TABLE E-1. Total hip arthroplasty studies.

	Population			Follow-up (months)	Instruments		
	N‡	Diagnosis	Mean Age (range)		Generic	Specific	Utility
Studies							
Katz JN et al.[57]	54	69% OA & 7% RA	59.7 (?)	3	FSQ, SIP & SF-36	MHAQ & sAIMS	
Brodie LJ et al.[58]	39	61.5% OA		3½		AIMS	
Mahon JL et al.[59]	99	OA	68	4*	SF-36	WOMAC	HUI 3
Knutsson S et al.[60]	40	87.5% Arthrosis	? (25-90)	6	SIP		
Hopman WM et al.[61]	68	OA	71.1 (47-85)	6	SF-36		
Wright JG et al.[62,63]	78	72% OA & 6% RA	62.2 (25-87)	6	SF-36	MACTAR, WOMAC & PASI	
Dawson J et al.[64]	185	89.6% OA	70.5¶ (35.8-89.6)	6	SF-36	AIMS & 12-item Hip Score	
Dawson J et al.[65]	173	99% OA & 1% RA	70.5¶ (38-89)	6	SF-36	AIMS & 12-item Hip Score	
Bayle B et al.[66]	30	90% OA & 10% AN	57.2 (22-74)	7	SEIQoL		
O'Connell T et al.[67]	89	?	? (50-80+)	9-12	SF-36		
Nilsdotter AK et al.[68]	162	OA	71.2 (50-92)	12	SF-36	WOMAC	
Borstlap M et al.[69]	97	64%OA & 36%RA	OA: 69.2 (54-88) RA: 60.6 (33-80)	12		IRGL	
Mangione CM et al.[70]	224	OA	67 (?)	12	SF-36		
Wiklund I et al.[71]	56	71.4% OA	65¶ (30-79)	12	NHP I & II		
Nilsdotter AK et al.[72]	20	OA	72.6 (52-86)	12	SF-36	WOMAC	
Nilsdotter AK et al.[73]	124	OA	71 (51-88)	12	SF-36	WOMAC	
Laupacis A et al.[74]	90	OA	64 (40-75)	24	SIP	WOMAC & MACTAR	TTO
MacWilliam CH et al.[75]	442	?	? (?)	24	SF-36		
Chan CL et al.[76]	166	OA	App. 69 (?)	3 years			RIM
Rorabeck CH et al.[77,78]	164	OA	? (18-75)	1-4 years	SIP	WOMAC & MACTAR	TTO
Garellick G et al.[79]	54	OA, RA & fracture	71 (40-86)	5 years	NHP I		
O'Boyle C et al.[80]	20	OA	65.2 (43-78)	6 years	SEIQoL & MHIQ	AIMS	
Laupacis A et al.[81]	214	OA	64 (?)	6.3 years*	SIP	WOMAC & MACTAR	TTO
Nakai T et al.[82]	17	ON	41 (24-60)	7 years			RIM
Studies reporting results on TKA also (see Table E-2):							
Aarons H et al.[26]	40	80% OA	58.5 (?)	7 days		WOMAC	
Kiebzak GM et al.[27]	80	77.5% DJD	M: 59 (?) & F: 68 (?)	3	SF-36		
Liang MH et al.[28]	25	80% OA & 20% RA	66.3 (?)	3s	FSQ & SIP	AIMS & HAQ	QWB
Lescoe-Long M et al.[29]	11	OA	66.4 (41-80)	3-4	NHP I		
Bellamy N et al.[30]	16	OA	68.3 (54-83)	6		WOMAC	
Katz JN et al.[31]	151	Arthritis	M: 67.3 (?) & F: 67.7 (?)	6	FSQ		
Fortin PR et al.[32]	116	OA	67 (?)	6	SF-36	WOMAC	
Liang MH et al.[33]	23	Arthrosis	64.5 (?)	6			QWB
Shields RK et al.[34]	19	OA	55.4 (30-74)	6	SF-36		QWB
Jones CA et al.[35]	227	94% OA	68.2 (?)	6	SF-36	WOMAC	
Jones CA et al.[36]	163<80 years 34≥80 years	94% OA 91% OA	68.8 (?) 83.6 (?)	6	SF-36	WOMAC	
Escobar A et al.[37]	100	OA	68.6 (?)	6	SF-36	WOMAC	
Mahomed NN et al.[38]	103	OA	66 (?)	6	SF-36	WOMAC	
Bachmeier CJ et al.[39]	86	OA	65 (?)	12	SF-36	WOMAC	
Williams JI et al.[40]	121	?	61.8 (?)	12	SF-36	WOMAC	
March LM et al.[41]	59	OA	? (≥55)	12	SF-36		
Bayley KB et al.[42]	90	?	?	12	SF-36		
Mainard D et al.[43]	123	DJD	62.5 (?)	12	NHP	AIMS 2	
March L et al.[44]	76	OA	63.3 (?)	12	SF-36	WOMAC	
Stickles B et al.[45]	592	OA	68.9 (23.9-96.1)	12	SF-36	WOMAC	
Liang MH et al.[46]	21	87% OA & 13%RA	67.5 (56-80)	12-15	FSQ & SIP	AIMS & HAQ	QWB
Rissanen P et al.[7,47,48]	276	Arthrosis	65 (27-85)	24	15-D & NHP I		
Kageyama Y et al.[49]	86	RA	56(?)	24		MHAQ	
Hozack WJ et al.[50]	151	89% OA & 5% RA	64 (28-86)	24	SF-36		
McGuigan FX et al.[51]	46	86% OA	68 (34-85)	24	SF-36		
Ritter MA et al.[52]	85	OA	68 (66-96)	24	SF-36		
Fortin PR et al.[53]	84	OA	65.7 (?)	24	SF-36	WOMAC	
Kiebzak GM et al.[54]	141 42	OA	?	12 24	SF-36		
Tsuboi S et al.[55]	79	RA	59 (?)	5 years	SIP		
Kirwan JR et al.[56]	242	73% OA & 27% RA	62.7 (?)	6 years		HAQ	

