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ASSOCIATION BETWEEN PREOPERATIVE RADIOGRAPHIC SEVERITY OF OSTEOARTHRITIS AND PATIENT-REPORTED OUTCOMES OF TOTAL KNEE REPLACEMENT

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Appendix A

Table 1. Patient-reported outcome scores at baseline and two years postoperatively, stratified by preoperative medial joint space narrowing.

Patient-reported outcomes	JSN score of 0,1,2	JSN score of 3	P-value
WOMAC Pain at baseline	41.0 (17.6)	36.9 (16.6)	0.07
WOMAC Pain at 2 years	8.4 (14.2)	6.1 (11.2)	0.05
Change in WOMAC Pain from baseline to 2 years	-32.6 (15.3)	-30.9 (18.4)	0.42
KOOS ADL at baseline	58.7 (16.6)	62.2 (16.3)	0.10
KOOS ADL at 2 years	88.9 (16.3)	92.2 (10.6)	0.08
Change in KOOS ADL from baseline to 2 years	30.2 (15.9)	30.0 (19.2)	0.94

Patient-reported outcome scores are separately for mild-to-moderate joint space narrowing of the medial compartment (JSN score of 0, 1, 2) and severe joint space narrowing of the medial compartment (JSN score of 3). Mean (SD) presented for continuous variables. WOMAC Pain is scaled 0-100, with 100 being worst pain. P-values represent comparisons between JSN score categories (JSN 0,1,2 and JSN 3) as assessed by Wilcoxon rank-sum test. KOOS ADL is scaled 0-100, with 100 being best function. JSN = joint space narrowing; WOMAC = Western Ontario and McMaster Universities Arthritis Index; KOOS = Knee Injury and Osteoarthritis Outcome Score; ADL = Activities of Daily Living.

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Table 2. Patient-reported outcome scores at baseline and two years postoperatively, stratified by preoperative lateral joint space narrowing.

Patient-reported outcomes	JSN score of 0	JSN score of 1,2,3	P-value
WOMAC Pain at baseline	38.2 (16.9)	40.3 (17.7)	0.37
WOMAC Pain at 2 years	5.8 (12.6)	9.4 (13.1)	0.01
Change in WOMAC Pain from baseline to 2 years	-32.4 (17.2)	-30.9 (16.3)	0.48
KOOS ADL at baseline	61.2 (16.4)	59.2 (16.5)	0.36
KOOS ADL at 2 years	91.7 (14.3)	88.7 (13.4)	0.01
Change in KOOS ADL from baseline to 2 years	30.5 (18.7)	29.5 (15.8)	0.66

Patient-reported outcome scores are reported separately for no joint space narrowing of the lateral compartment (JSN score of 0) and mild-to-severe joint space narrowing of the lateral compartment (JSN score of 1, 2, 3). Mean (SD) presented for continuous variables. WOMAC Pain is scaled 0-100, with 100 being worst pain. P-values represent comparisons between JSN score categories (JSN 0 and JSN 1,2,3) as assessed by Wilcoxon rank sum test. KOOS ADL is scaled 0-100, with 100 being best function. JSN = joint space narrowing; WOMAC = Western Ontario and McMaster Universities Arthritis Index; KOOS = Knee Injury and Osteoarthritis Outcome Score; ADL = Activities of Daily Living.

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Association Between Preoperative Radiographic Severity of Osteoarthritis and Patient-Reported Outcomes of Total Knee Replacement

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Table 3. Patient-reported outcome scores at baseline and two years postoperatively, stratified by OARSI score quartiles.

Patient-reported outcomes	OARSI<=8	8 <oarsi <="10</th"><th>10<oarsi<=12< th=""><th>OARSI>12</th><th>Unadjusted P-values</th></oarsi<=12<></th></oarsi>	10 <oarsi<=12< th=""><th>OARSI>12</th><th>Unadjusted P-values</th></oarsi<=12<>	OARSI>12	Unadjusted P-values
WOMAC Pain at baseline	39.98 (17.04)	38.45 (17.86)	35.36 (15.67)	43.30 (17.72)	0.14
WOMAC Pain at 2 years	8.49 (16.20)	6.22 (11.13)	6.52 (10.25)	8.07 (13.17)	0.85
Change in WOMAC Pain from baseline to 2 years	-31.49 (17.84)	-32.23 (17.65)	-28.84 (16.02)	-35.23 (14.47)	0.31
KOOS ADL at baseline	59.70 (15.94)	60.10 (16.25)	65.39 (15.96)	55.63 (17.10)	0.03
KOOS ADL at 2 years	87.84 (18.51)	91.55 (11.78)	91.85 (10.94)	91.10 (12.58)	0.21
Change in KOOS ADL from baseline to 2 years	28.14 (18.30)	31.45 (18.11)	26.46 (16.09)	35.47 (16.02)	0.05

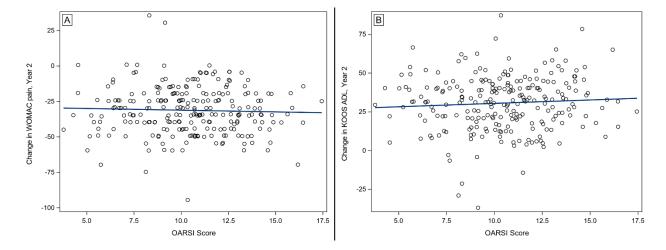
Patient-reported outcome scores are reported separately for each of 4 OARSI score categories defined by quartiles of OARSI score: (1) \leq 8 (2) 9-10 (3) 11-12 (4) >12. Mean (SD) presented for continuous variables. WOMAC Pain is scaled 0-100, with 100 being worst pain. P-values represent comparisons between OARSI category and patient reported outcomes as assessed by ANOVA. KOOS ADL is scaled 0-100, with 100 being best function. JSN = joint space narrowing; WOMAC = Western Ontario and McMaster Universities Arthritis Index; KOOS = Knee Injury and Osteoarthritis Outcome Score; ADL = Activities of Daily Living.

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Appendix Figure 1. Change in patient-reported outcome scores from baseline to two years postoperatively. (A) This scatter plot represents the change in WOMAC Pain score from baseline to two years postoperatively, stratified by preoperative OARSI score. (B) This scatter plot represents the change in KOOS ADL score from baseline to two years postoperatively, stratified by preoperative OARSI score. WOMAC = Western Ontario and McMaster Universities Arthritis Index; KOOS = Knee Injury and Osteoarthritis Outcome Score; ADL = Activities of Daily Living; OARSI = Osteoarthritis Research Society International.