

Supplementary Table S1. Univariate associations between outcomes and predictors. P-values <0.2 are in bold– these variables included in preliminary logistic regression analyses.

	died post-operatively					LoS>=2days					ruptured uterus					euthanized without surgery				
	no N=394	% no	yes N=11	% yes	Fisher exact	no N=220	% no	yes N=174	% yes	Fisher exact	no N=379	% no	yes N=11	% yes	Fisher exact	no N=405	% no	yes N=26	% yes	Fisher exact
PATIENT HISTORY																				
Age over 8 yrs old																				
no	215	55%	5	45%	0.56	117	53%	98	56%	0.61	203	54%	5	45%	0.76	235	58%	9	36%	0.04
yes	178	45%	6	55%		102	47%	76	44%		175	46%	6	55%		169	42%	16	64%	
number missing	1		0			1		0			1		0			1		1		
Small dog (<8kg)																				
no	193	49%	4	36%	0.54	107	49%	86	49%	0.94	187	49%	5	45%	1.00	197	49%	4	17%	0.00
yes	200	51%	7	64%		112	51%	88	51%		191	51%	6	55%		207	51%	20	83%	
number missing	1		0			1		0			1		0			1		2		
Duration of signs>1week																				
no	171	53%	4	36%	0.36	88	49%	83	58%	0.09	165	53%	7	78%	0.18	175	52%	14	54%	1.00
yes	153	47%	7	64%		93	51%	60	42%		149	47%	2	22%		160	48%	12	46%	
number missing	70		0			39		31			65		2			70		0		
Previous visit to DVM																				
no	170	43%	6	55%	0.54	102	46%	68	39%	0.18	165	44%	4	36%	0.76	176	44%	6	24%	0.06
yes	223	57%	5	45%		118	54%	105	61%		213	56%	7	64%		228	56%	19	76%	
number missing	1		0			0		1			1		0			1		1		
Polyuria																				
no	184	49%	9	82%	0.06	102	50%	82	49%	0.92	182	51%	6	55%	1.00	191	50%	18	82%	0.00
yes	190	51%	2	18%		104	50%	86	51%		178	49%	5	45%		192	50%	4	18%	
number missing	20		0			14		6			19		0			22		4		
Polydipsia																				
no	169	45%	8	73%	0.12	89	43%	80	48%	0.41	167	46%	5	45%	1.00	176	46%	14	64%	0.13
yes	205	55%	3	27%		117	57%	88	52%		193	54%	6	55%		208	54%	8	36%	
number missing	20		0			14		6			19		0			21		4		
Diarrhea																				
no	234	64%	7	70%	1.00	128	62%	106	67%	0.38	227	64%	8	73%	0.75	241	64%	15	65%	1.00
yes	132	36%	3	30%		79	38%	53	33%		125	36%	3	27%		135	36%	8	35%	
number missing	28		1			13		15			27		0			29		3		
Inappetence																				
no	41	11%	1	9%	1.00	32	15%	9	5%	0.00	38	10%	2	20%	0.29	42	11%	1	4%	0.50
yes	339	89%	10	91%		183	85%	156	95%		329	90%	8	80%		349	89%	24	96%	
number missing	14		0			5		9			12		1			14		1		
Vomiting																				
no	186	50%	7	64%	0.54	108	52%	78	48%	0.53	183	51%	4	40%	0.54	193	50%	7	28%	0.04
yes	186	50%	4	36%		101	48%	85	52%		177	49%	6	60%		190	50%	18	72%	
number missing	22		0			11		11			19		1			22		1		