OA=Osteoarthritis, RA=Rheumatoid Arthritis, DJD=Degenerative Joint Disease, AN=Avascular Femoral Head Necrosis, ON = Osteonecrosis. M=Male, F=Female.

‡ N denotes the number of subjects effectively assessed at follow-up and does not take into account those lost at follow-up.

* Mean duration of follow-up.

¶ Median age.

TABLE E-2. Total knee arthroplasty studies.

	Population			Follow-up (months)	Instruments		
	N‡	Diagnosis	Age Mean (range)		Generic	Specific	Utility
Studies							
Drewett RF et al.[83,84]	26	OA & RA	72 (49-84)	≥ 2	NHP I		RIM [83]
van Essen GJ et al.[85]	73	OA	73 (54-88)	3	SF-36		
Bennett KJ et al.[86]	41	OA	69.7 (?)	3	SF-36		McKnee
Lingard EA et al.[87]	770	OA	70 (38-90)	3	SF-36	WOMAC	
Sharma L et al.[88]	47	OA	68.9 (55-83)	3	SF-36		
Kreibich DN et al.[89]	68	OA	68 (53-81)	6	SF-36	WOMAC	TTO
Brazier JE et al.[90]	109	OA	71 (47-87)	6	SF-36	WOMAC & HAQ	EQ-5D
Griffiths G et al.[91]	21	OA	65.1 (?)	6		AIMS, HAQ & WOMAC	
Dawson J et al.[92]	117	91.4% OA	73¶ (46-89)	6	SF-36	12-item Knee Score	
Birdsall PD et al.[93]	119	Arthritis	? (80-?)	12	NHP I		
Lingard EA et al.[94]	697	OA	70 (38-90)	12	SF-36	WOMAC	
Deshmukh RG et al.[95]	139	OA	68.8 (40-89)	12	NHP		
Heck DA et al.[96]	291	OA	70.2 (50-88)	24	SF-36	WOMAC	
Lavernia CJ et al.[97]	100	82% OA & 16% RA	M: 62 (?) & F: 64 (?)	24			QWB
Donell ST et al.[98]	221	OA	? (51-90)	3 years*			RIM
Studies reporting results on THA also (see Table E-1):							
Aarons H et al.[26]	23	73.9% OA	65.8 (?)	7 days		WOMAC	
Kiebzak GM et al.[27]	78	98.7% DJD	M: 66 (?) & F: 68 (?)	3	SF-36		
Liang MH et al.[28]	25	80% OA & 20% RA	66.3 (?)	3	FSQ & SIP	AIMS & HAQ	QWB
Lescoe-Long M et al.[29]	12	OA	66.4 (41-80)	3-4	NHP I		
Bellamy N et al.[30]	14	OA	68.3 (54-83)	6		WOMAC	
Katz JN et al.[31]	151	Arthritis	M: 69.6 (?) & F: 71.0 (?)	6	FSQ		
Fortin PR et al.[32]	106	OA	67 (?)	6	SF-36	WOMAC	
Liang MH et al.[33]	22	Arthrosis	68.5 (?)	6			QWB
Shields RK et al.[34]	24	OA	64.5 (35-78)	6	SF-36		QWB
Jones CA et al.[35]	276	94% OA	69.2 (?)	6	SF-36	WOMAC	
Jones CA et al.[36]	222<80 years	93% OA	68.8 (?)	6	SF-36	WOMAC	
	35≥80 years	94% OA	82.9 (?)				
Escobar A et al.[37]	103	OA	70.9 (?)	6	SF-36	WOMAC	
Mahomed NN et al.[38]	89	OA	68 (?)	6	SF-36	WOMAC	
Bachmeier CJ et al.[39]	108	OA	72 (?)	12	SF-36	WOMAC	
Williams JI et al.[40]	88	?	68.9 (?)	12	SF-36	WOMAC	
March LM et al.[41]	92	OA	? (≥55)	12	SF-36		
Bayley KB et al.[42]	117	?	?	12	SF-36		
Mainard D et al.[43]	60	DJD	68.4 (?)	12	NHP	AIMS 2	
March L et al.[44]	98	OA	70.4 (?)	12	SF-36	WOMAC	
Stickles B et al.[45]	1011	OA	69.9 (18-94.8)	12	SF-36	WOMAC	
Liang MH et al.[46]	17	87% OA & 13%RA	67.5 (56-80)	12-15	FSQ & SIP	AIMS & HAQ	QWB
Rissanen P et al.[7,47,48]	176	Primary arthrosis	69.7 (45-84)	24	15-D & NHP I		
Kageyama Y et al.[49]	86	RA	56 (?)	24		MHAQ	
Hozack WJ et al.[50]	149	96% OA & 2% RA	70 (40-100)	24	SF-36		
McGuigan FX et al.[51]	71	86% OA	68 (34-85)	24	SF-36		
Ritter MA et al.[52]	158	OA	71 (69-72)	24	SF-36		
Fortin PR et al.[53]	81	OA	68.1 (?)	24	SF-36	WOMAC	
Kiebzak GM et al.[54]	235	OA	?	12	SF-36		
	70			24			
Tsuboi S et al.[55]	79	RA	59 (?)	5 years	SIP		
Kirwan JR et al.[56]	135	73%OA & 27%RA	62.7 (?)	6 years		HAQ	

