

Supplementary Table 1. Mean and Standard Deviation of Discrete Biomechanical Variables and Walking Speed with Association Between Change in Walking Speed and Change in Biomechanical Variable Evaluated in ACLR Cohort

	Involved Limb			Contralateral Limb			Control
	Six Month	Twelve Month Mean	R ² due to Δ speed and Δ in biomechanics	Six Month	Twelve Month	R ² due to Δ speed and Δ in biomechanics	
Peak vGRF	1.06 (0.07)	1.05 (0.06)	R ² = 0.054 (P = 0.218)	1.09 (0.07)	1.06 (0.07)	R ² = 0.325 (P = 0.001) *	1.12 (0.09)
Peak KFA	10.0 (5.6)	7.5 (5.2)	R ² = 0.026 (P = 0.398)	12.4 (5.4)	9.1 (3.8)	R ² = 0.126 (P = 0.054)	11.6 (5.2)
KFE	9.3 (5.3)	8.8 (4.6)	R ² < 0.001 (P = 0.953)	12.6 (4.9)	11.5 (4.7)	R ² = 0.052 (P = 0.224)	12.5 (4.3)
Peak KEM	-0.022 (0.013)	-0.020 (0.012)	R ² = 0.002 (P = 0.804)	-0.033 (0.014)	-0.026 (0.012)	R ² = 0.286 (P = 0.002) *	-0.032 (0.014)
Walking speed	1.26 (0.01)	1.22 (0.01)		1.26 (0.01)	1.22 (0.01)		1.31 (0.02)

* Significant association between change in walking speed (Δ speed) and change (Δ) in biomechanical variable from 6 to 12 months post-anterior cruciate ligament reconstruction (ACLR)

Peak vGRF – Peak vertical ground reaction force in first 50% of stance phase

Peak KFA – Peak knee flexion angle in first 50% of stance phase

KFE – Knee flexion excursion from maximum in first 50% of stance to minimum during last 50% of stance phase

Peak KEM – Peak internal knee extension moment in first 50% of stance phase