

**Table A2 Root mean square electromyography for muscles of interest**

	1 <sup>st</sup> Unpowered Minutes 7-10 ■	Powered Minutes 3-6 ■	Powered Minutes 27-30 ■	2 <sup>nd</sup> Unpowered Minutes 7-10 ■	Within Session P-Value
<b>Soleus r.m.s.</b>					
Session 1	1.00 ± 0.00	0.86 ± 0.04	0.80 ± 0.08	0.93 ± 0.03	0.073
Session 2	1.00 ± 0.00	1.03 ± 0.12	0.93 ± 0.12	0.98 ± 0.03	0.307
Session 3	1.00 ± 0.00	1.04 ± 0.08	0.89 ± 0.08	0.98 ± 0.02	0.119
Across Session P-Value	1.000	0.251	0.478	0.432	
<b>Tibialis Anterior r.m.s.</b>					
Session 1	1.00 ± 0.00	1.20 ± 0.03	1.07 ± 0.05	1.01 ± 0.04	0.005
Session 2	1.00 ± 0.00	1.10 ± 0.05	0.92 ± 0.03	0.99 ± 0.04	0.032
Session 3	1.00 ± 0.00	1.04 ± 0.05	0.89 ± 0.06	1.00 ± 0.04	0.354
Across Session P-Value	1.000	0.130	0.118	0.947	
<b>Medial Gastrocnemius r.m.s.</b>					
Session 1	1.00 ± 0.00	1.05 ± 0.07	0.98 ± 0.09	0.99 ± 0.05	0.317
Session 2	1.00 ± 0.00	1.02 ± 0.11	0.96 ± 0.12	0.98 ± 0.03	0.783
Session 3	1.00 ± 0.00	1.03 ± 0.09	0.94 ± 0.07	0.98 ± 0.02	0.252
Across Session P-Value	1.000	0.885	0.885	0.885	
<b>Biceps Femoris Long Head r.m.s.</b>					
Session 1	1.00 ± 0.00	1.12 ± 0.10	0.82 ± 0.05	0.82 ± 0.05	0.002
Session 2	1.00 ± 0.00	1.02 ± 0.10	0.76 ± 0.08	0.80 ± 0.06	0.039
Session 3	1.00 ± 0.00	1.19 ± 0.14	0.83 ± 0.09	0.87 ± 0.04	0.014
Across Session P-Value	1.000	0.115	0.008	0.672	
<b>Vastus Lateralis r.m.s.</b>					
Session 1	1.00 ± 0.00	1.18 ± 0.06	1.02 ± 0.08	0.93 ± 0.02	0.002
Session 2	1.00 ± 0.00	1.15 ± 0.06	1.04 ± 0.11	0.95 ± 0.04	0.178
Session 3	1.00 ± 0.00	1.13 ± 0.06	1.01 ± 0.07	0.99 ± 0.04	0.127
Across Session P-Value	1.000	0.670	0.912	0.427	
<b>Rectus Femoris r.m.s.</b>					
Session 1	1.00 ± 0.00	1.19 ± 0.11	0.91 ± 0.12	0.84 ± 0.06	0.008
Session 2	1.00 ± 0.00	1.02 ± 0.10	0.77 ± 0.05	0.88 ± 0.03	0.058
Session 3	1.00 ± 0.00	0.83 ± 0.09	0.80 ± 0.09	0.90 ± 0.05	0.350
Across Session P-Value	1.000	0.005	0.555	0.373	

Values (means ± s.e.m.) are root mean square (r.m.s.) average from the whole walking stride normalized to the first unpowered condition of the corresponding session.  $P < 0.05$  represents statistical significance.