OA=Osteoarthritis, RA=Rheumatoid Arthritis, DJD=Degenerative Joint Disease.
M=Male, F=Female.
‡ N denotes the number of subjects effectively assessed at follow-up and does not take into account those lost at follow-up.
* Mean duration of follow-up.
¶ Median age.

TABLE E-3. HRQoL instruments applied and number of evaluations using these instruments in the 74 retrieved studies (32 THA+TKA, 26 THA and 16 TKA).

Type of instruments	Abbreviations and names		Number of evaluation THA (58 evaluations)	TKA (48 evaluations)
Generic				
Standard	NHP	Nottingham Health Profile[99]	7 (12.1%)	9 (18.7%)
	SIP	Sickness Impact Profile[100]	9 (15.5%)	3 (6.2%)
	MHIQ	McMaster Health Index Questionnaire[101]	1 (1.7%)	0
	FSQ	Functional Status Questionnaire[102]	4 (6.9%)	2 (4.2%)
	SF-36	Medical Outcomes Study Short-Form 36[103]	31 (53.4%)	27 (56.2%)
	15-D	15 Dimensional Measure of Health-related Quality of Life[104]	3 (5.2%)	3 (6.2%)
Personalized	SEIQoL	Schedule for the Evaluation of Individual Quality of Life[105]	2 (3.4%)	0
		Total	51 (87.9%)	44 (91.7%)
Specific				
Arthritic and Rheumatic-specific	HAQ	Health Assessment Questionnaire[106]	3 (5.2%)	5 (10.4%)
	MHAQ	Modified Health Assessment Questionnaire[107]	2 (3.4%)	1 (2.1%)
	AIMS	Arthritis Impact Measurement Scale[108]	6 (10.3%)	3 (6.2%)
	sAIMS	Shortened Arthritis Impact Measurement Scale[109]	1 (1.7%)	0
	AIMS 2	Arthritis Impact Measurement Scale 2[110]	1 (1.7%)	1 (2.1%)
	WOMAC	Western Ontario and McMaster University Osteoarthritis Index[30]	22 (37.9%)	18 (37.5%)
	IRGL	Impact of Rheumatic Diseases on General Health and Lifestyle[111]	1 (1.7%)	0
Arthritic and Rheumatic-personalized	MACTAR	McMaster-Toronto Arthritis Patient Function Preference Questionnaire[112]	6 (10.3%)	0
THA-specific	PASI	Patient-specific Index[99]	1 (1.7%)	-
	12-item Hip	12-item Hip Score Questionnaire[64]	2 (3.4%)	-
TKA-specific	12-item Knee	12-item Knee Score Questionnaire[92]	-	1 (2.1%)
		Total	45 (77.6%)	29 (60.4%)
Utility				
Global	TTO	Time Trade-off[114]	4 (6.9%)	1 (2.1%)
	RIM	Rosser Index Matrix[115]	1 (1.7%)	2 (4.2%)
	QWB	Quality of Well Being[116]	4 (6.9%)	5 (10.4%)
	EQ-5D	Euroqol 5-Dimensions[117]	0	1 (2.1%)
	HUI 3	Health Utilities Index Mark 3[118]	1 (1.7%)	0
TKA-specific	McKnee HUI	McKnee Health Utility Index[86]	-	1 (2.1%)
		Total	10 (17.2%)	11 (22.9%)

