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TABLE E-1 Patient Characteristics by Treatment Option and Prosthesis Brand*

THEE E I I dient Characteristi	1									
		Total K	Inee Arthi	roplasty		Unicom				
	AGC	Genesis I	LCS	NexGen	Total	Genesis Uni	Miller- Galante	Oxford III	Total	All
No. of prostheses	205	266	364	137	972	104	104	164	372	1344
No. of hospitals†	16	25	20	9	56	11	16	29	42	60
Men (%)	32	27	28	33	29	41	35	45	41	33
Charnley category C (%)	62	67	65	64	65	56	45	52	51	61
Mean age (SD) (yr)‡	76 (7.9)	77 (6.6)	76 (7.9)	74 (8.5)	76 (7.7)	69 (9.4)	69 (7.5)	69 (9.1)	69 (8.8)	74 (8.6)
Mean time (SD) since operation (yr) §	7.2 (2.4)	9.2 (1.7)	6.5 (1.8)	4.6 (1.8)	7.1 (2.4)	6.0 (3.2)	5.2 (1.9)	4.2 (1.4)	5.0 (2.3)	6.5 (2.6)
() I . I	0.47 (0.22)	0.46 (0.22)		0.44 (0.22)		0.47 (0.21)	-			0.46 (0.22)
Mean (SD) postoperative EQ-5D index score	0.72 (0.25)	0.69	0.74	0.81 (0.19)	0.73	` /	` ′	0.78	0.76	0.74 (0.24)

^{*}SD = standard deviation, and EQ-5D = EuroQol-5D. †The numbers in the individual columns do not add up to the totals because several hospitals have used different prosthesis brands. ‡Mean age when completing the questionnaire. §Mean time since operation when completing the questionnaire.

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Table E-2 Mean difference in outcome (detailed questions from KOOS) between TKA and UKA

		diff [†]	р	TKA best UKA best
Pain	How often do you experience knee pain? Twisting/pivoting on your knee Straightening knee fully Bending knee fully Walking on flat surface Going up or down stairs At night while in bed Sitting or lying Standing upright	0.17 0.35 0.01	0.97 0.02 <0.001 0.9 0.08 0.2 0.2	
Symptoms	Do you have swelling in your knee? Do you feel grinding, hear clicking or any other type of noise when your knee moves? Does your knee catch or hang up when moving? Can you straighten your knee fully? Can you bend your knee fully? How severe is your knee joint stiffness after first wakening in the morning? How severe is your knee stiffness after sitting, lying or resting later in the day?	-0.10 0.10	0.06 0.04 0.2 <0.001 0.9	
ADL	Descending stairs Ascending stairs Rising from sitting Standing Bending to floor/pick up an object Walking on flat surface Getting in/out of car Going shopping Putting on socks/stockings Rising from bed Taking off socks/stockings Lying in bed (turning over, maintaining knee position) Getting in/out of bath Sitting Getting on/off toilet Heavy domestic duties (moving heavy boxes, scrubbing floors, etc) Light domestic duties (cooking, dusting, etc)	0.16 0.15 0.12 0.23 0.09 0.28 0.20 0.18 0.07 0.19 0.15 0.27 0.13 0.26 0.18	0.007 0.2 <0.001 0.02 0.03	
Sport&Rec	Squatting Running Jumping Twisting/pivoting on your injured knee Kneeling	0.22 0.27 0.23	0.003 0.02 0.003 0.01 0.09	
QOL	How often are you aware of your knee problem? Have you modified your life style to avoid potentially damaging activities? How much are you troubled with lack of confidence in your knee? In general, how much difficulty do you have with your knee?	-0.09 0.11 0.04 0.04	0.2 0.6	

^{*}KOOS=The Knee Injury and Osteoarthritis Outcome Score; TKA=total knee arthroplasty; UKA=unicompartmental knee arthroplasty; ADL=function in daily living; Sport/Rec=function in sport and recreation; QOL=knee related quality of life.

[†]Difference is equal to mean score among TKAs minus mean score among UKAs (positive values are in favor of UKA), adjusted for age, gender, time since operation and Charnley category in a multiple linear regression model.

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TABLE E-3 Effects on Mean Outcomes of Sex, Age, Time Since Operation, Charnley Category, and Unicompartmental Prosthesis Brand*

