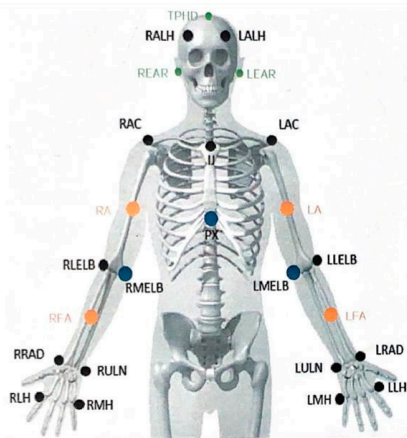
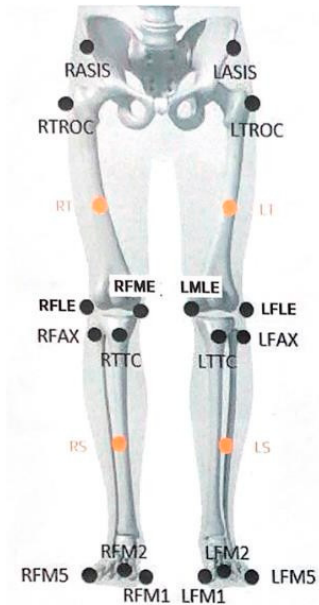
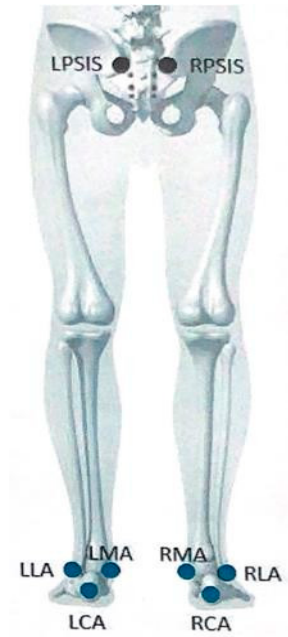


Supplementary Material

Table S1: Anatomical reference points for marker placement.

Reflective Markers			
	Name	Side	Location
	RALH	Right	Anterolateral Portion of the Head
	LALH	Left	
	RPLH	Right	Posterolateral Portion of the Head
	LPLH	Left	
	REAR	Right	Earlobe
	LEAR	Left	
	RACJ	Right	Acromion
	LACJ	Left	
	C7	-	Cervical Vertebra C7
	TV2	-	Thoracic Vertebra T2
	TV7	-	Thoracic Vertebra T7
	LV1	-	Lumbar Vertebra L1
	LV3	-	Lumbar Vertebra L3
	LV5	-	Lumbar Vertebra L5
	SJN	-	Jugular Notch
	SXS	-	Xiphoid Process
	RLELB	Right	Lateral Epicondyle of the Humerus
	LLELB	Left	
	RMELB	Right	Medial Epicondyle of the Humerus
	LMELB	Left	
RFA	Right	Forearm (tracking)	
LFA	Left		
RRAD	Right	Styloid Process of the Radius	
LRAD	Left		
RULN	Right	Styloid Process of the Ulna	
LULN	Left		
RLH	Right	Medial Aspect of the 2 nd Metacarpal Head	
LLH	Left		
RMH	Right	Medial Aspect of the 5 nd Metacarpal Head	
LMH	Left		
	Clusters		
	RUA1	Right	Upper Extremity
	RUA2		
	RUA3		
	LUA1	Left	
	LUA2		
	LUA3		

Lower Extremity			
	Name	Side	Location
	RIAS	Right	



LIAS	Left	Anterior Superior Iliac Spine	
RIPS	Right	Posterior Superior Iliac Spine	
LIPS	Left		
RFTC	Right	Greater Trochanter of the Femur	
LFTC	Left		
RFLE	Right	Lateral Epicondyle of the Femur	
LFLE	Left		
RFME	Right	Medial Epicondyle of the Femur	
LFME	Left		
RFAX	Right	Head of the Fibula	
LFAX	Left		
RTTC	Right	Anterior Tibial Tuberosity	
LTTC	Left		
RFAL	Right	Lateral Malleolus	
LFAL	Left		
RTAM	Right	Medial Malleolus	
LTAM	Left		
RFCC	Right	Posterior Aspect of the Calcaneus	
LFCC	Left		
RFM1	Right	Dorsal Aspect of the 1 st Metatarsal Head	
LFM1	Left		
RFM2	Right	Dorsal Aspect of the 2 nd Metatarsal Head	
LFM2	Left		
RFM5	Right	Dorsal Aspect of the 5 nd Metatarsal Head	
LFM5	Left		
Clusters			
RTH1 RTH2 RTH3 RTH4	Right	Lower Limb (Thigh)	
LTH1 LTH2 LTH3 LTH4	Left		
RSK	Right		Lower Limb (Leg)
LSK	Left		

Table S2: Interpretation table to the meaning of the positive and negative values of joint angles.

Joint Signal	Positive Value (+)	Negative Value (-)
Head (X)	Extension	Flexion
Head (Y)	Tilt to the right	Tilt to the left
Head (Z)	Rotation to the left	Rotation to the right
Thorax (X)	Extension	Flexion
Thorax (Y)	Tilt to the right	Tilt to the left
Thorax (Z)	Rotation to the left	Rotation to the right
Pelvis (X)	Retroversion	Anteversion
Pelvis (Y)	Tilt to the right	Tilt to the left
Pelvis (Z)	Rotation to the left	Rotation to the right
Shoulder (X)	Flexion	Extension
Shoulder (Y)	Adduction	Abduction
Shoulder (Z)	Internal rotation	External rotation
Elbow (X)	Flexion	Extension
Elbow (Y)	Adduction	Abduction
Elbow (Z)	Internal rotation ¹	External rotation ¹
Wrist (X)	Flexion	Extension
Wrist (Y)	Ulnar deviation	Radial deviation
Wrist (Z)	Internal rotation ²	External rotation ²
Hip (X)	Flexion	Extension
Hip (Y)	Adduction	Abduction
Hip (Z)	Internal rotation	External rotation
Knee (X)	Flexion ³	Extension ³
Knee (Y)	Tibial adduction (knee varus)	Tibial abduction (knee valgus)
Knee (Z)	Internal rotation	External rotation
Ankle (X)	Dorsiflexion	Plantar flexion
Ankle (Y)	Inversion	Eversion
Ankle (Z)	Internal rotation	External rotation

¹The rotation of the forearm is related to the pronation/supination of the hand. This movement creates the opposition of the radius and ulna markers, which will generate a 180° rotation in relation to the shoulder.

²Considering the anatomical position, this is empirically related to the pronation/supination movement. However, to perform such a movement, the forearm also must rotate over itself. As such, this hand rotation should be considered as the hand rotation is a fully immobile forearm.

³This is negated in relation to the right-hand rule (it should be extension (+)/flexion (-)) due to the fact there will be minimal extension, and the conventions have set the flexion has a positive signal.

Table S3. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS), total displacement (TDISP), mean displacement (MDISP), and amplitude (AMP) values of linear outcome of the head, trunk, and pelvis.

