

**Supplementary Table S1**—Results of quantile regression for pulmonary stenosis gradient (PG; mm Hg) as a function of MEA, ln(weight), sex, and murmur grade. The point estimates for each covariate are interpreted as the effect of a 1 unit change of the covariate on PG, with other covariates held constant. The intercept is interpreted as the conditional quantile function of PG estimated for female dogs of mean weight (14 kg) and MEA (131°). Each 10° increase in MEA corresponded to an approximate increase of ~5 mm Hg in PG. For each unit increase in body weight (approx 2.7 kg), PG declined by approximately 15 mm Hg, especially in the lower percentiles (< 0.5). Female dogs showed an estimated increase in PG of approximately 14 to 20 mm Hg over males at the extremes and up to 30 mm Hg in the midrange.

Parameter	Estimate	90% Confidence limits		P-value
Low (10th percentile)				
Intercept	85.54	44.95	126.14	0.001
MEA	0.19	0.05	0.32	0.024
x1 = 0	-26.55	-43.98	-9.11	0.013
x2 = 0	-7.31	-31.73	17.12	0.620
ln(body weight)	-14.96	-23.43	-6.49	0.004
Sex = 0	13.69	0.93	26.45	0.078
25th percentile				
Intercept	77.50	39.49	115.51	0.001
MEA	0.40	0.24	0.55	< .0001
x1 = 0	-24.88	-39.87	-9.89	0.007
x2 = 0	-22.02	-41.57	-2.47	0.065
ln(weight)	-13.68	-22.94	-4.42	0.016
Sex = 0	17.83	5.27	30.39	0.021
Median (50th percentile)				
Intercept	110.58	49.72	171.45	0.003
MEA	0.38	0.25	0.51	< 0.0001

x1 = 0	-24.27	-44.62	-3.92	0.051
x2 = 0	-36.35	-61.40	-11.30	0.018
ln(weight)	-13.69	-26.29	-1.08	0.075
Sex = 0	16.28	1.65	30.90	0.068
75th percentile				
Intercept	111.08	35.77	186.38	0.016
MEA	0.47	0.27	0.66	< 0.0001
x1 = 0	-30.69	-65.81	4.42	0.150
x2 = 0	-33.74	-73.08	5.60	0.158
ln(weight)	-8.69	-24.78	7.39	0.371
Sex = 0	19.25	-7.79	46.30	0.240
High (90th percentile)				
Intercept	209.78	92.96	326.60	0.004
MEA	0.22	-0.13	0.57	0.291
x1 = 0	-40.54	-94.15	13.07	0.212
x2 = 0	-76.92	-143.27	-10.57	0.057
ln(weight)	-8.55	-29.27	12.17	0.494
Sex = 0	12.83	-27.31	52.97	0.596