

Supplementary table 1

A: Multiple univariate regression analysis of active and passive range of motion against functional assessments

	Active ROM				Passive ROM			
	MPJ	MPJ	IPJ	IPJ	MPJ	MPJ	IPJ	IPJ
	extension	flexion	extension	flexion	extension	flexion	extension	flexion
Kapandji index								
β	-0.014	0.027	-0.029	0.094	0.164	0.007	0.107	0.012
SE	0.099	0.110	0.056	0.050	0.097	0.125	0.048	0.064
standardized β	-0.047	0.053	-0.085	0.460	0.518	0.013	0.396	0.047
t value	-0.143	0.241	-0.525	1.891	1.699	0.054	2.237	0.183
Sig.	0.887	0.810	0.602	0.065	0.096	0.957	0.030	0.856
Thumb opposition test								
β	-0.001	0.000	-0.005	0.042	0.032	0.048	0.012	0.008
SE	0.041	0.046	0.023	0.021	0.040	0.052	0.020	0.027
standardized β	-0.008	0.002	-0.036	0.519	0.254	0.232	0.113	0.084
t value	-0.022	0.007	-0.209	2.008	0.783	0.915	0.601	0.313
Sig.	0.983	0.994	0.836	0.051	0.437	0.365	0.551	0.756
Pinch strength								
β	-0.011	-0.005	-0.007	0.014	0.023	0.003	0.012	-0.011
SE	0.012	0.014	0.007	0.006	0.012	0.015	0.006	0.008

standardized β	-0.339	-0.092	-0.177	0.627	0.667	0.059	0.391	-0.402
t value	-0.933	-0.382	-0.992	2.326	1.976	0.225	1.994	-1.418
Sig.	0.356	0.704	0.009	0.024	0.054	0.823	0.052	0.163

B: Multivariate regression analysis

	Active ROM		Passive ROM		R square	SE
	IPJ flexion	MPJ extension	IPJ extension			
Kapandji index						
β	0.102		0.145	0.096		
SE	0.023		0.041	0.035		
Standardized β	0.499		0.458	0.355	0.433	7.711
t value	4.412		3.509	2.725		
Sig.	0.000		0.001	0.009		
Thumb opposition test						
β	0.041		0.026	0.011		
SE	0.010		0.018	0.015		
Standardized β	0.508		0.211	0.103	0.324	3.308

t value	4.115		1.482	0.725	
Sig.	0.000		0.145	0.472	
Pinch strength					
β	0.009		0.009	0.010	
SE	0.003		0.005	0.005	
Standardized β	0.380		0.263	0.322	0.206
t value	2.838		1.705	2.088	1.103
Sig.	0.007		0.094	0.042	

ROM: range of motion, MPJ: metacarpo-phalangeal joint, IPJ: inter-phalangeal joint, β : coefficient, SE: standard error, Sig: significance

The numbers expressed in **Bold** exhibit high value of coefficient and statistical significance.