		MED (P25; P75)		<i>p</i> value [#]
		Healthy	Stroke	
Head (Extension +/Flexion -)	POS (°)	0.281 (-6.856; 14.368)	-2.867 (-10.286; 4.014)	0.296
	TDISP (°)	0.438 (0.334; 0.693)	1.609 (0.416; 5.396)	0.019
	MDISP (°)	0.007 (0.005; 0.011)	0.025 (0.006; 0.083)	0.019
	AMP (°)	0.279 (0.219; 0.472)	0.855 (0.303; 5.096)	0.009
Trunk (Extension+/Flexion-)	POS (°)	-4.592 (-14.212; -0.396)	-4.087 (-10.013; 1.808)	0.387
	TDISP (°)	0.209 (0.170; 0.257)	0.339 (0.232; 0.708)	0.004
	MDISP (°)	0.005 (0.004; 0.007)	0.009 (0.006; 0.016)	0.004
	AMP (°)	0.267 (0.169; 0.357)	0.481 (0.291; 0.704)	0.002
Pelvis (Retroversion+/Anteversion-)	POS (°)	-9.547 (-12.656; -5.283)	-9.117 (-13.354; -5.334)	0.857
	TDISP (°)	0.318 (0.239; 0.447)	0.576 (0.369; 1.024)	0.017
	DISP (°)	0.003 (0.003; 0.004)	0.005 (0.004; 0.011)	0.014
	AMP (°)	0.173 (0.141; 0.203)	0.269 (0.187; 0.604)	0.009
Head (Right Tilt +/Left Tilt-)	POS (°)	-0.668 (-3.744; 0.308)	-0.297 (-2.790; 1.325)	0.564
	TDISP (°)	0.221 (0.181; 0.257)	0.583 (0.237; 1.086)	0.006
	MDISP (°)	0.003 (0.003; 0.004)	0.009 (0.004; 0.017)	0.005
	AMP (°)	0.120 (0.077; 0.178)	0.355 (0.121; 0.894)	0.006
Trunk (Right Tilt+/Left Tilt-)	POS (°)	1.137 (-0.038; 3.171)	2.394 (0.810; 5.191)	0.160
	TDISP (°)	0.112 (0.096; 0.178)	0.218 (0.100; 0.416)	0.016
	MDISP (°)	0.004 (0.002; 0.004)	0.007 (0.004; 0.010)	0.016
	AMP (°)	0.164 (0.099; 0.207)	0.303 (0.171; 0.450)	0.012
Pelvis (Right Tilt+/Left Tilt-)	POS (°)	0.714 (-1.164; 2.264)	0.207 (-1.570; 2.386)	0.829
	TDISP (°)	0.227 (0.161; 0.290)	0.441 (0.229; 0.637)	0.130
	DISP (°)	0.002 (0.001; 0.003)	0.003 (0.002; 0.006)	0.121
	AMP (°)	0.076 (0.064; 0.124)	0.141 (0.063; 0.328)	0.171

Head (Left Rotation +/Right Rotation-)	POS (°)	0.207 (-2.121; 3.085)	-1.059 (-3.888; 3.076)	0.540
	TDISP (°)	0.265 (0.171; 0.371)	0.917 (0.268; 1.518)	0.009
	DISP (°)	0.004 (0.003; 0.006)	0.014 (0.004; 0.023)	0.009
	AMP (°)	0.129 (0.090; 0.230)	0.704 (0.155; 1.162)	0.004
Trunk (Left Rotation+/Right Rotation-)	POS (°)	-1.090 (-3.927; 0.676)	-0.606 (-3.156; 1.943)	0.494
	TDISP (°)	0.165 (0.124; 0.375)	0.387 (0.215; 0.733)	0.037
	MDISP (°)	0.003 (0.002; 0.004)	0.004 (0.003; 0.009)	0.040
	AMP (°)	0.105 (0.073; 0.151)	0.177 (0.123; 0.406)	0.008
Pelvis (Left Rotation+/Right Rotation-)	POS (°)	0.887 (-0.796; 3.509)	-0.820 (-6.393; 1.408)	0.078
	TDISP (°)	0.169 (0.129; 0.285)	0.292 (0.190; 0.584)	0.011
	DISP (°)	0.003 (0.002; 0.006)	0.006 (0.003; 0.011)	0.009
	AMP (°)	0.103 (0.085; 0.252)	0.326 (0.150; 0.653)	0.002

Mann–Whitney Test; Significant differences in bold.

Table S4. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS), total displacement (TDISP), mean displacement (MDISP), and amplitude (AMP) values of linear outcome of lower limb joints.

		MED (P25; P75)		<i>p</i> value [#]	MED (P25; P75)		<i>p</i> value [#]
		Swing Healthy	Swing Stroke		Stance Healthy	Stance Stroke	
Hip (Flexion+/Extension-)	POS (°)	-3.673 (-9.233; 1.192)	0.371 (-4.445; 11.872)	0.121	-3.731 (-9.285; 0.623)	-0.570 (-3.390; 10.826)	0.098
	TDISP (°)	0.194 (0.144; 0.294)	0.362 (0.159; 0.968)	0.048	0.201 (0.162; 0.304)	0.358 (0.181; 1.143)	0.052
	MDISP (°)	0.003 (0.002; 0.004)	0.011 (0.003; 0.017)	0.019	0.003 (0.003; 0.005)	0.006 (0.002; 0.013)	0.098
	AMP (°)	0.128 (0.09; 0.188)	0.276 (0.099; 0.794)	0.044	0.141 (0.104; 0.2)	0.263 (0.108; 1.0)	0.061
Knee (Flexion+/Extension-)	POS (°)	-7.635 (-11.981; 2.328)	1.969 (-9.309; 7.228)	0.207	-4.565 (-11.045; 1.011)	1.681 (-7.104; 9.862)	0.113
	TDISP (°)	0.222 (0.153; 0.345)	0.268 (0.192; 0.973)	0.121	0.260 (0.155; 0.300)	0.387 (0.222; 1.380)	0.061
	MDISP (°)	0.003 (0.002; 0.005)	0.01 (0.003; 0.023)	0.019	0.004 (0.002; 0.005)	0.004 (0.003; 0.01)	0.280
	AMP (°)	0.147 (0.092; 0.256)	0.245 (0.133; 0.775)	0.072	0.17 (0.09; 0.192)	0.281 (0.15; 1.272)	0.021
Ankle	POS (°)	6.381 (3.309; 9.172)	4.983 (3.052; 8.227)	0.666	6.137 (3.555; 9.534)	7.404 (4.206; 9.605)	0.746