TABLE E-4. Evolution of utility scores (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Mahon JL et al.[59]										
< 6 months ‡	0.50	0.71								
> 6 months ‡	0.53	0.71								
Laupacis A et al.[74]										
3 months follow-up	0.29	0.84								
6 months follow-up	0.25		0.82							
12 months follow-up	0.27			0.85						
24 months follow-up	0.32				0.87					
Chan CLH et al. [76]¶										
BMI < 25	0.91			0.99						
25 < BMI < 29.9	0.91			0.99						
30 < BMI	0.87			0.99						
Rorabeck CH et al.[77,78]										
Cemented	0.28				0.76£					
Non-cemented	0.30				0.81£					
Laupacis A et al.[81]	0.29			0.80						
Nakai T et al.[82]	0.95				0.99					
TKA Studies										
Drewett RF et al.[83]						0.91	0.97			
Brazier JE et al.[90]						0.45		0.54		
Lavernia CJ et al.[97]										
All						0.56	0.56	0.57	0.59	0.59
Single sided						0.53	0.56	0.57	0.59	0.57
Bilateral						0.52	0.56	0.58	0.58	0.58
Donell ST et al.[98] §										
All						0.88				0.98
51-60 years						0.91				0.99
61-70 years						0.87				0.97
71-80 years						0.89				0.98
81-90 years						0.85				0.98
THA and TKA studies										
Liang MH et al.[33]	0.59		0.68			0.61		0.70		
Shields RK et al.[34]	0.58	0.66	0.69			0.58	0.66	0.65		

Some studies are not presented for several reasons (study design such as responsiveness study, no distinction between THA and TKA).

‡ Waiting time before surgery.

¶ Median values.

£ At 2 and 4-years follow-up.

§ Follow-up for a minimum of 2 years and an average of 3 years.

TABLE E-5. Evolution of the SF-36 physical functioning score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Katz JN et al.[57]	25	53.3								
Mahon JL et al.[59]										
< 6 months ‡	27.7	52.3								
> 6 months ‡	39	53.4								
Hopman WM et al.[61] μ	29		52							
Wright JG et al.[62,63]	24		51							
Dawson J et al.[64]	17.8		49.5							
Dawson J et al.[65]	17.2		50.2							
O'Connell T et al.[67] μ	31.5			69						
Nilsdotter AK et al.[68] μ										
grade 2 ¶	34		58	62						
grade 3 ¶	29		59	64						
Mangione CM et al.[70] £	31		60.4	63.6						
Nilsdotter AK et al.[73]										
< 3 months ‡	24.8			75						
> 3 months ‡	35.7			68.9						
TKA Studies										
van Essen GJ et al.[85]						31.3	40.2			
Bennett KJ et al.[86]						29.2	33.4			
Sharma L et al.[88]						33.2	56.7			
Brazier JE et al.[90] £						21		34.5		
Dawson J et al.[92]						18.5		42.6		
Lingard EA et al.[94]						27.4			53.8	
Heck DA et al.[96]						24.2		47.6	50.5	50.9
THA and TKA studies										
Kiebzak GM et al.[27]	30	52				27	44			
Fortin PR et al.[32]										
High function §	35.6		68			37.3		63		
Low function §	16.7		51.7			14.9		47		
Shields RK et al.[34]	30.3	62.1	72.5			32.1	58.7	63.3		
Jones CA et al.[35] μ	19		48.5			21.5		44.5		
Jones CA et al.[36]										
< 80 years	20		50			21		47		
≥ 80 years	13		39			17		35		
Escobar A et al.[37]	19.8		48.7			25		50.2		
Mahomed NN et al.[38]	27		60			28		56		
Bachmeier CJ et al.[39]	26.9	51.8	57.2	66.6		25.2	38.6	47.9	49.7	
Bayley KB et al.[42] μ	36			65		33			53	
Hozack WJ et al.[50]										
Primary	31.9				64.3	33.7				57.4
Revision (THA only)	32.3				53.8					
Ritter MA et al.[52]	15		15.5	17.9	21.2	15.9		14.9	17.6	21.6
Bilateral (TKA only)						15.8		22.4	22.4	23
Fortin PR et al.[53]										
High function §	39.4				74.2	37.4				65.7
Low function §	17.9				59.5	14.3				42.9
Kiebzak GM et al.[54] μ										
All	27.5	57.5		68	66	28	47		51	49.5
Female	22.2			58		24.4			42	
Male	34.8			72		33.2			61	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