CLINICAL SIGNS																				
Depressed mentation																				
no	191	49%	3	27%	0.22	117	54%	74	43%	0.03	180	48%	5	45%	1.00	194	48%	6	23%	0.01
yes	201	51%	8	73%		101	46%	100	57%		197	52%	6	55%		209	52%	20	77%	
number missing	2		0			2		0			2		0			2		0		
Closed pyometra																				
no	302	79%	7	64%	0.26	176	83%	126	75%	0.06	291	80%	8	73%	0.70	309	79%	13	62%	0.10
yes	79	21%	4	36%		36	17%	43	25%		75	20%	3	27%		83	21%	8	38%	
number missing	13		0			8		5			13		0			13		5		
Non-ambulatory																				
no	332	92%	7	70%	0.04	194	96%	138	88%	0.00	315	91%	10	100%	1.00	339	92%	12	57%	0.00
yes	27	8%	3	30%		8	4%	19	12%		30	9%	0	0%		30	8%	9	43%	
number missing	35		1			18		17			34		1			36		5		
Increased respiratory effort																				
no	362	94%	8	80%	0.12	204	96%	158	92%	0.08	349	95%	9	82%	0.13	370	94%	17	81%	0.04
yes	22	6%	2	20%		8	4%	14	8%		20	5%	2	18%		24	6%	4	19%	
number missing	10		1			8		2			10		0			11		5		
High respiratory rate																				
no	67	18%	2	18%	1.00	42	21%	25	15%	0.14	68	19%	0	0%	0.36	69	18%	6	25%	0.42
yes	298	82%	9	82%		156	79%	142	85%		289	81%	8	100%		307	82%	18	75%	
number missing	29		0			22		7			22		3			29		2		
Low temperature																				
no	257	71%	5	50%	0.17	143	71%	114	70%	0.82	244	70%	8	80%	0.73	262	70%	9	39%	0.00
yes	107	29%	5	50%		58	29%	49	30%		105	30%	2	20%		112	30%	14	61%	
number missing	30		1			19		11			30		1			31		3		
High temperature																				
no	288	79%	7	70%	0.45	163	81%	125	77%	0.36	277	79%	6	60%	0.23	295	79%	21	91%	0.19
yes	76	21%	3	30%		38	19%	38	23%		72	21%	4	40%		79	21%	2	9%	
number missing	30		1			19		11			30		1			31		3		
High heart rate																				
no	109	28%	3	27%	1.00	60	28%	49	28%	1.00	108	29%	1	9%	0.19	112	28%	6	26%	1.00
yes	280	72%	8	73%		155	72%	125	72%		266	71%	10	91%		288	72%	17	74%	
number missing	5		0			5		0			5		0			5		3		
Dehydrated																				
no	120	32%	4	36%	0.75	83	40%	37	22%	0.00	114	31%	3	27%	1.00	124	32%	4	16%	0.12
yes	258	68%	7	64%		126	60%	132	78%		249	69%	8	73%		265	68%	21	84%	
number missing	16		0			11		5			16		0			16		1		

LABORATORY FINDINGS																				
Low PCV at intake																				
no	254	65%	7	64%	1.00	152	70%	102	60%	0.04	243	65%	8	73%	0.75	261	65%	17	74%	0.50
yes	134	35%	4	36%		65	30%	69	40%		130	35%	3	27%		138	35%	6	26%	
number missing	6		0			3		3			6		0			6		3		
Low blood glucose at intake																				
no	376	96%	11	100%	1.00	212	97%	164	94%	0.23	361	96%	11	100%	1.00	387	96%	20	87%	0.09
yes	17	4%	0	0%		7	3%	10	6%		17	4%	0	0%		17	4%	3	13%	
number missing	1		0			1		0			1		0			1		3		
High creatinine at intake																				
no	335	85%	6	55%	0.02	205	94%	130	75%	0.00	318	84%	10	91%	1.00	341	85%	5	22%	0.00
yes	57	15%	5	45%		14	6%	43	25%		59	16%	1	9%		62	15%	18	78%	
number missing	2		0			1		1			2		0			2		3		
High BUN at intake																				
no	283	72%	4	36%	0.02	179	82%	104	60%	0.00	267	71%	10	91%	0.19	287	71%	2	9%	0.00
yes	109	28%	7	64%		40	18%	69	40%		110	29%	1	9%		116	29%	21	91%	
number missing	2		0			1		1			2		0			2		3		
COMORBIDITIES																				
Mammary tumor																				
no	306	78%	7	64%	0.28	174	79%	132	76%	0.47	290	77%	9	82%	1.00	313	77%	19	79%	1.00
yes	88	22%	4	36%		46	21%	42	24%		89	23%	2	18%		92	23%	5	21%	
number missing	0		0			0		0			0		0			0		2		
Heart disease																				
no	342	87%	7	64%	0.05	191	87%	151	87%	1.00	324	85%	11	100%	0.38	349	86%	20	83%	0.76
yes	52	13%	4	36%		29	13%	23	13%		55	15%	0	0%		56	14%	4	17%	
number missing	0		0			0		0			0		0			0		2		
Murmur																				
no	344	87%	7	36%	0.05	192	87%	152	87%	1.00	326	86%	11	100%	0.37	351	87%	20	83%	0.55
yes	50	13%	4	0%		28	13%	22	13%		53	14%	0	0%		54	13%	4	17%	
number missing						0					0		0			0		2		

SURGICAL FINDINGS															
Presence of ascites															
no	351	93%	11	100%	1.00	197	95%	154	91%	0.16	359	95%	3	27%	0.00
yes	27	7%	0	0%		11	5%	16	9%		19	5%	8	73%	
number missing	16		0			12		4			1		0		
Required transfusion															
no	371	94%	10	91%	0.49	213	97%	158	91%	0.02	355	94%	11	100%	1.00
yes	23	6%	1	9%		7	3%	16	9%		24	6%	0	0%	
number missing	0		0			0		0			0		0		
Ruptured uterus															
no	368	97%	11	100%	1.00	208	100%	160	94%	0.00					
yes	11	3%	0	0%		1	0%	10	6%						
number missing	15		0			11		4							