

Supplementary Table 1: Population characteristics of the study population, divided by groups.

mc, male castrated; f, female; m, male; Group H, healthy; Group A, arrhythmias; Group O, other; T, trot phase; C, canter phase; R, recovery phase; APC, atrial premature complex; VPC, ventricular premature complex; VT, ventricular tachycardia; PD, punctuated decelerations (marked sinus arrhythmia, sinus pause, sinus block); AVB, AV-block; EIPH, exercise-induced pulmonary haemorrhage; IAD, inflammatory airway disease; ICC, intra-cardiac catheter.

Study no.	Age (years)	Sex	Breed	Diagnosis	Arrhythmias
Group H					
3	8	f	Swiss Warmblood	healthy - ICC	
4	16	f	Swiss Warmblood	healthy	
5	9	mc	Swiss Warmblood	healthy	
12	11	mc	Hanoverian Warmblood	healthy	
18	16	mc	Swiss Warmblood	healthy - ICC	
25	9	mc	Dutch Warmblood	healthy	
27	8	mc	Mecklenburg Warmblood	healthy	
28	9	f	Oldenburg Warmblood	healthy	
29	7	f	Swiss Warmblood	healthy	
32	3	f	Thoroughbred	healthy	
47	16	mc	Irish Warmblood	healthy	
48	7	mc	Swiss Warmblood	healthy	
56	14	mc	Swiss Warmblood	healthy	
Group A					
1	19	mc	Westphalian Warmblood	mild-moderate mitral insufficiency - ICC	R: 3x APC
2	15	mc	Polish Warmblood	Healthy - ICC	R: 1x VPC
6	16	f	Austrian Warmblood	mild-moderate mitral insufficiency - ICC	C: 1x VPC
8	12	f	Arabian	gastric ulcers	R: 5x PD
9	15	mc	Arabian	moderate-severe aortic insufficiency	C: 1x APC
10	11	mc	Hanoverian Warmblood	healthy	C: 6x APC
13	5	mc	Swiss Warmblood	healthy - ICC	R: 14x VPC
14	10	mc	Swiss Warmblood	healthy - ICC	R: 2x APC
15	16	mc	Swiss Warmblood	healthy - ICC	C: 2x APC, 1x VPC R: 2x APC, 2x VPC
16	10	mc	Swiss Warmblood	healthy - ICC	R: 2x APC
17	12	mc	Swiss Warmblood	healthy - ICC	T: 1x VPC C: 1x APC R: 1x VPC
19	9	mc	Swiss Warmblood	healthy - ICC	R: 1x APC, 1x VPC
20	10	f	Swiss Warmblood	healthy - ICC	C: 2x VPC R: 12x VPC, 1x 2 nd degree AVB
21	5	mc	Swiss Warmblood	healthy - ICC	R: 1x VPC, 2x PD

22	15	f	Swiss Warmblood	healthy - ICC	T: 1x APC
23	17	mc	Swiss Warmblood	healthy - ICC	R: 1x VPC
26	11	mc	Oldenburg Warmblood	mild-moderate mitral insufficiency - ICC	R: 1x APC
31	9	mc	Irish Warmblood	gastric ulcers	R: PD
33	4	f	Thoroughbred	EIPH	R: 2x VPC
36	14	mc	Austrian Warmblood	arrhythmias	T: 1x VPC C: 7x VPC (short run of VT) R: 9x VPC
38	14	mc	Holstein Warmblood	severe aortic insufficiency	R: 3x VPC
39	10	mc	Swiss Warmblood	healthy	R: 5x VPC
42	3	mc	Swiss Warmblood	ventricular septal defect	T: 5x VPC C: 6x VPC
43	11	f	Belgian Warmblood	arrhythmias	T: 5x VPC R: 1x VPC
44	7	mc	French Warmblood	healthy	R: 17x PD
45	23	mc	Belgian Warmblood	healthy	T: 2x VPC
46	8	f	Westphalian Warmblood	idiopathic laryngeal hemiplegia	R: 29x APC
49	10	mc	Swiss Warmblood	healthy	R: 2x PD
54	9	f	Arabian	healthy	R: 5x PD
37	4	mc	Thoroughbred	collapse of undiagnosed origin	R: 2x PD

Group O

7	8	f	Slovakian Warmblood	moderate mitral and tricuspid insufficiency - ICC
24	17	mc	Irish Warmblood	moderate aortic insufficiency
30	9	mc	Oldenburg Warmblood	bronchitis, back issues
35	8	mc	Hanoverian Warmblood	interstitial pneumonia, EIPH, neoplasia
37	4	mc	Thoroughbred	collapse of undiagnosed origin
40	11	mc	Italian Warmblood	severe aortic and mild mitral insufficiency
41	19	mc	Pony	chronic bronchitis
50	8	f	Holstein Warmblood	IAD, gastric ulcers, selenium deficiency
51	9	f	Westphalian Warmblood	gastric ulcers
52	8	mc	Brandenburg Warmblood	tendonitis of the superficial digital flexor tendon, patellar fixation
53	3	m	Quarter Horse	piroplasmosis
55	4	mc	Thoroughbred	EIPH