μ Graphics reading.

‡ Waiting time before surgery.

¶ Radiographic grade before surgery (see [68]).

£ Postoperative scores derived from preoperative scores and mean changes.

§ Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-6. Evolution of the SF-36 pain score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Mahon JL et al.[59]										
< 6 months ‡	29.7	58.8								
> 6 months ‡	41	59								
Hopman WM et al.[61] μ	30.5		65							
Wright JG et al.[62,63]	37		66							
Dawson J et al.[64]	30		65.9							
Dawson J et al.[65]	29.4		65.8							
O'Connell T et al.[67] μ	36			79						
Nilsdotter AK et al.[68] μ										
grade 2 ¶	31		65	70						
grade 3 ¶	30		71	73						
Mangione CM et al.[70] £	31		67.1	70.4						
Nilsdotter AK et al.[73]										
< 3 months ‡	31			83						
> 3 months ‡	31.5			80.9						
TKA Studies										
van Essen GJ et al.[85]						32.8	51.6			
Bennett KJ et al.[86]]						37.9	45.9			
Sharma L et al.[88]						33.1	48.6			
Brazier JE et al.[90] £						35.2		51.8		
Dawson J et al.[92]						31.9		59		
Lingard EA et al.[94]						35			59.7	
Heck DA et al.[96]						38		62.1	63.9	64.2
THA and TKA studies										
Kiebzak GM et al.[27]	34	63				34	46			
Shields RK et al.[34]	32.7	66.8	72.2			39.3	62.3	70.5		
Jones CA et al.[35] μ	26		62			31		52		
Jones CA et al.[36]										
< 80 years	27		63			31		55		
≥ 80 years	21		61			29		53		
Escobar A et al.[37]	30.7		58.4			34.7		51.1		
Mahomed NN et al.[38]	40		70			42		61		
Bachmeier CJ et al.[39]	32.9	60.2	65.5	72.8		33	48.5	54.1	57.8	
Bayley KB et al.[42] μ	33			69		35			61	
Hozack WJ et al.[50]										
Primary	35.5				68.6	38.1				61.2
Revision (THA only)	42.1				66.2					
Ritter MA et al.[52]	4.6		6.3	7.2	8.8	4.8		5.7	6.8	8.5
Bilateral (TKA only)						5.4		8.6	9	9.3
Kiebzak GM et al.[54] μ										
All	31.5	60.5		69	67.5	32	48		53	52
Female	26.1			62		29.2			50	
Male	33.9			70		33.1			58	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

μ Graphics reading.

‡ Waiting time before surgery.

¶ Radiographic grade before surgery (see [68]).

£ Postoperative scores derived from preoperative scores and mean changes.

§ Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-7. Evolution of the SF-36 role physical score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Mahon JL et al.[59]										
< 6 months ‡	11.5	28.3								
> 6 months ‡	32	39.3								
Hopman WM et al.[61] μ	14		46							
Wright JG et al.[62,63]	13		53							
Dawson J et al.[64]	13.7		44.3							
Dawson J et al.[65]	13.5		44.2							
O'Connell T et al.[67] μ										
Nilsdotter AK et al.[68] μ										
grade 2 ¶	12		50	60						
grade 3 ¶	7		39	51						
Mangione CM et al.[70] £	21		68.3	66.4						
Nilsdotter AK et al.[73]										
< 3 months ‡	9.9			75						
> 3 months ‡	9.3			61.4						
TKA Studies										
van Essen GJ et al.[85]						20.9	21.1			
Bennett KJ et al.[86]						32.1	22.4			
Brazier JE et al.[90] £						11.8		18.3		
Dawson J et al.[92]						10.3		29		
Heck DA et al.[96]						17.9		36.6	51	46.8
THA and TKA studies										
Kiebzak GM et al.[27]	21	41				16	28			
Shields RK et al.[34]	10.5	53.9	67.1			25	45.8	69.8		
Jones CA et al.[35] μ	8		42			12		35		
Jones CA et al.[36]										
< 80 years	9		45			12		39		
≥ 80 years	3		34			7		21		
Bachmeier CJ et al.[39]	14.6	33.2	48.7	58.7		18	20.2	36.4	49.5	
Bayley KB et al.[42] μ	23			67		20			52	
Hozack WJ et al.[50]										
Primary	22.7				63.6	22.5				56.7
Revision (THA only)	27.6				57.1					
Ritter MA et al.[52]	0.6		1.7	2.1	2.4	0.6		1.4	2	2.1
Bilateral (TKA only)						1.3		2.4	2.5	2.5
Kiebzak GM et al.[54] μ										
All	19.5	47		71.5	68.5	18	30		49.5	45
Female	10.2			63		14.3			39	
Male	21			69		22.5			52	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

μ Graphics reading.

‡ Waiting time before surgery.

¶ Radiographic grade before surgery (see [68]).

£ Postoperative scores derived from preoperative scores and mean changes.

§ Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-8. Evolution of the SF-36 general health perception (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Hopman WM et al.[61] [μ]	58		58.5							
Wright JG et al.[62,63]	69		71							
Dawson J et al.[64]	74		75.3							
Dawson J et al.[65]	73.7		75.1							
O'Connell T et al.[67] [μ]	62			62						
Nilsdotter AK et al.[68] [μ]										
grade 2 [¶]	67		70.5	71						
grade 3 [¶]	68		69	69						
Mangione CM et al.[70] [£]	72		75.9	74.7						
Nilsdotter AK et al.[73]										
< 3 months [‡]	69.9			76.9						
> 3 months [‡]	68.2			73.2						
TKA Studies										
van Essen GJ et al.[85]						65.1	67.7			
Bennett KJ et al.[86]						66	65.9			
Brazier JE et al.[90] [£]						56.4		55.5		
Dawson J et al.[92]						70.5		68		
Heck DA et al.[96]						65.6		68.7	69.8	64.7
THA and TKA studies										
Kiebzak GM et al.[27]	69	74				67	61			
Shields RK et al.[34]	75	77.7	76.8			76.2	78.7	77.9		
Jones CA et al.[35] [μ]	61		69			61.5		65		
Jones CA et al.[36]										
< 80 years	62		70			61		65		
≥ 80 years	63		66			67		65		
Bachmeier CJ et al.[39]	66.3	69.6	71.2	73.8		71.3	69.2	69.2	70.2	
Bayley KB et al.[42] [μ]	76			76		71			68	
Hozack WJ et al.[50]										
Primary	67.9			70.9		66.3				68.1
Revision (THA only)	68.9			65.1						
Ritter MA et al.[52]	19.9		14.9	16.6	18.7	19.9		14	15.5	17.5
Bilateral (TKA only)										
Kiebzak GM et al.[54] [μ]										
All	70	75		70	66	67	66		62	61
Female	62.3			68		61.1			58	
Male	70			70		68.2			69	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

[μ] Graphics reading.

[‡] Waiting time before surgery.

[¶] Radiographic grade before surgery (see [68]).

[£] Postoperative scores derived from preoperative scores and mean changes.