(Dorsiflexion +/- Plantar Flexion-)	TDISP (°)	0.162 (0.117; 0.252)	0.277 (0.160; 0.567)	0.034	0.172 (0.113; 0.250)	0.216 (0.156; 0.650)	0.078
	MDISP (°)	0.002 (0.002; 0.004)	0.005 (0.002; 0.01)	0.037	0.003 (0.002; 0.004)	0.004 (0.003; 0.006)	0.052
	AMP (°)	0.137 (0.091; 0.198)	0.227 (0.128; 0.512)	0.028	0.131 (0.085; 0.214)	0.168 (0.114; 0.536)	0.072
Hip (Adduction+/Abduction-)	POS (°)	0.501 (-3.007; 4.642)	1.326 (-1.455; 5.508)	0.719	0.528 (-2.341; 2.572)	1.427 (-1.817; 2.917)	0.692
	TDISP (°)	0.156 (0.116; 0.270)	0.265 (0.138; 0.486)	0.130	0.154 (0.113; 0.219)	0.259 (0.136; 0.523)	0.113
	MDISP (°)	0.002 (0.002; 0.004)	0.004 (0.002; 0.008)	0.084	0.002 (0.002; 0.003)	0.004 (0.002; 0.007)	0.113
Knee (Tibial Adduction+/Tibial Abduction-)	AMP (°)	0.102 (0.071; 0.149)	0.167 (0.091; 0.344)	0.072	0.093 (0.07; 0.139)	0.177 (0.083; 0.358)	0.072
	POS (°)	1.714 (-3.895; 4.003)	-0.816 (-4.687; 3.195)	0.428	1.472 (-4.837; 4.344)	-0.369 (-1.780; 1.416)	0.589
	TDISP (°)	0.083 (0.055; 0.138)	0.104 (0.087; 0.142)	0.183	0.084 (0.062; 0.138)	0.100 (0.079; 0.312)	0.090
Ankle (Inversion +/- Eversion-)	MDISP (°)	0.001 (0.001; 0.002)	0.002 (0.001; 0.005)	0.056	0.001 (0.001; 0.002)	0.001 (0.001; 0.002)	0.235
	AMP (°)	0.048 (0.03; 0.089)	0.064 (0.05; 0.117)	0.150	0.053 (0.036; 0.076)	0.066 (0.048; 0.252)	0.098
	POS (°)	-0.084 (-2.123; 1.244)	1.478 (-0.681; 3.120)	0.130	1.167 (-1.374; 2.503)	2.030 (-0.685; 3.330)	0.494
Hip (Internal Rotation+/External Rotation-)	TDISP (°)	0.137 (0.105; 0.173)	0.224 (0.124; 0.455)	0.009	0.110 (0.098; 0.172)	0.270 (0.122; 0.449)	0.007
	MDISP (°)	0.002 (0.002; 0.003)	0.004 (0.002; 0.007)	0.026	0.002 (0.002; 0.003)	0.003 (0.002; 0.007)	0.002
	AMP (°)	0.102 (0.066; 0.121)	0.196 (0.093; 0.408)	0.006	0.073 (0.062; 0.12)	0.213 (0.096; 0.4)	0.002
Knee (Internal Rotation+/External Rotation-)	POS (°)	-1.331 (-6.808; 4.386)	-1.916 (-8.346; 2.944)	0.449	-1.014 (-5.119; 5.396)	-4.873 (-9.086; 4.898)	0.517
	TDISP (°)	0.233 (0.159; 0.308)	0.365 (0.275; 0.457)	0.011	0.240 (0.164; 0.373)	0.442 (0.217; 0.862)	0.031
	MDISP (°)	0.004 (0.002; 0.005)	0.007 (0.004; 0.013)	0.011	0.004 (0.002; 0.005)	0.006 (0.004; 0.007)	0.056
Ankle (Internal Rotation +/- External Rotation-)	AMP (°)	0.13 (0.097; 0.21)	0.223 (0.158; 0.326)	0.014	0.147 (0.1; 0.231)	0.298 (0.132; 0.631)	0.026
	POS (°)	-13.583 (-20.113; -7.516)	-10.794 (-16.714; -4.173)	0.387	-9.494 (-18.908; -5.159)	-10.395 (-20.890; -6.658)	0.471
	TDISP (°)	0.261 (0.190; 0.376)	0.329 (0.275; 0.607)	0.066	0.314 (0.197; 0.425)	0.434 (0.275; 0.747)	0.028
Ankle (Internal Rotation +/- External Rotation-)	MDISP (°)	0.004 (0.003; 0.006)	0.007 (0.005; 0.013)	0.017	0.005 (0.003; 0.007)	0.005 (0.004; 0.009)	0.150
	AMP (°)	0.149 (0.099; 0.242)	0.186 (0.166; 0.453)	0.037	0.179 (0.096; 0.248)	0.307 (0.188; 0.474)	0.006
	POS (°)	9.620 (4.694; 13.222)	8.671 (5.734; 12.081)	0.719	9.709 (7.616; 11.588)	8.982 (5.151; 13.392)	0.589
Ankle (Internal Rotation +/- External Rotation-)	TDISP (°)	0.143 (0.110; 0.246)	0.171 (0.122; 0.264)	0.517	0.178 (0.101; 0.233)	0.218 (0.133; 0.475)	0.130
	MDISP (°)	0.002 (0.002; 0.004)	0.003 (0.002; 0.006)	0.090	0.003 (0.001; 0.004)	0.003 (0.002; 0.005)	0.589
	AMP (°)	0.086 (0.066; 0.147)	0.116 (0.078; 0.197)	0.235	0.117 (0.055; 0.151)	0.132 (0.081; 0.383)	0.066

* Mann–Whitney test; significant differences in bold.

Table S5. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS), total displacement (TDISP), mean displacement (MDISP), and amplitude (AMP) values of linear outcome of upper limb joints.

		MED (P25; P75)		<i>p</i> value [#]	MED (P25; P75)		<i>p</i> value [#]
		Swing Healthy	Swing Stroke		Stance Healthy	Stance Stroke	
Shoulder (Flexion+/Extension-)	POS (°)	14.146 (8.153; 18.882)	14.483 (8.342; 22.519)	0.801	12.251 (9.047; 15.077)	12.768 (8.858; 18.603)	0.692
	TDISP (°)	0.267 (0.203; 0.334)	0.407 (0.232; 0.712)	0.026	0.266 (0.206; 0.353)	0.473 (0.261; 0.837)	0.019
	MDISP (°)	0.004 (0.003; 0.005)	0.007 (0.004; 0.013)	0.013	0.004 (0.003; 0.005)	0.006 (0.004; 0.011)	0.048
	AMP (°)	0.165 (0.111; 0.225)	0.299 (0.175; 0.562)	0.004	0.15 (0.11; 0.215)	0.282 (0.188; 0.625)	0.003
Elbow (Flexion+/Extension-)	POS (°)	19.325 (8.002; 29.015)	28.919 (15.248; 43.259)	0.098	23.010 (13.212; 26.439)	20.988 (7.137; 32.821)	0.692
	TDISP (°)	0.197 (0.174; 0.305)	0.337 (0.171; 0.536)	0.264	0.244 (0.215; 0.317)	0.421 (0.192; 0.882)	0.113
	MDISP (°)	0.003 (0.003; 0.005)	0.007 (0.003; 0.013)	0.034	0.004 (0.003; 0.005)	0.005 (0.003; 0.008)	0.313
	AMP (°)	0.117 (0.095; 0.151)	0.234 (0.114; 0.483)	0.044	0.138 (0.116; 0.174)	0.312 (0.11; 0.712)	0.031
Wrist (Flexion+/Extension-)	POS (°)	1.092 (-3.185; 4.199)	2.559 (-0.983; 5.300)	0.801	1.148 (-1.496; 6.255)	0.729 (-1.343; 6.798)	0.746
	TDISP (°)	0.354 (0.221; 0.520)	0.417 (0.351; 0.864)	0.066	0.337 (0.234; 0.840)	0.605 (0.365; 0.974)	0.105
	MDISP (°)	0.005 (0.003; 0.008)	0.009 (0.006; 0.013)	0.016	0.005 (0.004; 0.013)	0.006 (0.005; 0.017)	0.121
	AMP (°)	0.149 (0.098; 0.238)	0.233 (0.196; 0.557)	0.008	0.145 (0.123; 0.437)	0.306 (0.194; 0.678)	0.072
Shoulder (Adduction+/Abduction-)	POS (°)	-12.337 (-16.113; -9.282)	-11.705 (-16.633; -6.673)	0.494	-13.971 (-18.146; -9.497)	-10.662 (-14.144; -6.095)	0.121
	TDISP (°)	0.217 (0.176; 0.306)	0.259 (0.174; 0.419)	0.313	0.230 (0.150; 0.293)	0.331 (0.186; 0.541)	0.090
	MDISP (°)	0.003 (0.003; 0.005)	0.004 (0.003; 0.007)	0.090	0.004 (0.002; 0.004)	0.004 (0.003; 0.006)	0.249
	AMP (°)	0.146 (0.117; 0.17)	0.206 (0.111; 0.285)	0.264	0.158 (0.103; 0.21)	0.201 (0.104; 0.376)	0.121
Elbow (Adduction+/Abduction-)	POS (°)	13.967 (4.640; 20.301)	1.254 (-1.241; 8.400)	0.056	15.175 (6.397; 19.363)	5.577 (-1.725; 14.782)	0.130
	TDISP (°)	0.211 (0.172; 0.359)	0.306 (0.207; 0.509)	0.056	0.277 (0.178; 0.368)	0.401 (0.232; 0.725)	0.113
	MDISP (°)	0.003 (0.003; 0.006)	0.006 (0.004; 0.011)	0.031	0.004 (0.003; 0.005)	0.004 (0.003; 0.009)	0.264
	AMP (°)	0.117 (0.085; 0.165)	0.233 (0.138; 0.359)	0.004	0.139 (0.102; 0.18)	0.230 (0.138; 0.431)	0.026
Wrist (Ulnar Deviation+/Radial Deviation-)	POS (°)	2.899 (0.334; 5.321)	0.119 (-1.092; 5.889)	0.235	3.021 (1.153; 7.276)	1.677 (0.231; 6.123)	0.387
	TDISP (°)	0.246 (0.170; 0.294)	0.295 (0.216; 0.520)	0.113	0.249 (0.177; 0.343)	0.335 (0.206; 0.722)	0.387
	DISP (°)	0.004 (0.003; 0.004)	0.005 (0.003; 0.009)	0.040	0.004 (0.003; 0.005)	0.004 (0.003; 0.011)	0.494
	AMP (°)	0.107 (0.079; 0.145)	0.146 (0.126; 0.297)	0.021	0.137 (0.099; 0.166)	0.157 (0.104; 0.377)	0.296

