

## Supplemental material

Table 5. Achievement of the MIC for the KOOS Sport/Rec and QoL subscales.

Frequency	MIC KOOS Sport/Rec (MIC KOOS Sport/Rec change)		MIC KOOS QoL (MIC KOOS QoL Change)	
	Not achieving the MIC QoL	Achieving the MIC QoL	Total	
Not achieving the MIC Sport/Rec	3,340	1,619	4,959	
Achieving the MIC Sport/Rec	2,150	9,022	11,172	
Total	5,490	10,641	16,131	

KOOS=Knee injury and osteoarthritis outcome score; MIC=minimal important change; QoL=quality of life; Sport/Rec= function in sport and recreation

**Table 6. Results from univariable and multivariable logistics regression analysis. Prediction for not achieving the MIC for Sport/Rec KOOS Score.**

Variable	n	Value	n (%) of event	Univariable		Multivariable		
				OR (95% CI) MIC KOOS Sport/Rec	P	Area under ROC-Curve (95% CI)	OR (95% CI) MIC KOOS Sport/Rec	P
Age at time of surgery	0	16-<22	1,594 (30.7)	0.95 (0.92-0.98)	<b>0.0012</b>	0.51 (0.50-0.52)	1.05 (1.01-1.08)	<b>0.015</b>
		22-<33	1,819 (32.5)					
		33-74	1,546 (28.9)					
Sex	0	Female	2,438 (31.0)	0.97 (0.91-1.04)	0.44	0.50 (0.49-0.51)	0.81 (0.75-0.87)	<b>&lt;0.0001</b>
		Male	2,521 (30.5)					
BMI	4,490	15.1-<23.1	1,101 (28.3)	1.02 (1.00-1.03)	<b>0.0092</b>	0.51 (0.50-0.52)		
		23.1-<25.5	1,117 (28.8)					
		25.5-45.4	1,190 (30.7)					
Smoking	4,305	No	3,295 (29.2)	1.15 (0.96-1.39)	0.14	0.50 (0.50-0.51)		
		Yes	169 (32.2)					
Meniscal injury	0	No	2,910 (32.2)	0.86 (0.80-0.92)	<b>&lt;0.0001</b>	0.52 (0.51-0.53)	0.93 (0.86-1.00)	<b>0.045</b>
		Yes	2,049 (28.9)					
Cartilage injury	0	No	3,583 (30.4)	1.06 (0.98-1.14)	0.15	0.51 (0.50-0.51)	1.27 (1.17-1.36)	<b>&lt;0.0001</b>
		Yes	1,376 (31.6)					

Collateral ligament injury	0	No	4,767 (30.8)					
(MCL/LCL)		Yes	192 (29.4)	0.94 (0.79-1.11)	0.45	0.50 (0.50-0.50)		
ACL graft	528	Patellar	308 (40.1)					
		Hamstring	4,458 (30.1)	0.64 (0.55-0.74)	<b>&lt;0.0001</b>	0.51 (0.50-0.52)	0.59 (0.51-0.70)	<b>&lt;0.0001</b>
Sports-related injury	32	No	808 (33.9)					
		Yes	4,141 (30.2)	0.84 (0.77-0.92)	<b>0.0003</b>	0.51 (0.51-0.52)		
KOOS pre-op Sport/Rec	0	0.0-<25.0	921 (17.4)					
		25.0-<50.0	1,280 (24.9)	1.34 (1.32-1.36)	<b>&lt;0.0001</b>	0.69 (0.68-0.70)	1.36 (1.31-1.38)	<b>&lt;0.0001</b>
		50.0-85.0	2,758 (48.4)					

Univariable and multivariable logistic regression analysis were used for prediction analyses. All tests were performed with univariable logistic regression, while multivariable logistic regression models were only performed for age at time of surgery, sex, cartilage injury, graft type and KOOS pre-op Sports/Rec. Area under ROC-curve with 95% CI for multivariable model = 0.70 (0.69-0.70).

BMI=body mass index; CI=confidence interval; KOOS=Knee injury and osteoarthritis outcome score; LCL=lateral collateral ligament; MCL=medial collateral ligament; MIC=minimal important change; OR=odds ratio; Pre-op=pre-operative; ROC=receiver operating characteristics; Sport/Rec=function in sport and recreation

**Table 7. Results from univariable and multivariable logistics regression analysis. Prediction for not achieving the MIC for QoL KOOS Score.**

Variable	n	Value	n (%) of event	Univariable		Multivariable		
				OR (95% CI) MIC KOOS QoL	P	Area under ROC-Curve (95% CI)	OR (95% CI) MIC KOOS QoL	P
Age at time of surgery	0	16-<22	1,998 (38.4)	0.81 (0.78-0.83)	<0.0001	0.56 (0.55-0.57)	0.85 (0.82-0.88)	<0.0001
		22-<33	2,015 (36.0)					
		33-74	1,477 (27.7)					
Sex	0	Female	2,617 (33.3)	1.07 (1.00-1.14)	0.058	0.51 (0.50-0.52)	1.02 (0.95-1.09)	0.53
		Male	2,873 (34.7)					
BMI	4,490	15.1- <23.1	1,293 (33.3)	1.00 (0.99-1.01)	0.86	0.49 (0.48-0.51)		
		23.1- <25.5	1,244 (32.1)					
		25.5-45.4	1,266 (32.6)					
Smoking	4,305	No	3,679 (32.6)	1.22 (1.02-1.47)	0.029	0.50 (0.50-0.51)		
		Yes	195 (37.1)					
Meniscal injury	0	No	3,159 (34.9)	0.91 (0.86-0.98)	0.0069	0.51 (0.50-0.52)	0.99 (0.92-1.06)	0.73
		Yes	2,331 (32.9)					
Cartilage injury	0	No	4,058 (34.5)	0.93 (0.87-1.00)	0.059	0.51 (0.50-0.51)	1.15 (1.06-1.25)	0.0006
		Yes	1,432 (32.9)					

Collateral ligament injury	0	No	5,283 (34.1)					
(MCL/LCL)		Yes	207 (31.7)	0.90 (0.76-1.06)	0.20	0.50 (0.50-0.51)		
ACL graft	528	Patellar	286 (37.2)					
		Hamstring	5,002 (33.7)	0.86 (0.74-1.00)	<b>0.045</b>	0.50 (0.50-0.51)	0.85 (0.73-1.00)	<b>0.047</b>
Sports-related injury	32	No	739 (33.3)					
		Yes	4,691 (34.2)	1.04 (0.95-1.14)	0.40	0.50 (0.50-0.51)		
KOOS pre-op QoL	0	0.0-<25	969 (21.7)					
		25.0-<50	2,873 (32.7)					
		50.0-81.3	1,648 (57.5)	1.42 (1.39-1.45)	<b>&lt;0.0001</b>	0.65 (0.64-0.66)	1.40 (1.37-1.43)	<b>&lt;0.0001</b>

Univariable and multivariable logistic regression analysis were used for prediction analyses. All tests were performed with univariable logistic regression, while multivariable logistic regression models were only performed for age at time of surgery, sex, cartilage injury, graft type and KOOS pre-op QoL. Area under ROC-curve with 95% CI for multivariable model = 0.66 (0.65-0.67).

BMI=body mass index; CI=confidence interval; KOOS=Knee injury and osteoarthritis outcome score; LCL=lateral collateral ligament; MCL=medial collateral ligament; MIC=minimal important change; OR=odds ratio; Pre-op=pre-operative; ROC=receiver operating characteristics; Sport/Rec=function in sport and recreation