[§] Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-9. Evolution of the SF-36 mental health score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Katz JN et al.[57]	69.8	78.9								
Mahon JL et al.[59]										
< 6 months ‡	54.9	58.1								
> 6 months ‡	56	55.2								
Hopman WM et al.[61] μ	73		79							
Wright JG et al.[62,63]	73		77							
Dawson J et al.[64]	70.8		78.5							
Dawson J et al.[65]	70.6		78.4							
O'Connell T et al.[67] μ	71			78.5						
Nilsdotter AK et al.[68] μ										
grade 2 ¶	73		76	79						
grade 3 ¶	67		81	81						
Mangione CM et al.[70] £	72		81.3	80.7						
Nilsdotter AK et al.[73]										
< 3 months ‡	69.6			86.4						
> 3 months ‡	67			84.6						
TKA Studies										
van Essen GJ et al.[85]						71.3	75.4			
Bennett KJ et al.[86]						56.6	56.2			
Sharma L et al.[88]						78.2	81.1			
Brazier JE et al.[90] £						67.6		67.7		
Dawson J et al.[92]						72.8		75.2		
Heck DA et al.[96]						73.6		79	81.4	77.9
THA and TKA studies										
Kiebzak GM et al.[27]	72	80				74	74			
Shields RK et al.[34]	74.9	82.1	84.6			80.2	84.2	86		
Jones CA et al.[35] μ	67		75			69		75		
Jones CA et al.[36]										
< 80 years	67		77			69		76		
≥ 80 years	67		73			71		74		
Bachmeier CJ et al.[39]	71.4	77.4	80.5	81.7		70.4	72.8	75.6	77.6	
Bayley KB et al.[42] μ	78			82		76			78	
Hozack WJ et al.[50]										
Primary	73.5			77.8		73.4				75.4
Revision (THA only)	75.5			78.6						
Ritter MA et al.[52]	22.8		18.5	20.6	25.5	23.2		17.8	20.3	24.3
Bilateral (TKA only)						24.3		25.7	25.3	25.6
Kiebzak GM et al.[54] μ										
All	70	79		80	79	73.5	75		76	75
Female	69.7			80		70.9			70	
Male	76.1			87		75.3			80	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

μ Graphics reading.

‡ Waiting time before surgery.

¶ Radiographic grade before surgery (see [68]).

£ Postoperative scores derived from preoperative scores and mean changes.

§ Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-10. Evolution of the SF-36 social functioning score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Hopman WM et al.[61] [μ]	54		75							
Wright JG et al.[62,63]	59		83							
Dawson J et al.[64]	51.8		79.1							
Dawson J et al.[65]	52.1		79.4							
O'Connell T et al.[67] [μ]	46			78.5						
Nilsdotter AK et al.[68] [μ]										
grade 2 [¶]	67		84	84						
grade 3 [¶]	62		82	87						
Mangione CM et al.[70] [£]	58		86.3	86.3						
Nilsdotter AK et al.[73]										
< 3 months [‡]	60.4			86.8						
> 3 months [‡]	61.6			93.3						
TKA Studies										
van Essen GJ et al.[85]						63.3	68.5			
Bennett KJ et al.[86]						64.9	69.1			
Sharma L et al.[88]						70.3	87.8			
Brazier JE et al.[90] [£]						51.2		56.8		
Dawson J et al.[92]						54.02		69.54		
Heck DA et al.[96]						62.1		80.5	81.3	83.3
THA and TKA studies										
Kiebzak GM et al.[27]	60	77				62	68			
Shields RK et al.[34]	63.2	85.5	92.1			69.3	92.7	86.5		
Jones CA et al.[35] [μ]	50		77			53		72		
Jones CA et al.[36]										
< 80 years	51		79			55		75		
≥ 80 years	43		66			53		63		
Bachmeier CJ et al.[39]	52.5	69.9	77.8	88.6		59.2	70.8	70.8	77.7	
Bayley KB et al.[42] [μ]	70			86		69			81.5	
Hozack WJ et al.[50]										
Primary	62.4				83.6	66.5				78.7
Revision (THA only)	59.8				77.7					
Ritter MA et al.[52]	7.4		7.5	8.1	9.5	8.2		7.1	8.1	9.5
Bilateral (TKA only)						8.5		10.4	10.5	10.1
Kiebzak GM et al.[54] [μ]										
All	60.5	81		86	82	61.5	71.5		79	75
Female	55.3			80		61.8			75	
Male	67.8			90		69.2			82	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

[μ] Graphics reading.

[‡] Waiting time before surgery.

[¶] Radiographic grade before surgery (see [68]).

[£] Postoperative scores derived from preoperative scores and mean changes.