Shoulder (Internal Rotation+/-External Rotation-)	POS (°)	-17.120 (-36.353; 7.499)	12.811 (-9.952; 34.121)	0.019	-9.655 (-34.033; 12.475)	-5.645 (-41.230; 27.128)	0.943
	TDISP (°)	0.488 (0.413; 0.751)	0.626 (0.384; 1.081)	0.349	0.526 (0.440; 0.861)	0.740 (0.435; 1.210)	0.113
	MDISP (°)	0.007 (0.006; 0.012)	0.014 (0.006; 0.018)	0.105	0.008 (0.007; 0.013)	0.009 (0.007; 0.018)	0.494
	AMP (°)	0.282 (0.222; 0.381)	0.308 (0.223; 0.766)	0.280	0.283 (0.241; 0.464)	0.379 (0.227; 0.762)	0.150
Elbow (Internal Rotation +/-External Rotation-)	POS (°)	125.492 (91.457; 145.071)	127.845 (70.402; 142.806)	0.943	125.947 (102.469; 135.530)	126.945 (92.484; 145.429)	0.666
	TDISP (°)	0.464 (0.366; 0.796)	0.579 (0.386; 1.218)	0.105	0.657 (0.422; 0.846)	0.758 (0.497; 1.483)	0.113
	MDISP (°)	0.007 (0.006; 0.012)	0.012 (0.008; 0.022)	0.019	0.01 (0.007; 0.012)	0.009(0.006; 0.02)	0.589
	AMP (°)	0.229 (0.179; 0.388)	0.425 (0.236; 0.768)	0.026	0.305 (0.239; 0.406)	0.443 (0.331; 0.799)	0.028
Wrist (Internal Rotation+/-External Rotation-)	POS (°)	16.925 (12.795; 19.396)	0.506 (-0.647; 14.965)	0.009	20.094 (16.696; 31.567)	0.605 (-1.297; 16.873)	<.001
	TDISP (°)	0.212 (0.155; 0.242)	0.269 (0.183; 0.512)	0.021	0.236 (0.172; 0.332)	0.280 (0.192; 0.693)	0.349
	MDISP (°)	0.003 (0.002; 0.004)	0.005 (0.003; 0.01)	0.021	0.004 (0.003; 0.005)	0.004 (0.003; 0.009)	0.387
	AMP (°)	0.108 (0.084; 0.134)	0.155 (0.084; 0.359)	0.044	0.126 (0.083; 0.196)	0.157 (0.094; 0.403)	0.249

Mann–Whitney test; significant differences in bold.

Table S6. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS) and displacement (DISP) values of non- linear outcome of head, trunk, and pelvis.

		POSITION MED (P25; P75)			MEAN DISPLACMENT MED (P25; P75)		
		Healthy	Post-Stroke	<i>p</i> value #	Healthy	Post-Stroke	<i>p</i> value #
Head (Extension +/-Flexion -)	Ly	-5.691 (-8.247; -4.555)	-2.776 (-5.384; -0.077)	0.004	-12.220 (-16.973; 2.905)	-4.314 (-10.222; 6.252)	0.130
	MSE S1	0.234 (0.209; 0.270)	0.169 (0.087; 0.208)	0.002	0.533 (0.466; 0.572)	0.470 (0.258; 0.505)	0.009
	MSE S2	0.409 (0.352; 0.481)	0.322 (0.167; 0.375)	0.009	1.069 (0.800; 1.187)	0.833 (0.418; 1.077)	0.034
	CI	0.641 (0.561; 0.748)	0.503 (0.254; 0.583)	0.006	1.581 (1.215; 1.777)	1.375 (0.645; 1.558)	0.021
Trunk (Extension+/-Flexion-)	Ly	-3.567 (-4.910; -2.793)	-2.917 (-3.493; -1.413)	0.056	-14.268 (-18.386; -10.263)	-10.775 (-15.369; -6.928)	0.130
	MSE S1	0.171 (0.152; 0.204)	0.162 (0.107; 0.190)	0.195	0.525(0.476; 0.582)	0.479 (0.431; 0.538)	0.078
	MSE S2	0.319 (0.281; 0.414)	0.304 (0.204; 0.337)	0.160	1.057 (0.871; 1.141)	0.915 (0.830; 1.002)	0.121
	CI	0.493 (0.434; 0.613)	0.463 (0.309; 0.518)	0.160	1.598(1.329; 1.680)	1.413 (1.232; 1.501)	0.061

Pelvis (Retroversion+/Anteversio n-)	Ly	-11.396 (-14.178; -9.298)	-5.251 (-8.179; -1.043)	<.001	-11.216 (-14.525; -6.332)	-10.913 (-13.536; -8.351)	0.943
	MSE S1	0.143 (0.114; 0.162)	0.145 (0.119; 0.156)	0.857	0.480 (0.440; 0.529)	0.480 (0.417; 0.508)	0.666
	MSE S2	0.250 (0.212; 0.321)	0.243 (0.220; 0.303)	0.943	0.940 (0.857; 1.064)	0.848 (0.786; 1.003)	0.195
	CI	0.397 (0.329; 0.485)	0.379 (0.336; 0.458)	0.971	1.412 (1.315; 1.532)	1.270 (1.222; 1.456)	0.150
Head (Right Tilt +/Left Tilt-)	Ly	-9.011 (-12.178; -6.777)	-4.583 (-8.552; -3.008)	0.006	-7.096 (-14.706; 1.694)	-8.421 (-12.539; -1.563)	0.885
	MSE S1	0.310 (0.249; 0.349)	0.193(0.158; 0.316)	0.023	0.665 (0.596; 0.730)	0.522 (0.453; 0.582)	<.001
	MSE S2	0.564 (0.435; 0.689)	0.376 (0.281; 0.565)	0.021	1.167 (0.997; 1.372)	0.946 (0.777; 1.125)	0.007
	CI	0.870 (0.665; 1.038)	0.558 (0.446; 0.870)	0.013	1.798 (1.615; 2.092)	1.464 (1.219; 1.709)	0.006
Trunk (Right Tilt+/Left Tilt-)	Ly	-4.327 (-5.609; -2.845)	-3.361 (-5.702; -2.092)	0.368	-9.668 (-14.084; 1.769)	-12.286 (-14.639; -4.436)	0.387
	MSE S1	0.193 (0.165; 0.231)	0.148 (0.127; 0.176)	0.007	0.540 (0.464; 0.572)	0.492 (0.420; 0.543)	0.150
	MSE S2	0.339 (0.299; 0.404)	0.268 (0.242; 0.294)	0.002	0.988 (0.907; 1.142)	0.942 (0.857; 1.153)	0.885
	CI	0.548(0.453; 0.616)	0.434 (0.369; 0.468)	0.003	1.502 (1.373; 1.699)	1.455 (1.283; 1.635)	0.614
Pelvis (Right Tilt+/Left Tilt-)	Ly	-11.206 (-14.113; -9.469)	-7.997(-11.055; -3.938)	0.011	3.581 (-6.017; 6.079)	3.241 (-9.452; 6.761)	0.564
	MSE S1	0.220 (0.182; 0.271)	0.172 (0.127; 0.240)	0.051	0.558 (0.510; 0.602)	0.513 (0.445; 0.597)	0.235
	MSE S2	0.379 (0.327; 0.467)	0.349 (0.251; 0.439)	0.207	1.161 (0.943; 1.205)	1.018 (0.852; 1.148)	0.235
	CI	0.613 (0.512; 0.736)	0.518 (0.379; 0.674)	0.105	1.721(1.434; 1.790)	1.531 (1.275; 1.704)	0.207
Head (Left Rotation +/Right Rotation-)	Ly	-9.072 (-12.134; -6.875)	-7.472 (-11.683; -1.293)	0.130	-2.532 (-8.539; 4.605)	-5.688 (-10.120; 1.614)	0.296
	MSE S1	0.314 (0.268; 0.362)	0.244 (0.157; 0.313)	0.009	0.691 (0.572; 0.754)	0.538 (0.399; 0.612)	0.002
	MSE S2	0.591 (0.505; 0.690)	0.466 (0.275; 0.567)	0.006	1.236 (1.108; 1.445)	0.957 (0.762; 1.160)	0.006
	CI	0.903 (0.798; 1.056)	0.700 (0.443; 0.856)	0.005	1.970 (1.704; 2.078)	1.502 (1.141; 1.738)	0.005
Trunk (Left Rotation+/Right Rotation-)	Ly	-6.592 (-7.767; -4.999)	-5.723 (-7.473; -2.846)	0.221	-11.008 (-14.720; -0.753)	-7.469 (-16.431; -3.228)	0.719
	MSE S1	0.247 (0.224; 0.274)	0.226 (0.177; 0.245)	0.021	0.599 (0.503; 0.710)	0.532 (0.497; 0.616)	0.160
	MSE S2	0.460 (0.379; 0.503)	0.397 (0.332; 0.433)	0.052	1.149 (0.922; 1.284)	0.930 (0.845; 1.106)	0.052
	CI	0.696 (0.603; 0.782)	0.629 (0.518; 0.677)	0.040	1.756(1.396; 1.971)	1.477 (1.312; 1.677)	0.048
Pelvis (Left Rotation+/Right Rotation-)	Ly	-11.027(-13.406; -8.215)	-7.008 (-9.626; -1.944)	0.011	-13.785 (-17.085; -11.108)	-13.581 (-17.568; -9.212)	1.000
	MSE S1	0.225 (0.188; 0.269)	0.160 (0.128; 0.196)	0.002	0.514 (0.476; 0.571)	0.469 (0.401; 0.499)	0.021
	MSE S2	0.383 (0.349; 0.440)	0.302 (0.262; 0.379)	0.019	1.011 (0.840; 1.039)	0.883 (0.708; 1.008)	0.105
	CI	0.593 (0.543; 0.713)	0.480 (0.388; 0.561)	0.004	1.523(1.260; 1.571)	1.333 (1.093; 1.478)	0.044

