

Supplementary data

Table 1. The distribution of patients with missing variables. Only patients with complete registrations were included in the study. Some registrations had more than one missing variable, thus explaining the discrepancy between the number of patients with missing observations and the final number of patients with complete registrations

	PTFA	OA
Total no. of TKAs registered	1,475	53,502
Registrations missing		
Weight	36	1,876
Charnley class	10	230
Duration of surgery	11	180
Vital status	4	197
Patients weighing > 200 or < 30 kg	0	13
Revision registered before primary surgery	0	22
Total no. of TKAs with complete registrations:	1,421 (3%)	51,097 (97%)

Table 3. Hazard ratios for the risk of revision of TKA inserted due to PTFA, with OA as reference (calculated by Cox regression). Adjusted hazard ratios are based on the following covariates: sex, weight, Charnley class, perioperative complications, and the need for additional component supplementation

	Entire	< 1 year	1 – 5 years	> 5 years
Age < 50				
Crude hazard ratio	1.68	2.71	1.23	1.93
(95% CI)	(1.21–2.32)	(1.49–4.92)	(0.72–2.09)	(0.91–4.11)
p-value	0.002	0.001	0.5	0.09
Adjusted hazard ratio	1.55	2.52	1.08	1.83
(95% CI)	(1.11–2.16)	(1.41–4.48)	(0.59–1.99)	(0.82–4.09)
p-value	0.01	0.002	0.8	0.1
Age 50–70				
Crude hazard ratio	1.64	1.80	1.72	1.30
(95% CI)	(1.37–1.96)	(1.20–2.69)	(1.25–2.36)	(0.79–2.14)
p-value	< 0.001	0.004	0.001	0.3
Adjusted hazard ratio	1.46	1.62	1.48	1.17
(95% CI)	(1.21–1.76)	(1.09–2.41)	(1.03–2.12)	(0.63–2.17)
p-value	< 0.001	0.02	0.03	0.6
Age > 70				
Crude hazard ratio	2.00	1.77	2.44	1.33
(95% CI)	(1.44–2.80)	(0.87–3.61)	(1.65–3.61)	(0.41–4.35)
p-value	< 0.001	0.1	< 0.001	0.6
Adjusted hazard ratio	1.93	1.62	2.37	1.41
(95% CI)	(1.36–2.72)	(0.85–3.08)	(1.47–3.82)	(0.42–4.72)
p-value	< 0.001	0.1	< 0.001	0.6

Table 4. Indications for revision of TKA inserted due to PTFA and OA, sorted by follow-up. A single revision may have reported more than one indication, explaining the discrepancy between the total number of indications and the total number of revisions

	Entire follow-up		< 1 year		1–5 years		> 5 years	
	PTFA	OA	PTFA	OA	PTFA	OA	PTFA	OA
Aseptic loosening	45 (23%)	699 (24%)	4 (7%)	88 (10%)	25 (26%)	424 (29%)	16 (36%)	187 (34%)
Pain	20 (10%)	381 (13%)	3 (5%)	91 (10%)	12 (13%)	238 (16%)	5 (11%)	52 (9%)
Instability	45 (23%)	514 (17%)	18 (32%)	139 (16%)	19 (20%)	291 (19%)	8 (18%)	84 (15%)
Infection	50 (25%)	543 (19%)	18 (32%)	308 (35%)	24 (25%)	179 (12%)	8 (18%)	56 (10%)
Polyethylene failur	8 (4%)	148 (5%)	2 (4%)	18 (2%)	2 (2%)	50 (3%)	4 (9%)	80 (14%)
Secondary insertion of patella component	14 (7%)	264 (9%)	5 (9%)	65 (8%)	7 (7%)	150 (10%)	2 (4%)	49 (9%)
Other	15 (8%)	375 (13%)	6 (11%)	159 (19%)	7 (7%)	167 (11%)	2 (4%)	49 (9%)
Total	197	2,924	56	868	96	1,499	45	557

Table 5. Comparison of patient and operation characteristics according to type of arthritis and sorted by whether or not TKA was revised during follow-up

Characteristics	PTFA		OA	
	Unrevised	Revised	Unrevised	Revised
Observations, n	1,262 (89%)	159 (11%)	48,736 (95%)	2,361 (5%)
Mean age years ^{a,b}	63 (SD 13) ^e	57 (SD 13) ^e	69 (SD 9) ^e	65 (SD 10) ^e
< 50 years old, n (%)	177 (14%) ^e	50 (32%) ^e	1,223 (3%) ^e	154 (7%) ^e
50–70 years old, n (%)	691 (55%) ^e	80 (50%) ^e	22,869 (47%) ^e	1,390 (59%) ^e
> 70 years old, n (%)	394 (31%) ^e	29 (18%) ^e	24,644 (50%) ^e	817 (34%) ^e
Mean weight, kg ^a	79 (SD 21)	79 (SD 22)	83 (SD 19) ^e	86 (SD 21) ^e
Sex ^b				
Female	717 (57%)	90 (57%)	30,955 (64%)	1,468 (62%)
Fracture ^b				
Femur	223 (23%)	26 (16%)	NA	NA
Tibia	751 (77%)	133 (84%)	NA	NA
Charnley class ^b				
A	982 (78%)	127 (80%)	21,016 (43%) ^e	1,129 (48%) ^e
B1	122 (10%)	14 (9%)	16,682 (34%) ^e	734 (31%) ^e
B2	31 (2%)	2 (1%)	8,106 (17%) ^e	350 (15%) ^e
C	127 (10%)	16 (10%)	2,932 (6%) ^e	148 (6%) ^e
Mean duration of primary surgery, min ^a	95 (SD 35) ^d	106 (SD 44) ^d	72 (SD 21) ^e	75 (SD 24) ^e
Perioperative complications ^b	33 (2.5%)	7 (4.5%)	341 (0.7%) ^d	28 (1.2%) ^d
Component supplementation ^b	228 (18%)	36 (23%)	1,011 (2%) ^c	63 (3%) ^c

^a Wilcoxon rank-sum test.

^b Chi-square test or Fisher's exact test.

Level of significance: ^c p < 0.05, ^d p < 0.01, and ^e p < 0.001.