

Supplementary Material

1 Supplementary Data

Results from univariable mixed effects logistic regression models.

Supplementary Table 1. Systemic antimicrobials in canine consultations: Parameter estimates from a series of univariable mixed effects logistic regression models, modelling on a case-level the outcome variable ‘presence of systemic antimicrobial prescription’ against a number of categorical and continuous risk factors.

Random effect	Variance	Standard Deviation	Variable	Category	β	SE ^a	OR ^b	Lower CI ^c	Upper CI	P
Practice Site	0.39 0.16	0.63 0.40	Insurance status	Uninsured (Intercept)	-0.96	0.06	-	-	-	-
				Insured	-0.02	0.04	0.98	0.90	1.06	0.59
			Vaccination	Unvaccinated (Intercept)	-0.94	0.06	-	-	-	-
				Vaccinated	-0.04	0.04	0.96	0.89	1.04	0.33
			Neutered status	Un-neutered (Intercept)	-0.98	0.06	-	-	-	-
				Neutered	0.02	0.04	1.02	0.95	1.09	0.64
			Consultation episode	First visit (Intercept)	-0.94	0.05	-	-	-	-
				Revisit	-0.11	0.04	0.90	0.83	0.97	0.006
			Severity	Mild (Intercept)	-1.05	0.05	-	-	-	-
				Moderate/Severe	0.44	0.04	1.55	1.42	1.69	<0.001
			Faecal bacteriology/parasitology	Absent (Intercept)	-0.97	0.05	-	-	-	-
				Present	0.02	0.07	1.03	0.90	1.16	0.71
			Diarrhoea	Absent (Intercept)	-1.78	0.07	-	-	-	-
				Non-haemorrhagic	0.72	0.05	2.05	1.86	2.26	<0.001
				Haemorrhagic	1.43	0.05	4.17	3.77	4.62	<0.001
			Vomiting	Absent (Intercept)	-0.79	0.06	-	-	-	-
				Non-haemorrhagic	-0.42	0.04	0.66	0.61	0.70	<0.001

		Haemorrhagic	-0.31	0.09	0.73	0.61	0.88	0.001
	Duration	≤ 2 days (Intercept)	-1.01	0.06	-	-	-	-
		≥ 3 days and ≤ 2 weeks	0.22	0.04	1.24	1.16	1.33	<0.001
		> 2 weeks and < 1 month	-0.31	0.09	0.74	0.61	0.88	0.001
		≥ 1 month	-0.50	0.08	0.61	0.52	0.71	<0.001
		Do not know	-0.70	0.28	0.50	0.29	0.86	0.013
	Continuous risk factor							
	Age (years)	Intercept	-0.97	0.05	-	-	-	-
		Age – linear	0.14	0.02	1.15	1.12	1.19	<0.001
	^a Standard error							
	^b Odds ratio							
^c 95% Confidence interval								

Supplementary Table 2. Systemic antimicrobials in feline consultations: Parameter estimates from a series of univariable mixed effects logistic regression models, modelling on a case-level the outcome variable ‘presence of systemic antimicrobial prescription’ against a number of categorical and continuous risk factors.

Random effect	Variance	Standard Deviation	Variable	Category	β	SE ^a	OR ^b	Lower CI ^c	Upper CI	P
Practice	0.58	0.76	Insurance status	Uninsured (Intercept)	-1.32	0.08	-	-	-	-
				Insured	-0.07	0.11	0.93	0.76	1.15	0.51
Site	0.21	0.46	Vaccination	Unvaccinated (Intercept)	-1.29	0.09	-	-	-	-
				Vaccinated	-0.08	0.08	0.92	0.79	1.08	0.31
			Neutered status	Un-neutered (Intercept)	-1.21	0.11	-	-	-	-
				Neutered	-0.16	0.10	0.86	0.71	1.04	0.11
			Consultation episode	First visit (Intercept)	-1.25	0.08	-	-	-	-
				Revisit	-0.26	0.08	0.77	0.65	0.91	0.002
			Severity	Mild (Intercept)	-1.46	0.08	-	-	-	-
				Moderate/Severe	0.62	0.09	1.86	1.55	2.23	<0.001
			Faecal bacteriology/parasitology	Absent (Intercept)	-1.32	0.08	-	-	-	-
				Present	-0.19	0.15	0.83	0.61	1.11	0.21
			Diarrhoea	Absent (Intercept)	-1.73	0.10	-	-	-	-
				Non-haemorrhagic	0.47	0.09	1.61	1.35	1.91	<0.001
				Haemorrhagic	1.04	0.11	2.83	2.27	3.53	<0.001
			Vomiting	Absent (Intercept)	-1.12	0.09	-	-	-	-
				Non-haemorrhagic	-0.47	0.08	0.63	0.54	0.73	<0.001
				Haemorrhagic	0.01	0.19	1.01	0.69	1.48	0.95
			Duration	≤ 2 days (Intercept)	-1.16	0.09	-	-	-	-
				≥ 3 days and ≤ 2 weeks	-0.02	0.09	0.98	0.83	1.16	0.84
				> 2 weeks and < 1 month	-0.66	0.17	0.52	0.37	0.72	<0.001

		≥ 1 month	-0.77	0.12	0.46	0.37	0.58	<0.001
		Do not know	-1.21	0.55	0.30	0.10	0.88	0.03
	Continuous risk factor							
	Age (years)	Intercept	-1.45	0.09	-	-	-	-
		Age - linear	-0.11	0.04	0.90	0.83	0.97	0.006
		Age - quadratic	0.12	0.04	1.12	1.03	1.22	0.008

^a Standard error

^b Odds ratio

^c 95% Confidence interval

2 Supplementary Data

List of abbreviations and clinical acronyms present in the analysed clinical narratives:

a/b – antibiotics	Euth - euthanasia
Ab('s) – antibiotics	F/S – faecal sample
Abdo – abdomen	f+ – faeces/faecal
Abios – antibiotics	FeLV – Feline Leukaemia Virus
Abx – antibiotics	FIV – Feline Immunodeficiency Virus
Adv – advised	FPLi – Feline Pancreatic Lipase Immunoreactivity
Am – morning	GE – gastroenteritis
Antibs – antibiotics	GI – gastrointestinal
Asap – as soon as possible	Hols – holidays
B. duct – biliary duct	IBD – Inflammatory Bowel Disease
Bact – bacterial	Inf – infection
BG – Blood Glucose	Infxn – infection
BT – Blood Test	Inj – injection
Camp – <i>Campylobacter spp.</i>	IVFT – intravenous fluid therapy
Campy – <i>Campylobacter spp.</i>	Meds – medication/medical treatment
Chk – check(ed)	Metronid – metronidazole
D+(++) – Diarrhoea	mmol – millimoles
Ddx – differential diagnosis	Mtz – metronidazole
dexf – dexamethasone	NAD – Nothing Abnormal Detected
Disc – discussed	NSAID – non-steroidal anti-inflammatory drug
E.coli – <i>Escherichia coli</i>	

NSF – No Significant Findings

O – Owner

Opt – opted

P – plan

P. duct – pancreatic duct

Poss – possible

Re – re-examination

Re/ex – re-examination

re-ex – re-examination

RV – revisit

Rx – prescribed medication/re-examine
(depending on the context)

Susp – suspect(ed)

T – temperature

Temp – temperature

TLI - Trypsin-Like Immunoreactivity

Tx – treatment

UA – Urinalysis

V+ – vomiting

Vom – vomiting

W/ – with

W/e – weekend

WBC – White Blood Cell