TABLE E-3 Eller	as on Mean Out	comes or s	ex, Age, Time S	mice Opera	tion, Charnley C	alegory, a	na Omcompara	nemai Pro	sinesis bianu"				1			
Risk Predictors	Pain (difference† [95% CI])	P Value	Symptoms (difference† [95% CI])	P Value	ADL (difference† [95% CI])	P Value	Sport/Rec (difference† [95% CI])	P Value	QOL (difference† [95% CI])	P Value	Pain (VAS) (difference† [95% CI])	P Value	Satisfaction (VAS) (difference† [95% CI])	P Value	ΔEQ-5D (difference† [95% CI])	P Value
Male (n =	ref		ref		ref		ref		ref		ref		ref		ref	
152)	ici		ici		ici		ici		ici		ici		ici		ici	
Female (n = 220)	-4.7 (-9.3 to -0.1)	0.045	-2.5 (-6.0 to 1.1)	0.2	-5.2 (-9.6 to -0.9)	0.02	-6.4 (-11.9 to -1.0)	0.02	-4.5 (-9.9 to 0.9)	0.1	-3.3 (-8.0 to 1.5)	0.2	-1.7 (-6.8 to 3.5)	0.5	4.7 (-1.4 to 10.7)	0.1
Age‡																
<65 years (n = 128)	ref		ref		ref		ref		ref		ref		ref		ref	
65-69 years (n = 77)	8.5 (2.2 to 14.8)	0.008	4.5 (-0.4 to 9.5)	0.07	3.8 (-2.2 to 9.8)	0.2	8.6 (1.1 to 16.2)	0.03	8.9 (1.5 to 16.4)	0.02	10.2 (3.7 to 16.7)	0.002	9.9 (2.7 to 17.0)	0.007	7.1 (-1.4 to 15.6)	0.1
70-79 years (n = 126)	10.1 (4.5 to 15.7)	<0.001	6.9 (2.5 to 11.2)	0.002	7.1 (1.8 to 12.4)	0.01	11.3 (4.6 to 18.0)	<0.001	12.9 (6.3 to 19.4)	<0.001	11.5 (5.8 to 17.3)	<0.001	8.2 (1.9 to 14.4)	0.011	2.8 (-4.6 to 10.2)	0.5
≥80 years (n = 41)	14.3 (6.3 to 22.4)	<0.001	10.8 (4.6 to 17.0)	<0.001	4.8 (-2.9 to 12.4)	0.2	15.5 (5.7 to 25.4)	0.002	17.1 (7.7 to 26.5)	<0.001	19.3 (10.8 to 27.8)	<0.001	14.1 (5.0 to 23.3)	0.003	-0.6 (-11.2 to 9.9)	0.9
Years since operation	0.3 (-0.7 to 1.4)	0.6	0.5 (-0.4 to 1.3)	0.3	-0.1 (-1.1 to 1.0)	0.9	-0.1 (-1.4 to 1.2)	0.8	-0.2 (-1.5 to 1.0)	0.7	-0.2 (-1.3 to 0.9)	0.7	0.6 (-0.7 to 1.8)	0.4	0.2 (-1.3 to 1.6)	0.8
Charnley																
category§ A (n = 109)	ref		ref		ref		ref		ref		ref		ref		ref	
11(11 105)	101				101		101						101			
B (n = 67)	-10.6 (-17.1 to -4.0)	0.002	-5.7 (-10.8 to -0.6)	0.03	-9.8 (-16.0 to -3.5)	0.002	-10.0 (- 18.0 to - 2.1)	0.01	-15.1 (- 22.8 to - 7.3)	<0.001	-14.9 (- 21.8 to - 8.1)	<0.001	-11.8 (- 19.2 to - 4.3)	0.002	-8.5 (-17.2 to 0.3)	0.1
C (n = 184)	-11.4 (-16.6 to -6.1)	<0.001	-7.7 (-11.8 to -3.6)	<0.001	-15.2 (-20.2 to -10.2)	<0.001	-14.7 (- 20.9 to - 8.4)	<0.001	-15.5 (- 21.6 to - 9.3)	<0.001	-11.4 (- 16.9 to - 5.9)	<0.001	-8.8 (-14.8 to -2.9)	0.004	-8.8 (-15.8 to -1.8)	0.01
Prosthesis brand																
Oxford Uni (III) (n = 164)	ref		ref		ref		ref		ref		ref		ref		ref	

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Genesis Uni (n = 104)	-4.1 (-9.9 to 1.6)	0.2	-3.2 (-7.6 to 1.3)	0.2	-2.7 (-8.1 to 2.7)	0.3	2.2 (-4.7 to 9.1)	0.5	-2.1 (-8.8 to 4.6)	0.5	-2.9 (-8.8 to 3.1)	0.3	-1.4 (-7.9 to 5.1)	0.7	-1.3 (-9.0 to 6.4)	0.7
Miller- Galante (n = 104)	-2.5 (-8.0 to 3.1)	0.4	-2.9 (-7.2 to 1.5)	0.2	-3.6 (-8.9 to 1.7)	0.2	-4.2 (-10.9 to 2.5)	0.2	-3.8 (-10.4 to 2.8)	0.3	-4.2 (-10.0 to 1.6)	0.2	-1.2 (-7.5 to 5.2)	0.7	-4.3 (-11.7 to 3.2)	0.3

^{*}ADL = function in daily living, Sport/Rec = function in sport and recreation, QOL = knee-related quality of life, VAS = visual analog scale, Δ EQ-5D = present minus preoperative EuroQol-5D index score, CI = confidence interval. †Differences in mean scores are adjusted for all variables in a multiple linear regression model. ‡Age when completing the questionnaire. §Information on Charnley category was not given by twelve patients.