PREOPERATIVE RADIOGRAPHIC OSTEOARTHRITIS SEVERITY MODIFIES THE EFFECT OF PREOPERATIVE PAIN ON PAIN/FUNCTION AFTER TOTAL KNEE ARTHROPLASTY

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Supplementary table E-1: Preoperative prediction of 1-year postoperative pain; outcomes of original, not-imputed data

	Donomotono	D	95% CI for B	
	Parameters	В	Lower	Upper
Model 1	KL score	3.5	1.7	5.2
Model 2	Preoperative pain	0.2	0.2	0.3
Model 3	KL score	3.3	1.6	5.0
	Preoperative pain	0.2	0.1	0.3
Model 4	KL score	5.5	1.6	9.5
	Preoperative pain	0.4	0.1	0.7
	KL score * preoperative pain	-0.1	-0.2	0.0
Model 5	KL score	6.1	1.7	10.5
	Preoperative pain	0.4	0.1	0.7
	KL score * preoperative pain	-0.1	-0.2	0.0

Multivariate linear regression models

Model 1: KOOS pain outcome = β 0 + β 1*(KL score) + ϵ

Model 2: KOOS pain outcome = $\beta 0 + \beta 1*(KOOS \text{ preoperative pain}) + \epsilon$

Model 3: KOOS pain outcome = β 0 + β 1*(KL score) + β 2*(KOOS preoperative pain) + ϵ

Model 4: KOOS pain outcome = β 0 + β 1*(KL score) + β 2*(KOOS preoperative pain) + β 3*(KL score*KOOS preoperative pain) + ϵ

Model 5: Model 4 adjusted for BMI, age, gender and SF12 MCS

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Supplementary table E-2: Preoperative prediction of 1-year postoperative function; outcomes of original, not-imputed data.

	Parameters	В	95% CI for B	
_	Parameters		Lower	Upper
Model 1	KL score	3.6	1.9	5.2
Model 2	Preoperative pain	-0.1	-0.2	0.0
Model 3	KL score	3.5	1.9	5.2
	Preoperative pain	-0.1	-0.2	0.0
Model 4	KL score	6.4	2.5	10.2
	Preoperative pain	0.1	-0.2	0.4
	KL score * preoperative pain	-0.1	-0.2	0.0
Model 5	KL score	5.9	1.6	10.1
	Preoperative pain	0.0	-0.3	0.4
	KL score * preoperative pain	0.0	-0.1	0.1

Multivariate linear regression models

All models were adjusted for preoperative function.

Model 1: KOOS function outcome = $\beta 0 + \beta 1*(KL score) + \epsilon$

Model 2: KOOS function outcome = $\beta 0 + \beta 1*(KOOS \text{ preoperative pain}) + \epsilon$

Model 3: KOOS function outcome = $\beta 0 + \beta 1*(KL \text{ score}) + \beta 2*(KOOS \text{ preoperative pain}) + \epsilon$

Model 4: KOOS function outcome = $\beta 0 + \beta 1*(KL score) + \beta 2*(KOOS preoperative pain) +$

 β 3*(KL score*KOOS preoperative pain) + ϵ

Model 5: Model 4 adjusted for **preoperative function**, BMI, age, gender and SF12 MCS

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Supplementary table E-3: Preoperative prediction of 2-year postoperative pain; outcomes of original, not-imputed data

	Domonostono	В	95% CI for B	
	Parameters		Lower	Upper
Model 1	KL score	3.9	1.8	6.0
Model 2	Preoperative pain	0.2	0.1	0.3
Model 3	KL score	3.9	1.8	6.0
	Preoperative pain	0.2	0.1	0.3
Model 4	KL score	7.3	2.3	12.4
	Preoperative pain	0.5	0.1	0.8
	KL score * preoperative pain	-0.1	-0.2	0.0
Model 5	KL score	7.5	2.2	12.9
	Preoperative pain	0.4	0.1	0.8
	KL score * preoperative pain	-0.1	-0.2	0.0

Multivariate linear regression models

Model 1: KOOS pain outcome = β 0 + β 1*(KL score) + ϵ

Model 2: KOOS pain outcome = $\beta 0 + \beta 1*(KOOS \text{ preoperative pain}) + \epsilon$

Model 3: KOOS pain outcome = β 0 + β 1*(KL score) + β 2*(KOOS preoperative pain) + ϵ

Model 4: KOOS pain outcome = $\beta 0 + \beta 1*(KL \text{ score}) + \beta 2*(KOOS \text{ preoperative pain}) + \beta 3*(KL \text{ score}*KOOS \text{ preoperative pain}) + \epsilon$

Model 5: Model 4 adjusted for BMI, age, gender and SF12 MCS

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Supplementary table E-4: Preoperative prediction of 2-year postoperative function; outcomes of original, not-imputed data

	Damamatana	D	95% CI for B	
	Parameters	В	Lower	Upper
Model 1	KL score	3.4	1.4	5.4
Model 2	Preoperative pain	-0.2	-0.3	0.0
Model 3	KL score	3.3	1.3	5.3
	Preoperative pain	-0.2	-0.3	0.0
Model 4	KL score	7.3	2.4	12.2
	Preoperative pain	0.1	-0.2	0.5
	KL score * preoperative pain	-0.1	-0.2	0.0
Model 5	KL score	7.4	2.2	12.5
	Preoperative pain	0.1	-0.3	0.5
	KL score * preoperative pain	-0.1	-0.2	0.0

Multivariate linear regression models

All models were adjusted for preoperative function.

Model 1: KOOS function outcome = $\beta 0 + \beta 1*(KL score) + \epsilon$

Model 2: KOOS function outcome = $\beta 0 + \beta 1*(KOOS \text{ preoperative pain}) + \epsilon$

Model 3: KOOS function outcome = $\beta 0 + \beta 1*(KL \text{ score}) + \beta 2*(KOOS \text{ preoperative pain}) + \epsilon$

Model 4: KOOS function outcome = $\beta 0 + \beta 1*(KL score) + \beta 2*(KOOS preoperative pain) +$

 β 3*(KL score*KOOS preoperative pain) + ϵ

Model 5: Model 4 adjusted for **preoperative function**, BMI, age, gender and SF12 MCS

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Supplementary table E-5: Comparative analysis of socio-demographic characteristics of the loss to follow-up patient population *versus* eligible patient population.

	Eligible patients (n=559)	Loss to follow-up patients (n=199)	Analysis of variance (p-value)
Female, n (%)	376 (68)	130 (66)	0.697
Age at inclusion, years	67 ±9	66 ±10	0.476
BMI, kg/m ²	25 ±4	25 ±4	0.431
Comorbidities, n (%)			
Muscular	184 (52)	59 (48)	0.544
Non-muscular	334 (72)	118 (78)	0.171
Preoperative painkilling medication usage, n (%)	492 (91)	170 (88)	0.170
Preoperative pain, 0-100 ±SD	39 ±18	37 ±20	0.124
Preoperative function, 0-100 ±SD	45 ±18	42 ±21	0.062
SF-12, 0-100			
Mean MCS	56 ±9	54 ±10	0.010

BMI: Body-mass Index

MCS: mental component summary scale

SF-12: Short Form 12