[§] Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-11. Evolution of the SF-36 role emotional score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Hopman WM et al.[61] [μ]	47		72							
Wright JG et al.[62,63]	74		88							
Dawson J et al.[64]	55.7		73.8							
Dawson J et al.[65]	54.9		73.9							
O'Connell T et al.[67] [μ]	66			86						
Nilsdotter AK et al.[68] [μ]										
grade 2 [¶]	40		64	73						
grade 3 [¶]	32		64	66						
Mangione CM et al.[70] [£]	61		93.8	85.8						
Nilsdotter AK et al.[73]										
< 3 months [‡]	27.1			70.6						
> 3 months [‡]	34.5			66.7						
TKA Studies										
van Essen GJ et al.[85]						49.8	58.2			
Bennett KJ et al.[86]						68.4	64			
Sharma L et al.[88]						68.8	78			
Brazier JE et al.[90] [£]						42		45.9		
Dawson J et al.[92]						57.4		58.7		
Heck DA et al.[96]						61.8		71	77.6	74.4
THA and TKA studies										
Kiebzak GM et al.[27]	58	70				62	66			
Shields RK et al.[34]	73.7	89.5	86			69.3	75	91.7		
Jones CA et al.[35] [μ]	48		71			55		67		
Jones CA et al.[36]										
< 80 years	47		74			56		71		
≥ 80 years	66		69			54		58		
Bachmeier CJ et al.[39]	60	64.3	71.4	71.8		54.2	54	63.2	64.7	
Bayley KB et al.[42] [μ]	62.5			81		58			71.5	
Hozack WJ et al.[50]										
Primary	69.1				78.6	54.9				71.3
Revision (THA only)	71.9				81.5					
Ritter MA et al.[52]	1.8		1.8	1.9	2.3	1.5		1.6	2	2
Bilateral (TKA only)						1.9		2.5	2.5	2.6
Kiebzak GM et al.[54] [μ]										
All	57	66		84	83	52	71.5		69	69.5
Female	53.8			80		55.2			65	
Male	62.8			82		66.6			70	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

[μ] Graphics reading.

[‡] Waiting time before surgery.

[¶] Radiographic grade before surgery (see [68]).

[£] Postoperative scores derived from preoperative scores and mean changes.

[§] Function before surgery (according to the median preoperative score on the WOMAC physical function scale).

TABLE E-12. Evolution of the SF-36 vitality score (mean).

	THA					TKA				
	Pre-operative	Follow-up (months)				Pre-operative	Follow-up (months)			
		3	6	12	24		3	6	12	24
THA studies										
Hopman WM et al.[61] [μ]	43		58.5							
Wright JG et al.[62,63]	44		59							
Dawson J et al.[64]	46.7		61.7							
Dawson J et al.[65]	46.2		61.4							
O'Connell T et al.[67] [μ]	52			68						
Nilsdotter AK et al.[68] [μ]										
grade 2 [¶]	51		66	69						
grade 3 [¶]	47		66	68						
Mangione CM et al.[70] [£]	46		62.6	61.7						
Nilsdotter AK et al.[73]										
< 3 months [‡]	50			78.6						
> 3 months [‡]	47.5			71						
TKA Studies										
van Essen GJ et al.[85]						46.6	54.6			
Bennett KJ et al.[86]						41.7	44.8			
Brazier JE et al.[90] [£]						40.9		45.7		
Dawson J et al.[92]						45.7		53.1		
Heck DA et al.[96]						42.9		55.1	59.7	55.8
THA and TKA studies										
Kiebzak GM et al.[27]	46	61				42	49			
Shields RK et al.[34]	51	62.9	66			58.5	58.3	65.4		
Jones CA et al.[35] [μ]	39		58			42		52		
Jones CA et al.[36]										
< 80 years	40		58			42		54		
≥ 80 years	34		52			39		48		
Bachmeier CJ et al.[39]	47.1	60	61.7	67.5		47	51.2	52.7	58.8	
Bayley KB et al.[42] [μ]	51			64		46			57	
Hozack WJ et al.[50]										
Primary	47.8				63.2	50.9				58.7
Revision (THA only)	51.2				60.1					
Ritter MA et al.[52]	12.2		12.4	13.2	15.7	14.2		11.8	13.4	15.5
Bilateral (TKA only)						13.7		16.9	17.4	16.4
Kiebzak GM et al.[54] [μ]										
All	42	59		63	59	44	51		51	50
Female	40.6			59		39.3			51	
Male	51			67		49.6			58	

Some studies are not presented for several reasons (difficult graphics reading, no presentation of all the SF-36 dimensions, presentation of the SF-36 physical and mental component summaries only, study design such as responsiveness study, no distinction between THA and TKA).

[μ] Graphics reading.

[‡] Waiting time before surgery.

[¶] Radiographic grade before surgery (see [68]).

[£] Postoperative scores derived from preoperative scores and mean changes.

[§] Function before surgery (according to the median preoperative score on the WOMAC physical function scale).