WEB ENHANCEMENT

Reference MS#: 200011087

Autosomal dominant canine malignant hyperthermia is caused by a mutation in the gene encoding the skeletal muscle calcium release channel (RYR1)

Roberts, MC et al.

Canine in vitro contracture test data. Values in the 3% Halothane column represent generated fasicle tension in grams (g). Values in the CSC (caffeine specific concentration) and HCSC (halothane/caffeine specific concentration) columns represent titrated caffeine concentration (mM) required to generate 1 g of isometric contracture. The MHS diagnosis was made if the mean of three fasicles was an abnormal response of one or more of: contracture tension in 3% halothane > 0.2g, CSC < 6.0 mM and HCSC < 2.0 mM.

I.D.	3% Halothane	CSC (mM)	HCSC (mM)
A-10 MHS	1.70	1.80	0.60
	3.00	1.65	0.59
mean	**2.35**	**1.72**	**0.59**
3-5271 MHN	0.00	5.22	2.18
	0.11	3.79	0.9
	0.35	4.20	2.13
mean	**0.15**	**4.40**	**1.73**
3-5343 MHS	0.84	2.25	0.60
	0.73	3.00	0.64
	0.46	1.70	0.71
mean	**0.60**	**2.32**	**0.65**
3-5344 MHN	0.39	2.49	1.66
	0.00	4.16	2.32
	0.00	4.12	2.52
mean	**0.13**	**3.69**	**2.17**
3-5345 MHS	0.55	4.21	0.82
	0.73	3.66	0.63
	0.48	7.33	0.83
mean	**0.59**	**5.07**	**0.76**
3-5346 MHN	0.00	5.30	4.21
	0.00	6.6	3.62
	0.00	7.76	4.15
mean	**0.00**	**6.55**	**3.99**
3-5347 MHS	0.12	1.99	0.69
	0.81	1.88	0.75
	0.35	2.86	0.75

mean	**0.43**	**2.24**	**0.73**
3-5348 MHS	1.04	1.69	0.58
	1.01	1.40	0.52
	1.03	1.51	0.37
mean	**1.03**	**1.53**	**0.49**
3-5349 MHN	0.00	7.37	3.97
	0.00	5.40	4.03
	0.00	8.39	4.48
mean	**0.00**	**7.05**	**4.16**
3-5350 MHN	0.00	5.80	4.15
	0.00	6.65	2.33
	0.00	4.40	1.82
mean	**0.00**	**5.62**	**2.77**
4-5403 MHS	0.18	5.38	4.65
	0.28	5.69	2.17
	0.30	2.89	1.71
mean	**0.25**	**4.65**	**2.84**
4-5404 MHS	0.60	3.15	1.84
	0.62	4.41	1.13
	0.60	2.95	0.63
mean	**0.61**	**3.50**	**1.20**
4-5405 MHN	0.00	8.75	2.30
	0.00	7.30	2.44
	0.00	8.82	4.53
mean	**0.00**	**8.29**	**3.09**
4-5406 MHS	0.55	1.88	1.14
	0.58	3.82	0.89
	0.55	2.67	1.81
mean	**0.56**	**2.79**	**1.28**
4-5407 MHS	0.53	2.32	0.41
	0.74	2..37	0.50
	0.30	2.50	1.61
mean	**0.52**	**2.40**	**0.84**
4-5408 MHS	0.81	1.52	1.55
	0.64	1.89	1.08
	0.60	2.50	1.19
mean	**0.68**	**1.97**	**1.27**
4-5409 MHS	0.81	1.52	1.55
	0.64	1.89	1.08
	0.60	2.50	1.19
mean	**0.68**	**1.97**	**1.27**
4-5410 MHN	0.00	12.04	3.81
	0.10	11.22	4.37
		10.14	5.36
mean	**0.05**	**11.13**	**4.51**
5-5437 MHN	0.00	8.92	2.83
	0.17	31.44	2.49
	0.04	35.04	2.61
mean	**0.07**	**25.13**	**2.64**
5-5438 MHS	0.39	10.07	2.08
	0.65	3.82	0.64