* Mann–Whitney test; significant differences in bold; LyE: Lyapunov exponent; MSE: Multiscale Entropy; S1: Scale 1; S2: Scale 2; CI: Complexity Index.

Table S7. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS) values of non-linear outcome of lower limb joints.

		POSITION					
		MED (P25; P75)					
		Swing Healthy	Swing Stroke	<i>p</i> value [#]	Stance Healthy	Stance Stroke	<i>p</i> value [#]
Hip (Flexion+/Extension-)	Ly	-8.589 (-10.509; -6.026)	-4.520 (-6.745; -3.151)	0.021	-5.372 (-8.269; -3.385)	-5.195 (-7.357; -3.582)	0.006
	MSE S1	0.201 (0.173; 0.258)	0.198 (0.160; 0.238)	0.048	0.215 (0.178; 0.256)	0.191 (0.174; 0.252)	0.053
	MSE S2	0.368 (0.310; 0.481)	0.365 (0.285; 0.414)	0.026	0.403 (0.331; 0.519)	0.354 (0.287; 0.477)	0.060
	CI	0.569 (0.489; 0.735)	0.566 (0.447; 0.624)	0.040	0.625 (0.515; 0.743)	0.545 (0.461; 0.736)	0.428
Knee (Flexion+/Extension-)	Ly	-6.216 (-7.962; -3.008)	-3.865 (-5.662; -1.208)	0.564	-5.383 (-8.579; -2.934)	-4.359 (-6.628; 1.526)	0.971
	MSE S1	0.230 (0.187; 0.268)	0.206 (0.154; 0.234)	0.471	0.217 (0.197; 0.268)	0.189 (0.133; 0.237)	0.943
	MSE S2	0.425 (0.319; 0.505)	0.343 (0.281; 0.415)	0.471	0.385 (0.359; 0.459)	0.348 (0.243; 0.458)	0.885
	CI	0.667 (0.508; 0.757)	0.566 (0.427; 0.645)	0.026	0.592 (0.557; 0.713)	0.536 (0.386; 0.696)	0.666
Ankle (Dorsiflexion +/ Plantar Flexion-)	Ly	-2.538 (-3.582; -1.734)	-1.982 (-3.511; -1.465)	0.589	-2.388 (-3.438; -0.495)	-2.395 (-4.532; -0.461)	0.016
	MSE S1	0.176 (0.131; 0.196)	0.133 (0.117; 0.172)	0.280	0.160 (0.132; 0.189)	0.167 (0.146; 0.195)	0,057
	MSE S2	0.334 (0.246; 0.381)	0.258 (0.212; 0.288)	0.313	0.287 (0.247; 0.355)	0.286 (0.257; 0.365)	0,062
	CI	0.510 (0.392; 0.570)	0.391 (0.337; 0.470)	0.773	0.447 (0.372; 0.539)	0.464 (0.403; 0.552)	0.280
Hip (Adduction+/Abduction-)	Ly	-10.303 (-12.835; -8.672)	-6.209 (-7.474; -4.529)	0.052	-6.774 (-7.971; -4.657)	-5.603 (-6.773; -3.707)	0.746
	MSE S1	0.232 (0.181; 0.279)	0.170 (0.133; 0.210)	0.023	0.246 (0.225; 0.275)	0.185 (0.139; 0.245)	0.494
	MSE S2	0.416 (0.346; 0.566)	0.318 (0.262; 0.455)	0.009	0.430 (0.405; 0.475)	0.325(0.270; 0.449)	0.057
	CI	0.653 (0.509; 0.838)	0.488 (0.394; 0.656)	0.004	0.680 (0.643; 0.730)	0.512 (0.411; 0.688)	0.564
Knee (Tibial Adduction+/Tibial Abduction-)	Ly	-6.167 (-8.560; -1.446)	-5.338 (-6.781; -3.438)	0.090	-7.593 (-9.534; -5.351)	-5.535 (-8.462; -3.460)	0.971
	MSE S1	0.216 (0.205; 0.291)	0.247 (0.216; 0.282)	0.061	0.253 (0.204; 0.278)	0.238 (0.167; 0.284)	0.885
	MSE S2	0.398 (0.347; 0.488)	0.430 (0.397; 0.497)	0.313	0.421 (0.372; 0.539)	0.419 (0.306; 0.548)	0.130
	CI	0.626 (0.546; 0.787)	0.689 (0.611; 0.792)	0.105	0.670 (0.577; 0.828)	0.631 (0.478; 0.839)	0.264
Ankle (Inversion +/Eversion-)	Ly	-4.844 (-5.759; -3.433)	-3.933 (-5.292; -2.829)	0.368	-6.005 (-7.544; -3.643)	-2.467 (-4.306; -1.426)	0.048
	MSE S1	0.212 (0.169; 0.267)	0.161 (0.134; 0.193)	0.914	0.212(0.192; 0.258)	0.181 (0.128; 0.204)	0.387
	MSE S2	0.438 (0.287; 0.509)	0.306 (0.248; 0.394)	0.001	0.445 (0.397; 0.528)	0.373 (0.273; 0.407)	0.008
	CI	0.650 (0.454; 0.780)	0.467 (0.379; 0.595)	<.001	0.658 (0.595; 0.779)	0.536 (0.402; 0.608)	<.001

