Appendix S1. Calculation of target heart rate ranges.

Based on the heart rate at the anaerobic threshold (HR at AT), the individual target heart rate ranges for low and high intensity exercise intervals and recovery can be determined as follows:

	Percentage of HR at AT		Heart rate (bpm)	
	Lower limit	Upper limit	Lower limit	Upper limit
Target heart rate zone				
Recovery	60%	80%	0.6*HR at AT	0.8*HR at AT
Low intensity	80%	100%	0.8*HR at AT	HR at AT
High intensity	105%	115%	1.05*HR at AT	1.15*HR at AT

Assuming that patient A had a HR at AT of 120 beats per minute, then the lower and upper limits for the high intensity exercise interval are:

Lower limit = 105% of HR at AT   Upper limit = 115% of HR at AT

Lower limit = 1.05 * HR at AT   Upper limit = 1.15 * HR at AT

Lower limit = 1.05 * 120   Upper limit = 1.15 * 120

Lower limit = 126   Upper limit = 138

Appendix S2. Individual patient characteristics and exercise parameters at the highest achieved workload during the maximal exercise test.

ID	Sex	Age (yrs)	Weight (kg)	Diagnosis	Walk function	Walking aids (y/n)	MMT Sum LE*	Workload (W)	HR (bpm)	6–20 RPE	VO$_2$ (ml/min/kg)	RER	r test	r train
Lower RPE values for corresponding HRs during training compared to exercise testing														
2	Male	50	80.5	CMT2	Seldom≥1km	Yes	60.0	158	160	19	20.7	1.41	1.00	.84
8	Female	52	51.5	CMT1	Regularly≥1km	Yes	74.5	95	169	17	24.1	1.39	.89	.17
9	Female	59	67.9	CMT1	Seldom≥1km	Yes	71.0	108	151	15	24.7	1.33	.92	.74
11	Female	54	63.1	CMT1	Regularly≥1km	No	74.0	156	168	20	25.5	1.43	1.00	.73
14	Male	65	70.5	CMT2	Regularly≥1km	Yes	68.5	135	127	16	22.7	1.26	.99	.65
17	Female	65	67.6	PPS	Regularly≥1km	No	75.5	85	140	16	16.1	1.30	.97	.82
18	Female	34	50.0	CMT1	Regularly≥1km	No	77.0	84	156	19	24.1	1.27	.98	.53
19	Female	41	58.5	CMT1	Regularly≥1km	Yes	76.0	162	171	18	33.6	1.12	.98	.67
23	Female	66	60.0	PPS	Seldom≥1km	Yes	64.0	97	138	18	19.7	1.08	1.00	.68
26	Male	65	76.0	CMT1	Regularly≥1km	Yes	76.0	219	145	18	35.7	1.06	.99	.82
28	Male	45	87.2	CM	Regularly≥1km	No	79.0	196	179	18	26.6	1.13	1.00	.91
30	Male	27	70.8	CM	Regularly≥1km	Yes	74.5	187	184	20	32.2	1.21	1.00	.78
Similar RPE values for corresponding HRs during training compared to exercise testing														
1	Male	64	84.7	CMTX	Regularly≥1km	Yes	60.0	157	166	20	21.8	1.03	.98	.86
4	Male	62	82.0	CMT1	Regularly≥1km	Yes	67.0	151	160	18	24.8	1.45	1.00	.62
6	Female	58	86.7	CMT1	Around house	Yes	49.5	45	173	19	15.4	1.18	.98	.89

12	Female	65	73.4	PPS	Seldom≥1km	Yes	74.0	118	124	19	18.6	1.22	.98	.75
15	Male	68	96.8	CMT2	Regularly≥1km	Yes	68.0	162	141	17	19.5	1.33	1.00	.76
16	Female	28	59.0	CMTUK	Regularly≥1km	Yes	70.5	151	184	17	35.9	1.21	1.00	.95
21	Female	68	84.3	DM1	Around house	No	75.0	92	115	15	12.3	1.04	.99	.75
22	Female	77	75.5	PPS	Seldom≥1km	Yes	77.0	92	127	20	17.7	.91	.99	.32
25	Female	65	76.0	CMT1	Regularly≥1km	Yes	60.0	144	161	18	20.6	1.13	.93	.74
29	Female	60	75.9	DM2	Seldom≥1km	No	78.5	119	160	19	20.6	1.23	.97	.34
Higher RPE values for corresponding HRs during training compared to exercise testing														
3	Male	65	81.5	CMT1	Regularly≥1km	Yes	76.0	196	177	17	25.6	1.17	.95	.33
5	Male	68	71.0	CMT2	Regularly≥1km	Yes	61.0	177	142	19	32.3	1.07	1.00	.75
7	Male	63	87.3	CMT1	Seldom≥1km	Yes	63.5	103	169	19	14.4	1.25	.99	.71
10	Male	65	86.8	PPS	Regularly≥1km	Yes	67.5	133	133	15	19.1	1.31	.96	.69
13	Male	68	82.2	PPS	Seldom≥1km	No	74.0	166	161	18	23.9	1.29	.99	.60
20	Male	73	97.0	IBM	Regularly≥1km	Yes	73.5	103	132	17	13.6	1.16	.99	.51
24	Female	68	67.4	PPS	Seldom≥1km	Yes	69.5	90	149	17	21.0	1.06	.98	.63
27	Female	46	90.0	DM1	Seldom≥1km	Yes	64.0	104	141	17	16.1	.97	.98	.84

Abbreviations: bpm, beats per minute; CM, Congenital myopathy; CMT1, Charcot-Marie-Tooth disease type 1; CMT2, Charcot-Marie-Tooth disease type 2; CMTX, Charcot-Marie-Tooth disease type X; CMTUK, Charcot-Marie-Tooth disease subtype unknown; DM1, Myotonic Dystrophy type 1; DM2, Myotonic Dystrophy type 2; HR, heart rate; IBM, Inclusion Body Myositis; kg, kilogram; km, kilometer; min, minute; ml, milliliter; MMT, Manual muscle testing; LE, lower extremities; PPS, post-polio syndrome; r, Pearson's correlation coefficient; RER, respiratory exchange ratio; RPE, rating of perceived exertion; VO$_2$, oxygen uptake; W, Watts; yrs, years.

[*] Defined as the sum of scores from 8 lower extremity muscle groups on both sides. Each muscle group had a score between 0 and 5, so that the sum score ranged from 0 to 80.