	0.36	3.12	0.64
mean	**0.47**	**5.67**	**1.12**
5-5439 MHN	0.00	23.27	3.04
	0.00	25.42	4.30
	0.00	25.42	3.42
mean	**0.00**	**25.83**	**3.59**
5-5440 MHS	0.48	3.33	2.18
	0.73	2.92	0.41
	1.04	3.06	0.67
mean	**0.75**	**3.10**	**1.09**
6-5448 MHN	0.00	9.76	2.55
	0.00	13.90	1.80
	0.00	17.50	2.40
mean	**0.00**	**13.72**	**2.25**
6-5449 MHS	0.89	4.33	1.18
	1.33	4.40	1.00
	1.16	4.41	0.54
mean	**1.13**	**4.38**	**0.91**
6-5450 MHS	0.80	2.77	0.37
	1.50	3.11	0.55
	1.40	4.44	0.22
mean	**1.23**	**3.44**	**0.38**
6-5451 MHN	0.00	11.64	2.77
	0.00	19.20	3.41
	0.00	14.00	4.00
mean	**0.00**	**14.95**	**3.39**
6-5452 MHS	0.80	2.70	0.42
	0.70	3.00	0.79
	1.20	4.40	0.85
mean	**0.90**	**3.37**	**0.69**
6-5453 MHS	0.61	3.65	0.61
	1.04	3.17	0.51
	0.81	5.10	0.82
mean	**0.82**	**3.97**	**0.65**
6-5454 MHS	0.87	5.72	1.74
	0.79	6.11	0.75
	0.63	5.04	3.15
mean	**0.76**	**5.62**	**1.88**
7-5468 MHN	0.00	12.60	2.20
	0.00	7.40	2.20
	0.00	6.90	2.40
mean	**0.00**	**8.97**	**2.27**
7-5476 MHN	0.00	13.70	2.40
	0.00	7.52	1.60
	0.00	32.00	2.90
mean	**0.00**	**17.74**	**2.30**
7-5477 MHN	0.00	9.10	2.50
	0.00	9.10	4.50
	0.00	9.60	2.30
mean	**0.00**	**9.27**	**3.10**
7-5478 MHN	0.00	4.30	3.20

	0.50	6.10	2.10
	0.00		2.10
mean	**0.17**	**5.20**	**2.47**
7-5479 MHS	0.20	2.00	0.27
	0.90	1.90	0.07
	0.60	2.40	0.29
mean	**0.57**	**2.10**	**0.21**
7-5480 MHS	0.72	3.67	0.75
	1.00	3.67	0.75
	1.10	7.20	1.00
mean	**0.94**	**4.85**	**0.83**
7-5481 MHS	0.50	3.30	
	0.70		
	0.60		
mean	**0.60**	**3.30**	
7-5482 MHS	1.00	1.40	
	0.60	1.60	
	1.30		
	1.10		
mean	**1.00**	**1.50**	
7-5483 MHN	0.00	9.30	
	0.00	16.00	
	0.00	10.00	
mean	**0.00**	**11.88**	
7-5484 MHS	0.95	3.56	0.38
	0.90	2.10	0.19
	0.85	2.30	0.32
mean	**0.90**	**2.65**	**0.30**
7-5485 MHN	0.00	12.00	
	0.00	11.30	
	0.00	8.60	
mean	**0.00**	**10.63**	
7-5486 MHN	0.00	10.40	
	0.00	22.90	
	0.00	21.30	
	0.00		
mean	**0.00**	**18.20**	
8-5480 MHN	0.00	12.58	3.56
	0.00	11.88	4.99
	0.00		
mean	**0.00**	**12.23**	**4.28**
9-5503 MHN	0.00	14.76	1.55
	0.00	17.59	1.67
	0.00	16.30	2.15
mean	**0.00**	**16.22**	**1.79**
9-5504 MHN	0.00	9.79	1.75
	0.00	8.38	2.06
	0.00	8.48	2.17
mean	**0.00**	**8.88**	**1.99**
9-5505 MHN	0.00	10.28	2.89
	0.00	8.83	2.10
	0.00	12.34	3.15

mean	**0.00**	**10.48**	**2.71**
9-5506 MHN	0.00	8.98	1.84
	0.00	12.84	3.18
	0.00	9.74	4.06
mean	**0.00**	**10.52**	**3.03**
9-5507 MHS	1.58	0.82	0.65
	1.61	1.23	1.22
	1.24	0.56	0.44
mean	**1.48**	**0.87**	**0.77**