Hip (Internal Rotation+/-External Rotation-)	Ly	-10.472 (-11.189; -8.557)	-7.350 (-9.785; -4.882)	0.006	-7.377 (-9.433; -5.627)	-7.424 (-9.547; -3.959)	0.296
	MSE S1	0.254 (0.222; 0.299)	0.248 (0.193; 0.267)	0.098	0.265 (0.195; 0.305)	0.208 (0.178; 0.252)	0.407
	MSE S2	0.498 (0.425; 0.545)	0.438 (0.370; 0.491)	0.061	0.485 (0.372; 0.522)	0.396 (0.334; 0.445)	0.719
	CI	0.742 (0.645; 0.826)	0.667 (0.571; 0.756)	0.040	0.754 (0.565; 0.822)	0.618 (0.511; 0.679)	0.773
Knee (Internal Rotation+/-External Rotation-)	Ly	-8.514 (-9.483; -6.228)	-6.367 (-9.501; -4.112)	0.207	-7.265 (-9.084; -5.767)	-5.801 (-9.063; -5.332)	0.140
	MSE S1	0.256 (0.225; 0.278)	0.222 (0.203; 0.261)	0.084	0.273 (0.200; 0.316)	0.206 (0.186; 0.263)	0.130
	MSE S2	0.472 (0.394; 0.545)	0.418 (0.368; 0.478)	0.061	0.518 (0.370; 0.563)	0.398 (0.345; 0.459)	0.331
	CI	0.736 (0.610; 0.826)	0.631 (0.574; 0.743)	0.066	0.784 (0.568; 0.879)	0.625 (0.548; 0.697)	0.296
Ankle (Internal Rotation +/-External Rotation-)	Ly	-5.123 (-6.817; -3.350)	-3.774 (-5.675; -2.362)	0.013	-5.454 (-8.203; -3.499)	-4.022 (-5.941; -2.539)	<.001
	MSE S1	0.261 (0.237; 0.309)	0.213 (0.176; 0.256)	0.098	0.252 (0.215; 0.305)	0.204 (0.168; 0.255)	0.016
	MSE S2	0.487 (0.456; 0.522)	0.410 (0.341; 0.499)	0.640	0.456 (0.403; 0.543)	0.373(0.334; 0.494)	<.001
	CI	0.740 (0.702; 0.841)	0.653 (0.516; 0.755)	0.221	0.708 (0.631; 0.841)	0.572 (0.508; 0.743)	<.001

Mann–Whitney test; significant differences in bold; LyE: Lyapunov exponent; MSE: Multiscale Entropy; S1: Scale 1; S2: Scale 2; CI: Complexity Index.

Table S8. Median (MED), 25th (P25), and 75th (P75) percentiles of displacement (DISP) values of non-linear outcome of lower limb joints.

		DISPLACEMENT MED (P25; P75)					
		Swing Healthy	Swing Stroke	<i>p</i> value #	Stance Healthy	Stance Stroke	<i>p</i> value #
Hip (Flexion+/-Extension-)	Ly	6.144 (-5.855; 10.499)	-6.558 (-10.687; -1.985)	0.801	0.185 (-5.981; 8.766)	-2.536 (-9.129; 7.298)	0.494
	MSE S1	0.524 (0.447; 0.569)	0.502 (0.440; 0.601)	0.387	0.524 (0.480; 0.585)	0.490 (0.426; 0.599)	0.296
	MSE S2	0.974 (0.871; 1.105)	0.986 (0.842; 1.105)	0.195	1.021 (0.891; 1.080)	0.888 (0.720; 1.080)	0.105
	CI	1.490 (1.327; 1.643)	1.488 (1.308; 1.715)	0.195	1.534 (1.406; 1.586)	1.355 (1.167; 1.617)	0.098
Knee (Flexion+/-Extension-)	Ly	6.064 (-3.393; 10.437)	-4.541 (-8.172; -0.283)	0.160	4.963 (-9.906; 11.420)	3.271 (-9.769; 8.492)	0.449
	MSE S1	0.554 (0.505; 0.600)	0.480 (0.431; 0.571)	0.105	0.517 (0.476; 0.574)	0.491 (0.356; 0.556)	0.264
	MSE S2	1.007 (0.912; 1.196)	0.953 (0.812; 1.075)	0.195	1.001 (0.905; 1.118)	0.883 (0.626; 1.005)	0.121
	CI	1.507 (1.353; 1.802)	1.456 (1.236; 1.606)	0.171	1.500 (1.359; 1.675)	1.317 (0.967; 1.547)	0.171

Ankle (Dorsiflexion +/- Plantar Flexion-)	Ly	-5.881 (-8.706; 9.055)	-9.501 (-11.620; -7.167)	0.614	-3.687 (-9.756; 1.077)	-3.284 (-11.747; 0.602)	0.885
	MSE S1	0.491 (0.394; 0.603)	0.485 (0.412; 0.551)	0.517	0.515 (0.379; 0.612)	0.525 (0.391; 0.576)	0.857
	MSE S2	0.997 (0.789; 1.260)	0.907 (0.828; 1.001)	0.801	0.933 (0.811; 1.200)	0.873 (0.695; 1.163)	0.564
	CI	1.506 (1.183; 1.838)	1.389 (1.269; 1.512)	0.746	1.462 (1.191; 1.778)	1.347 (1.052; 1.776)	0.692
Hip (Adduction+/Abduction-)	Ly	9.991 (5.590; 17.894)	-2.493 (-9.438; 2.174)	0.130	2.440 (-2.841; 10.292)	-0.436 (-7.928; 3.191)	0.171
	MSE S1	0.535 (0.437; 0.597)	0.531 (0.436; 0.637)	0.034	0.565 (0.496; 0.579)	0.546 (0.454; 0.603)	0.746
	MSE S2	1.021 (0.843; 1.143)	0.984 (0.822; 1.235)	0.040	1.008 (0.970; 1.080)	0.997 (0.870; 1.163)	0.746
	CI	1.522 (1.251; 1.726)	1.489 (1.295; 1.796)	0.034	1.548 (1.448; 1.612)	1.517 (1.336; 1.738)	0.692
Knee (Tibial Adduction+/Tibial Abduction-)	Ly	11.390 (6.114; 16.888)	-1.094 (-7.806; 2.243)	0.235	4.032 (-2.721; 12.353)	3.892 (-4.617; 16.476)	0.801
	MSE S1	0.574 (0.478; 0.645)	0.614 (0.546; 0.645)	0.428	0.582 (0.542; 0.646)	0.603 (0.499; 0.642)	0.746
	MSE S2	1.080 (0.934; 1.279)	1.062 (0.909; 1.212)	0.517	1.138 (0.939; 1.309)	1.121 (0.943; 1.292)	0.746
	CI	1.626 (1.439; 1.893)	1.628 (1.399; 1.838)	0.449	1.679 (1.436; 1.919)	1.682 (1.449; 1.925)	0.773
Ankle (Inversion +/-Eversion-)	Ly	7.223 (2.367; 13.489)	-5.404 (-7.078; -0.805)	0.021	4.797 (-0.009; 9.825)	-2.401 (-7.719; 0.319)	0.002
	MSE S1	0.595 (0.558; 0.800)	0.572 (0.517; 0.731)	0.012	0.668 (0.616; 0.785)	0.664 (0.548; 0.760)	0.280
	MSE S2	1.263 (1.027; 1.367)	1.160 (0.940; 1.401)	0.021	1.189 (1.094; 1.333)	1.181 (0.924; 1.260)	0.331
	CI	1.824 (1.536; 2.152)	1.675 (1.437; 2.145)	0.011	1.821 (1.706; 2.098)	1.749 (1.468; 2.048)	0.368
Hip (Internal Rotation+/External Rotation-)	Ly	13.433 (7.142; 23.623)	-2.590 (-7.263; 5.460)	0.614	6.727 (-0.553; 11.447)	0.889 (-7.309; 7.304)	0.098
	MSE S1	0.560 (0.487; 0.622)	0.610 (0.551; 0.653)	0.056	0.581(0.483; 0.650)	0.573 (0.499; 0.617)	0.589
	MSE S2	1.027 (0.856; 1.158)	1.164(0.900; 1.287)	0.048	1.069 (1.003; 1.220)	1.095 (0.909; 1.200)	0.719
	CI	1.555 (1.328; 1.688)	1.763 (1.401; 1.890)	0.034	1.607 (1.490; 1.846)	1.677 (1.345; 1.763)	0.801
Knee (Internal Rotation+/External Rotation-)	Ly	9.503 (1.055; 13.929)	-2.750 (-9.590; -0.457)	0.313	5.826 (-1.703; 9.294)	-1.890 (-7.183; 0.748)	0.009
	MSE S1	0.557 (0.522; 0.669)	0.635 (0.567; 0.678)	0.066	0.631 (0.506; 0.738)	0.630 (0.547; 0.708)	0.719
	MSE S2	1.074 (0.945; 1.196)	1.086 (0.991; 1.249)	0.078	1.261(0.989; 1.422)	1.147 (0.986; 1.249)	0.296
	CI	1.580 (1.485; 1.835)	1.652 (1.568; 1.888)	0.066	1.941 (1.480; 2.084)	1.698 (1.568; 1.913)	0.221
Ankle (Internal Rotation +/-External Rotation-)	Ly	11.460 (7.820; 23.949)	-3.888 (-9.980; 6.453)	0.090	12.979 (-0.632; 14.881)	-1.132 (-5.547; 3.494)	0.031
	MSE S1	0.530 (0.436; 0.624)	0.645 (0.562; 0.668)	0.023	0.669 (0.535; 0.731)	0.565 (0.525; 0.694)	0.471
	MSE S2	0.969 (0.870; 1.070)	1.143 (1.009; 1.334)	0.072	1.140 (0.932; 1.367)	1.079 (1.03; 1.223)	0.857
	CI	1.488 (1.255; 1.598)	1.778 (1.569; 1.938)	0.040	1.669 (1.495; 2.049)	1.610 (1.535; 1.894)	0.494

* Mann–Whitney test; significant differences in bold; LyE: Lyapunov exponent; MSE: Multiscale Entropy; S1: Scale 1; S2: Scale 2; CI: Complexity Index.

