

Appendix 1: Independent Variables Common to all ACL Reconstructions

Area	#	Independent Variable	Potentially Modifiable Variable	Scale
CONCURRENT INJURIES and TREATMENT	1	Meniscal tears and treatment	Yes (Treatment)	<ul style="list-style-type: none"> • Normal • Partial tear: no treatment, repair, excision • Complete tear: no treatment, repair, excision
	2	Articular cartilage injuries and treatment	Yes (Treatment)	<ul style="list-style-type: none"> • Normal / Grade I • Grades II & III: no treatment • Grades II & III: treatment • Grade IV
	3	Partial collateral ligament injury	No (Treatment)	<ul style="list-style-type: none"> • Normal or Grade I • Grade II – MCL • Grade II – LCL
BEHAVIORAL	4	Activity level (t_0)	No (Activity)	<ul style="list-style-type: none"> • Integer (1-16 Marx scale)
ALIGNMENT	5	Clinical knee alignment	Yes (Osteotomy)	<ul style="list-style-type: none"> • Normal • Valgus • Varus
DEMOGRAPHICS	6	Gender	No	<ul style="list-style-type: none"> • Male • Female
	7	Age	No	<ul style="list-style-type: none"> • Integer
	8	BMI	Yes (Weight)	<ul style="list-style-type: none"> • Continuous variable