

Appendix Table A1: The table shows the univariate analysis for independent predictor factors, none among those listed was found to be significant for ipsilateral ACL revision.

Variable	Total No.	ACL Revisions	Survivorship free from surgery (%)					p-value	Hazard Ratio (HR)		
			2-year	4-year	6-year	8-year	10-year		HR	95% CI	p-value
All subjects	244	8 (3.3%)	98.8	98.0	98.0	97.1	96.3				
Sex											
Male	186	6 (3.2%)	98.4	97.8	97.3	97.3	96.6	=0.9529	1.0	0.2 - 5.3	Reference
Female	58	2 (3.4%)	100	98.3	98.3	96.6	96.6				
Age											
≥18 years (old)	215	7 (3.2%)	99.1	98.1	97.7	97.2	96.3	=0.9655	1.0	0.1 - 8.8	Reference
<18 years (young)	29	1 (3.4%)	96.6	96.6	96.6	96.6	96.6				
Preoperative Tegner											
<7 (low)	108	3 (2.8%)	99.1	98.1	98.1	97.2	97.2	=0.7693	1.3	0.3 - 5.2	Reference
≥7 (high)	136	5 (3.7%)	98.5	97.8	97.8	97.1	95.8				
Age and Preoperative Tegner											
≥18 years (old), <7 (low)	97	3 (3.1%)	99.0	97.9	97.9	96.9	96.9	=0.9832	1.1	0.2 - 4.7	Reference
≥18 years (old), ≥7 (high)	118	4 (3.3%)	99.2	98.3	98.3	97.5	95.9				
<18 years (young), <7 (low)	11	0 (0.0%)	100	100	100	100	100				
<18 years (young), ≥7 (high)	18	1 (5.6%)	100	94.4	94.4	94.4	94.4				
Acute Reconstruction (<3 months)											
No	183	7 (3.8%)	98.4	97.8	97.8	96.7	95.6	=0.3888	0.4	0.1 - 2.0	Reference
Yes	61	1 (1.6%)	100	98.4	98.4	98.4	98.4				
Overweight (BMI ≥25)											
No	168	6 (3.6%)	98.8	98.2	98.2	97.0	95.8	=0.7041	0.7	0.2 - 3.3	Reference
Yes	76	2 (2.6%)	98.7	97.4	97.4	97.4	97.4				
Smoke											
No	169	5 (3.0%)	99.4	98.2	98.2	97.6	96.5	=0.6643	1.4	0.3 - 6.2	Reference
Yes	75	3 (4.0%)	97.3	97.3	97.3	96.0	96.0				

Appendix Table A2: The table shows the univariate analysis for independent predictor factors, Age at surgery <18 and high activity level (Tegner ≥7) were found to be significant for contralateral ACL failure; the combination of these two factors had the higher hazard ratio.

Variable	Total No.	Contralateral Ruptures	Survivorship free from surgery (%)					p-value	Hazard Ratio (HR)		
			2-year	4-year	6-year	8-year	10-year		HR	95% CI	p-value
All subjects	244	19 (7.8%)	98.4	95.5	92.6	92.2	92.2				
Sex											
Male	186	17 (9.4%)	97.8	95.2	91.4	90.9	90.9	=0.1660	0.4	Reference 0.1 - 1.6	=0.1831
Female	58	2 (3.5%)	100	96.6	96.6	96.6	96.6				
Age											
≥18 years (old)	215	13 (6.1%)	99.1	97.2	94.4	94.0	94.0	=0.0029*	3.4	Reference 1.4 - 8.3	=0.0065*
<18 years (young)	29	6 (20.7%)	93.1	82.8	79.3	79.3	79.3				
Preoperative Tegner											
<7 (low)	108	1 (0.9%)	100	100	99.1	99.1	99.1	=0.0004*	15.2	Reference 6.1 - 37.5	=0.0091*
≥7 (high)	136	18 (13.2%)	97.1	91.9	87.5	86.8	86.8				
Age and Preoperative Tegner											
≥18 years (old) , <7 (low)	97	1 (1.0%)	100	100	99.0	99.0	99.0	=0.0001*	10.2	Reference 3.9 - 26.5	=0.0256*
≥18 years (old), ≥7 (high)	118	12 (10.2%)	98.3	94.9	90.7	89.8	89.8				
<18 years (young), <7 (low)	11	0 (0.0%)	100	100	100	100	100				
<18 years (young), ≥7 (high)	18	6 (33.3%)	88.9	72.2	66.7	66.7	66.7				
Acute Reconstruction (<3 months)											
No	183	14 (7.6%)	100	96.2	92.9	92.3	92.3	=0.8736	1.1	Reference 0.4 - 2.8	=0.8902
Yes	61	5 (8.2%)	98.4	93.4	91.8	91.8	91.8				
Overweight (BMI ≥25)											
No	168	15 (8.9%)	97.6	94.0	91.1	91.1	91.1	=0.3093	0.6	Reference 0.4 - 3.1	=0.3326
Yes	76	4 (5.3%)	100	98.7	96.1	94.7	94.7				