Table S9. Median (MED), 25th (P25), and 75th (P75) percentiles of position (POS) values of non-linear outcome of upper limbs joints.

		POSITION MED (P25; P75)					
		Swing Healthy	Swing Stroke	<i>p</i> value [‡]	Stance Healthy	Stance Stroke	<i>p</i> value [‡]
Shoulder (Flexion+/Extension-)	Ly	-5.795 (-7.331; -3.144)	-2.460 (-5.935; -1.272)	0.540	-6.055 (-7.120; -4.855)	-4.424 (-5.908; -2.048)	0.449
	MSE S1	0.253 (0.204; 0.269)	0.187 (0.119; 0.217)	0.368	0.260 (0.214; 0.279)	0.196 (0.143; 0.236)	0.719
	MSE S2	0.432 (0.386; 0.466)	0.313 (0.244; 0.390)	0.331	0.463 (0.356; 0.501)	0.364 (0.283; 0.391)	0.885
	CI	0.669 (0.599; 0.718)	0.490 (0.359; 0.603)	0.105	0.722 (0.566; 0.764)	0.566 (0.434; 0.626)	0.207
Elbow (Flexion+/Extension-)	Ly	-2.305 (-4.041; -0.327)	-2.146 (-4.431; -1.059)	0.078	-8.921 (-11.699; -7.464)	-6.679 (-9.207; -5.719)	0.471
	MSE S1	0.270 (0.216; 0.299)	0.218 (0.179; 0.266)	0.719	0.279 (0.242; 0.333)	0.248 (0.199; 0.284)	0.084
	MSE S2	0.481 (0.382; 0.550)	0.383 (0.300; 0.482)	0.195	0.522 (0.414; 0.586)	0.426 (0.348; 0.574)	0.313
	CI	0.758 (0.591; 0.873)	0.644 (0.473; 0.733)	0.517	0.801 (0.661; 0.905)	0.672 (0.537; 0.865)	0.195
Wrist (Flexion+/Extension-)	Ly	-5.270 (-6.850; -3.456)	-5.562 (-8.454; -3.574)	0.150	-11.944 (-14.108; -11.196)	-8.801 (-11.303; -7.434)	0.540
	MSE S1	0.303 (0.284; 0.361)	0.263 (0.237; 0.317)	0.171	0.323(0.290; 0.367)	0.279 (0.253; 0.335)	0.160
	MSE S2	0.591 (0.523; 0.716)	0.500 (0.430; 0.557)	0.140	0.588(0.495; 0.655)	0.542 (0.457; 0.607)	0.105
	CI	0.928 (0.799; 1.081)	0.758 (0.668; 0.877)	0.014	0.913 (0.807; 1.013)	0.824 (0.721; 0.938)	0.249
Shoulder (Adduction+/Abduction-)	Ly	-5.939 (-9.583; -4.297)	-5.327 (-9.444; -2.820)	0.090	-3.850 (-6.071; -1.803)	-5.926 (-9.042; -3.380)	0.517
	MSE S1	0.227 (0.181; 0.255)	0.210 (0.184; 0.237)	0.084	0.196 (0.170; 0.209)	0.230 (0.190; 0.262)	0.249
	MSE S2	0.374(0.340; 0.435)	0.365 (0.335; 0.445)	<.001	0.352(0.310; 0.389)	0.404 (0.349; 0.480)	0.016
	CI	0.580 (0.540; 0.690)	0.580 (0.523; 0.663)	<.001	0.555 (0.487; 0.594)	0.638 (0.536; 0.748)	0.028
Elbow (Adduction+/Abduction-)	Ly	-5.189 (-6.939; -2.957)	-3.442 (-7.106; -0.706)	0.160	-10.223 (-12.142; -7.658)	-7.857 (-10.686; -6.555)	0.014
	MSE S1	0.292 (0.247; 0.314)	0.230 (0.176; 0.283)	0.614	0.296 (0.260; 0.357)	0.275 (0.233; 0.320)	0.614
	MSE S2	0.518 (0.433; 0.610)	0.371 (0.312; 0.506)	0.105	0.533 (0.492; 0.686)	0.491 (0.395; 0.604)	0.614

	CI	0.813 (0.696; 0.912)	0.591 (0.488; 0.806)	0.026	0.824 (0.767; 1.052)	0.749 (0.627; 0.921)	0.264
Wrist (Ulnar Deviation+/Radial Deviation-)	Ly	-4.814 (-6.092; -3.892)	-5.822 (-9.397; -3.422)	0.005	-11.549 (-12.706; -10.382)	-11.560 (-12.595; -7.699)	0.207
	MSE S1	0.316 (0.279; 0.344)	0.273 (0.258; 0.308)	0.059	0.292 (0.256; 0.311)	0.283 (0.253; 0.325)	0.195
	MSE S2	0.534 (0.492; 0.666)	0.494 (0.460; 0.536)	0.066	0.536 (0.435; 0.587)	0.530 (0.451; 0.606)	0.056
	CI	0.856 (0.791; 1.006)	0.789 (0.714; 0.844)	0.066	0.824 (0.685; 0.893)	0.829 (0.711; 0.924)	0.449
Shoulder (Internal Rotation+/External Rotation-)	Ly	-7.817 (-10.206; -5.204)	-6.432 (-9.031; -4.952)	<.001	-9.916 (-11.515; -7.329)	-10.164 (-12.055; -9.124)	0.011
	MSE S1	0.300 (0.256; 0.355)	0.266 (0.236; 0.305)	0.719	0.272 (0.237; 0.303)	0.299 (0.268; 0.311)	0.407
	MSE S2	0.542 (0.469; 0.613)	0.483 (0.395; 0.562)	0.719	0.490 (0.421; 0.593)	0.538 (0.440; 0.582)	0.829
	CI	0.842 (0.738; 0.986)	0.730 (0.637; 0.865)	0.666	0.759 (0.650; 0.897)	0.839 (0.716; 0.874)	0.885
Elbow (Internal Rotation +/External Rotation-)	Ly	-5.962 (-8.261; -2.508)	-4.506 (-8.665; -2.219)	0.034	-9.404 (-12.356; -7.221)	-8.605 (-11.270; -7.150)	0.313
	MSE S1	0.305 (0.247; 0.344)	0.274 (0.238; 0.294)	0.017	0.281 (0.251; 0.342)	0.265 (0.224; 0.305)	0.517
	MSE S2	0.552 (0.515; 0.644)	0.482 (0.398; 0.587)	0.026	0.470 (0.438; 0.585)	0.486 (0.437; 0.544)	0.471
	CI	0.839 (0.794; 0.996)	0.762 (0.639; 0.873)	0.019	0.743 (0.698; 0.903)	0.769 (0.684; 0.844)	0.494
Wrist (Internal Rotation+/External Rotation-)	Ly	-8.149 (-13.682; -6.357)	-9.981 (-13.592; -7.375)	0.048	-10.875 (-13.276; -10.112)	-9.254 (-12.684; -7.779)	0.296
	MSE S1	0.315 (0.228; 0.362)	0.301 (0.271; 0.334)	0.666	0.313 (0.262; 0.337)	0.301 (0.241; 0.338)	0.885
	MSE S2	0.560 (0.408; 0.642)	0.526 (0.478; 0.605)	0.914	0.590 (0.458; 0.656)	0.510 (0.460; 0.586)	0.349
	CI	0.866 (0.645; 1.000)	0.825 (0.749; 0.937)	0.773	0.903 (0.729; 1.014)	0.794 (0.715; 0.920)	0.517

Mann–Whitney test; significant differences in bold; LyE: Lyapunov exponent; MSE: Multiscale Entropy; S1: Scale 1; S2: Scale 2; CI: Complexity Index.

