBC/ μ l	Synovial neutrophil %	Synovial TP g/dl	PCR pos/neg	LYS U/ml	MPO U/ml
48		17	Haflinger	2 y	femoropatellar joint L	Bilateral hindlimb/back pain	3/5 LH/RH	<10	clear, physiol visc	710	<5	3.4	nd	23.81	0.086
49		18	Haflinger	3 y	femoropatellar joint R	Bilateral hindlimb/back pain	3/5 LH/RH	<10	clear, physiol visc	792	<5	3.8	nd	171.95	0.086
50		19	Gidran	9 y	metacarpophalangeal joint R	Aseptic R metacarpophalangeal svnovitis	2/5 RF	nd	clear, physiol visc				nd	54.69	0.093
51		20	Warmblood	12 y	tarsocural joint L	DIRT-OCD L, prox. susp. desmitis RH	3/5 LH/RH	<10	clear, physiol visc				neg.	73.44	0.086
52		21	Haflinger	20 y	antebrachiocarpal joint L	OA of the antebrachiocarpal joint L	2/5 LF	nd	clear, physiol visc				nd	0.00	0.468
53		22	Standardbred	10 y	tarsocural joint R	control after successful tx of septic syn.	1/5 RH	nd	red. visc., min turbid	1060	61	3.6	pos.	460.48	0.086
54		23	Warmblood	17 y	metacarpophalangeal joint R	OA R metacarpophalangeal joint	2/5 LF	nd	clear, physiol visc				nd	4.92	0.000
55		24	PRE	21 y	femoropatellar joint L	OA femoropatellar joint	3/5 LH	230.4	hemor.	~1500	65	3.6	pos.	426.52	0.378
56		25	Warmblood	14 y	metatarso-phalangeal joint L	OA metatarso-phalangeal joint L	2/5 LH	nd					nd	127.43	0.136
57		26	Quarter Horse	10 y	tarsocural joint R	Laceration without joint penetration	3/5 RH	878	clear, physiol visc	180	<5		neg.	29.98	0.000
58		27	Warmblood	15 y	tarsometatarsal joint R	Bilateral bone spavin	2/5 RH	nd	clear, physiol visc				nd	0.00	0.144

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59	Control group	1	Warmblood	4 y	tarsocrural joint	Chronic renal failure			clear, physiol visc				neg.	63.09	0.086
60		2	Frisian	16 y	antebrachiocarpal joint	Degenerative suspensory desmitis			clear, physiol visc				neg.	30.03	0.086
61		3	Frisian	10 y	metacarpophalangeal joint	Intoxication			clear, physiol visc				neg.	42.67	0.090
62		4	Warmblood	10 y	antebrachiocarpal joint	Vertebral fracture			clear, physiol visc				neg.	140.24	0.086
63		5	Icelandic Horse	15 y	antebrachiocarpal joint	Colic			clear, physiol visc				neg.	65.58	0.086
64		6	Draft	17 y	antebrachiocarpal joint	Colic			clear, physiol visc				neg.	131.95	0.086
65		7	Warmblood	18 y	antebrachiocarpal joint	Colic			clear, physiol visc				neg.	206.62	0.086
66		8	Thoroughbred	15 y	metacarpophalangeal joint	Lacerations			clear, physiol visc				neg.	66.17	0.101
67		9	Warmblood	15 y	antebrachiocarpal joint	Sepsis			clear, physiol visc				neg.	131.95	0.086
68		10	Arabian	25 y	metacarpophalangeal joint	Colic			clear, physiol visc				neg.	46.87	0

Table S1: The age (in years (y) and days (d)) of the included horses, the sampled synovial structure, the cause of septic synovitis respectively diagnosis, the American Association of Equine Practitioners (AAEP) lameness scale, serum amyloid A (SAA), macroscopic characteristics of the synovial fluid, synovial leukocyte (WBC) count, percentage (%) of neutrophils in the synovial fluid, synovial total protein (TP), PCR and the measured synovial lysozyme (LYS) and myeloperoxidase (MPO) activities are detailed for each of 3 groups (control, aseptic inflammatory and septic synovitis). Abbreviations: hemat....haematogenous, hemor....haemorrhagic, min....minimal, nd...not done, neg....negative, OA...osteoarthritis, OCD....osteocondrosis dissecans, pos....positive, red....reduced, visc....viscosity, syn....synovitis, WBC* intracellular cocci detected in cytology