

Supplementary Table S2—Table summarizing post-hoc statistical significance of all measured gait parameters between exercise groups (post-op values normalized to baseline pre-op).

Gait Parameter	Slow Incline vs.				Slow-Divine vs.			Fast-Flat vs.		Fast-Incline
	Slow Decline	Fast-Flat	Fast Incline	Vs. Fast Decline	Fast Flat	Fast Incline	Fast-Divine	Fast-Incline	Fast-Divine	Fast-Divine
% Swing Stride	1.00	1.00	1.00	0.69	1.00	1.00	0.69	1.00	0.98	0.65
% Brake Stride	0.92	0.83	0.98	0.92	0.98	1.00	1.00	0.96	0.98	1.00
% Propel Stride	0.90	0.76	1.00	0.62	0.97	0.98	0.98	0.86	1.00	0.80
% Stance Stride	0.85	1.00	1.00	1.00	0.94	0.90	0.57	1.00	1.00	1.00
% Brake Stance	0.92	0.82	0.99	0.88	0.98	1.00	1.00	0.94	0.99	0.99
% Propel Stance	0.92	0.95	0.99	0.88	0.71	1.00	1.00	0.84	0.67	0.99
Stance/Swing (real number)	1.00	0.99	0.99	0.62	0.96	1.00	0.41	0.92	0.99	0.33
Stride Length	0.99	0.27	1.00	1.00	0.12	1.00	0.95	0.19	0.26	0.99
Stride Frequency	0.99	1.00	1.00	1.00	0.97	0.99	0.92	1.00	1.00	1.00
Absolute Paw Angle	0.99	1.00	0.60	0.99	1.00	0.80	1.00	0.91	1.00	0.74
Stance Width	0.90	0.99	0.64	1.00	0.84	0.20	0.94	0.98	0.98	0.44
Step Angle	0.44	1.00	0.98	1.00	0.64	0.20	0.25	1.00	1.00	0.99
Hindlimb Shared Stance Time	0.04	0.02	0.06	0.01	0.01	0.98	0.99	0.86	0.88	1.00
% Shared Stance	0.94	1.00	0.97	0.99	0.91	0.63	0.64	1.00	1.00	1.00
Stance Factor	0.96	1.00	0.96	0.59	1.00	0.67	0.90	0.92	0.97	0.24
Gait Symmetry	0.99	0.84	0.98	0.93	0.93	1.00	1.00	0.96	0.98	1.00
Max dA/dT	0.48	<0.0001	0.34	0.65	<0.0001	1.00	0.97	<0.0001	<0.0001	0.83
Min dA/dT	0.69	0.005	0.27	0.84	0.005	0.78	0.98	0.02	0.0009	0.37
Tau Propulsion	0.70	1.00	1.00	1.00	0.73	0.71	0.57	1.00	1.00	1.00
Overlap Distance	0.60	1.00	0.02	1.00	0.88	0.12	0.36	0.12	1.00	0.01
Paw Placement Positioning	0.19	0.67	0.78	0.88	1.00	0.81	0.50	0.98	0.93	1.00
Ataxia Coefficient	0.90	0.99	1.00	1.00	0.82	0.96	0.76	0.97	1.00	0.99
Midline Distance	1.00	0.89	0.92	0.59	0.88	0.91	0.51	0.60	1.00	0.19

Axis Distance (absolute value)	1.00	1.00	0.43	0.99	1.00	0.38	0.99	0.89	0.97	0.19
Paw Drag (real number)	0.01	0.97	0.58	1.00	0.26	0.001	0.0035	0.48	0.93	0.59