Table S10. Median (MED), 25th (P25), and 75th (P75) percentiles of displacement (DISP) values of non-linear outcome of upper limbs joints.

		DISPLACEMENT MED (P25; P75)					
		Swing Healthy	Swing Stroke	<i>p</i> value [#]	Stance Healthy	Stance Stroke	<i>p</i> value [#]
Shoulder (Flexion+/Extension-)	Ly	-13.520 (-20.576; -10.817)	-13.097 (-16.623; -7.615)	0.011	-16.413 (-17.900; -8.797)	-12.050 (-16.493; -8.836)	0.140

	MSE S1	0.548 (0.502; 0.588)	0.480 (0.469; 0.530)	0.002	0.535 (0.501; 0.589)	0.494 (0.456; 0.562)	0.113
	MSE S2	1.022 (0.916; 1.157)	0.899 (0.826; 1.041)	0.003	1.036 (0.894; 1.092)	0.937 (0.779; 1.105)	0.349
	CI	1.550 (1.406; 1.704)	1.369 (1.269; 1.550)	0.002	1.565 (1.396; 1.671)	1.402 (1.199; 1.636)	0.195
Elbow (Flexion+/Extension-)	Ly	-10.949 (-16.001; -6.085)	-9.166 (-12.876; 1.231)	0.034	-5.001 (-10.000; -2.532)	-4.625 (-13.403; 2.421)	0.801
	MSE S1	0.613 (0.577; 0.713)	0.616 (0.526; 0.688)	0.084	0.624 (0.571; 0.726)	0.603 (0.524; 0.645)	0.150
	MSE S2	1.194 (1.013; 1.341)	1.111 (0.963; 1.374)	0.160	1.250 (1.050; 1.458)	1.168 (0.968; 1.302)	0.221
	CI	1.788 (1.565; 2.049)	1.674 (1.488; 2.023)	0.121	1.870 (1.617; 2.101)	1.768 (1.490; 1.944)	0.150
Wrist (Flexion+/Extension-)	Ly	-2.327 (-11.645; 4.203)	0.410 (-4.239; 3.529)	0.012	0.583 (-3.982; 4.141)	1.588 (-8.235; 4.257)	0.692
	MSE S1	0.719 (0.640; 0.788)	0.660 (0.585; 0.759)	0.066	0.712 (0.574; 0.769)	0.663 (0.555; 0.699)	0.171
	MSE S2	1.295 (1.184; 1.489)	1.215 (1.083; 1.434)	0.160	1.221 (1.053; 1.276)	1.102 (0.953; 1.355)	0.471
	CI	1.976 (1.810; 2.269)	1.861 (1.647; 2.065)	0.140	1.839 (1.672; 1.945)	1.732 (1.533; 2.004)	0.614
Shoulder (Adduction+/Abduction-)	Ly	-15.645 (-17.480; -11.778)	-11.789 (-15.474; -4.944)	0.113	-14.728 (-18.873; -11.923)	-8.718 (-14.409; -4.775)	0.017
	MSE S1	0.523 (0.466; 0.599)	0.555 (0.495; 0.605)	0.113	0.512 (0.487; 0.660)	0.530 (0.473; 0.605)	0.943
	MSE S2	1.030 (0.852; 1.223)	1.021 (0.900; 1.162)	0.171	0.972 (0.897; 1.156)	0.980 (0.868; 1.155)	0.971
	CI	1.550 (1.316; 1.765)	1.524 (1.416; 1.711)	0.130	1.479 (1.343; 1.787)	1.499 (1.338; 1.689)	0.971
Elbow (Adduction+/Abduction-)	Ly	1.642 (-9.666; 6.207)	-9.901 (-12.718; -0.428)	0.195	-2.691 (-11.759; 2.346)	-4.829 (-11.698; 1.640)	0.666
	MSE S1	0.708 (0.600; 0.772)	0.617 (0.561; 0.656)	0.207	0.715 (0.611; 0.764)	0.661 (0.566; 0.703)	0.084
	MSE S2	1.242 (1.045; 1.394)	1.191 (1.067; 1.326)	0.130	1.310 (1.258; 1.491)	1.283 (1.003; 1.381)	0.296
	CI	1.918(1.600; 2.140)	1.775 (1.617; 1.963)	0.171	2.023 (1.839; 2.281)	1.851 (1.563; 2.098)	0.090
Wrist (Ulnar Deviation+/Radial Deviation-)	Ly	-4.161 (-7.105; -1.483)	0.354 (-3.162; 3.080)	1.000	-1.912 (-6.448; 3.437)	-0.372 (-3.225; 3.329)	0.666
	MSE S1	0.714 (0.637; 0.772)	0.633 (0.569; 0.684)	0.971	0.662 (0.610; 0.752)	0.665 (0.547; 0.700)	0.540
	MSE S2	1.172 (1.089; 1.257)	1.129 (0.971; 1.315)	0.614	1.240 (1.111; 1.338)	1.135 (1.079; 1.317)	0.249
	CI	1.837 (1.693; 1.954)	1.726 (1.521; 1.937)	0.801	1.886 (1.737; 2.004)	1.781 (1.611; 1.961)	0.264
Shoulder	Ly	-6.981 (-14.078; 3.783)	-3.434 (-7.556; 2.417)	0.494	-5.090 (-11.934; 2.830)	-2.781 (-5.971; 2.290)	0.449

(Internal Rotation+/ External Rotation-)	MSE S1	0.659 (0.605; 0.700)	0.650 (0.597; 0.681)	0.313	0.639 (0.599; 0.727)	0.648 (0.565; 0.699)	0.589
	MSE S2	1.302 (1.056; 1.389)	1.162 (1.030; 1.249)	0.857	1.256 (1.015; 1.449)	1.104 (0.942; 1.275)	0.098
	CI	1.948 (1.745; 2.077)	1.765 (1.589; 1.884)	0.666	1.859 (1.589; 2.135)	1.754 (1.478; 1.887)	0.061
Elbow (Internal Rotation +/ External Rotation-)	Ly	-5.860 (-12.011; 1.537)	-4.790(-8.299; 2.152)	0.280	-6.460 (-8.267; -3.545)	-5.345 (-7.940; -0.013)	0.387
	MSE S1	0.659 (0.629; 0.756)	0.649 (0.586; 0.741)	0.368	0.645 (0.596; 0.696)	0.620 (0.585; 0.680)	0.494
	MSE S2	1.301 (1.101; 1.455)	1.255 (1.122; 1.409)	0.914	1.161 (0.951; 1.352)	1.183 (1.021; 1.303)	0.614
	CI	1.945 (1.736; 2.162)	1.957 (1.669; 2.180)	0.692	1.769 (1.517; 2.014)	1.801 (1.590; 1.960)	0.943
Wrist (Internal Rotation+/ External Rotation-)	Ly	1.446 (-3.914; 7.626)	0.117 (-4.343; 5.779)	0.207	1.403 (-1.697; 2.731)	0.519 (-4.047; 4.987)	0.692
	MSE S1	0.678 (0.609; 0.805)	0.695 (0.615; 0.771)	0.614	0.704 (0.648; 0.762)	0.678 (0.613; 0.801)	0.719
	MSE S2	1.272 (1.141; 1.376)	1.235 (1.037; 1.346)	0.296	1.284 (1.137; 1.365)	1.179 (1.069; 1.485)	0.971
	CI	1.954 (1.728; 2.144)	1.889 (1.622; 2.036)	0.280	1.937 (1.724; 2.079)	1.901 (1.648; 2.158)	0.914

Mann–Whitney test; significant differences in bold; LyE: Lyapunov exponent; MSE: Multiscale Entropy; S1: Scale 1; S2: Scale 2; CI: Complexity Index.