Smoke											
No	169	11 (6.5%)	98.2	95.9	93.5	93.5	93.5	=0.2723	1.6	Reference 0.7 - 3.9	=0.2653
Yes	75	8 (10.7%)	98.7	94.7	90.7	89.3	89.3				

Appendix Table A3: The table shows the univariate analysis for independent predictor factors, Age at surgery <18 and high activity level (Tegner ≥7) were found to be significant for a second ACL rupture; as for a contralateral injury the combination of these two factors had the higher hazard ratio.

Variable	Total No.	Second Ruptures	Survivorship free from surgery (%)					p-value	Hazard Ratio (HR)		
			2-year	4-year	6-year	8-year	10-year		HR	95% CI	p-value
All subjects	244	26 (10.7%)	97.1	93.4	90.6	89.3	89.3				
Sex											
Male	186	4 (6.9%)	96.2	93.0	89.2	88.2	88.2	=0.2892	0.6	Reference 0.2 – 1.6	p=0.3017
Female	58		100	94.2	94.2	93.1	93.1				
Age											
≥18 years (old)	215	19 (8.8%)	98.1	94.9	92.6	91.2	91.2	=0.0059*	2.7	Reference 1.2 – 5.9	p=0.0110*
<18 years (young)	29	7 (24.1%)	89.7	79.3	75.9	75.9	75.9				
Preoperative Tegner											
<7 (low)	108	4 (3.7)	99.1	98.1	97.2	96.3	96.3	=0.0018*	4.7	Reference 2.2 - 10.1	=0.0052*
≥7 (high)	136	22 (16.2%)	95.6	89.7	85.3	83.8	83.8				
Age and Preoperative Tegner											
≥18 years (old) , <7 (low)	97	4 (4.2%)	99.0	97.9	96.9	95.9	95.9	=0.0001*	3.2	Reference 1.4 - 7.2	=0.0391*
≥18 years (old), ≥7 (high)	118	15 (12.8%)	97.5	93.2	89.0	87.3	87.3				
<18 years (young), <7 (low)	11	0 (0%)	100	100	100	100	100				
<18 years (young), ≥7 (high)	18	7 (39%)	83.3	66.7	61.1	61.1	61.1				
Acute Reconstruction (<3 months)											
No	183	20 (10.1%)	96.7	94.0	90.7	89.1	89.1	=0.8217	0.9	Reference 0.4 - 2.2	=0.8113
Yes	61	6 (9.8%)	98.4	91.8	90.2	90.2	90.2				
Overweight (BMI ≥25)											
No	168	20 (11.9%)	96.4	92.3	89.3	88.1	88.1	=0.3402	0.6	Reference 0.3 - 1.5	=0.3554
Yes	76	6 (7.9%)	98.7	96.1	94.7	93.4	93.4				

Smoke											
No	169	15 (8.8%)	97.6%	94.1%	92.7%	91.1%	91.1%			Reference	
Yes	75	11 (14.7%)	96.0%	92.0%	88.0%	85.3%	85.3%	=0.1823	1.7	0.8 – 3.4	p=0.1769