

**Web appendix 1** Comparison of participants invited but not attending, those attending clinical examination only and those with clinical and radiographic examination.

<b>Characteristics at baseline</b>	<b>Invited, but not attending</b> n=1,653	<b>Attending clinical examination only</b> n=1,100	<b>Clinical and radiographic examination</b> n=1,603
Age at baseline			
35 to 54 years	530 (32%)	250 (23%)	394 (25%)
55 to 74 years	694 (42%)	511 (46%)	979 (61%)
75 years or older	429 (26%)	339 (31%)	230 (14%)
Males	584 (35%)	422 (38%)	659 (41%)
Lower social class (IIIM to V)	739 (52%)	526 (50%)	773 (48%)
Previous joint replacement	95 (5.8%)	123 (11%)	86 (5.4%)
Arterial hypertension	407 (25%)	258 (24%)	376 (23%)
Cancer	51 (3.1%)	51 (4.6%)	59 (3.7%)
Cardiovascular disease	448 (27%)	307 (28%)	354 (22%)
Chronic inflammatory disease	539 (33%)	372 (34%)	512 (32%)
COPD	298 (18%)	216 (20%)	267 (17%)
Depression	218 (13%)	122 (11%)	157 (10%)
Diabetes	73 (4.4%)	56 (5.1%)	56 (3.5%)
Eye disease	161 (9.8%)	139 (13%)	127 (7.9%)

Note that characteristics such as smoking status, type of OA, knee or hip pain, walking disability, type of analgesic intake and obesity are not available for all groups and not shown. COPD: chronic obstructive pulmonary disease.

**Web appendix 2** Association between overall mortality and baseline characteristics in 885 patients with OA of Kellgren/Lawrence grade  $\geq 2$ .

Characteristic	Hazard ratio (95% CI)	P value
Age at baseline*		<0.001
55 to 74 years	14.0 (4.45 to 43.8)	
75 years or older	46.7 (14.7 to 148)	
Males	1.50 (1.20 to 1.89)	<0.001
Lower social class	1.13 (0.91 to 1.41)	0.28
Smoking	1.27 (0.97 to 1.67)	0.09
Previous joint replacement	1.14 (0.80 to 1.63)	0.47
Type of OA**		0.12
Hip only	1.37 (1.01 to 1.87)	
Knee and hip	1.20 (0.93 to 1.54)	
Knee or hip pain	0.97 (0.77 to 1.23)	0.78
Walking disability	1.31 (1.02 to 1.69)	0.034
Type of analgesic intake		
Paracetamol	1.12 (0.85 to 1.49)	0.42
NSAIDs	0.88 (0.69 to 1.13)	0.33
Opioids	1.11 (0.82 to 1.49)	0.50
Arterial hypertension	1.23 (0.97 to 1.56)	0.09
Cancer	1.98 (1.23 to 3.21)	0.005
Cardiovascular disease	1.40 (1.10 to 1.78)	0.006
Chronic inflammatory disease	1.07 (0.86 to 1.34)	0.52
COPD	1.14 (0.86 to 1.52)	0.36
Depression	0.95 (0.65 to 1.38)	0.78
Diabetes	1.81 (1.14 to 2.88)	0.011
Eye disease	1.05 (0.77 to 1.44)	0.75
Obesity	0.86 (0.67 to 1.11)	0.25

Multivariable hazard ratios of overall mortality and 95% confidence intervals (95% CI) were derived from Cox proportional hazards models after multiple imputation of missing covariate data. Hazard ratios larger than 1 indicate a lower mortality in the reference category. P-values were derived from two-sided Wald tests. \*Age 35 to 54 as reference category. \*\*Isolated knee osteoarthritis as reference category. COPD: chronic obstructive pulmonary disease. NSAIDs: Non-steroidal anti-inflammatory drugs. OA: Osteoarthritis.

**Web appendix 3** Association between all-cause mortality and baseline characteristics in 743 patients with complete covariate information.

<b>Characteristic</b>	<b>Hazard ratio (95% CI)</b>	<b>P value</b>
Age at baseline*		<0.001
55 to 74 years	18.0 (4.45 to 72.9)	
75 years or older	56.8 (13.8 to 233)	
Males	1.68 (1.31 to 2.15)	<0.001
Lower social class	1.12 (0.88 to 1.42)	0.35
Smoking	1.25 (0.91 to 1.71)	0.16
Previous joint replacement	1.12 (0.76 to 1.67)	0.57
Type of OA**		0.74
Hip only	1.08 (0.79 to 1.47)	
Knee and hip	0.96 (0.73 to 1.26)	
Knee or hip pain	0.86 (0.67 to 1.10)	0.23
Walking disability	1.28 (0.98 to 1.67)	0.06
Type of analgesic intake		
Paracetamol	1.21 (0.90 to 1.64)	0.21
NSAIDs	1.04 (0.81 to 1.34)	0.75
Opioids	0.91 (0.66 to 1.25)	0.56
Arterial hypertension	1.15 (0.89 to 1.48)	0.28
Cancer	2.27 (1.40 to 3.68)	0.001
Cardiovascular disease	1.22 (0.93 to 1.59)	0.15
Chronic inflammatory disease	1.04 (0.82 to 1.33)	0.73
COPD	1.19 (0.87 to 1.63)	0.29
Depression	1.04 (0.69 to 1.58)	0.84
Diabetes	2.35 (1.50 to 3.67)	<0.001
Eye disease	1.16 (0.82 to 1.63)	0.40
Obesity	0.83 (0.63 to 1.08)	0.17

Multivariable hazard ratios of overall mortality and 95% confidence intervals (95% CI) were derived from Cox proportional hazards models. Hazard ratios larger than 1 indicate a lower mortality in the reference category. P-values were derived from two-sided Wald tests. \*Age 35 to 54 as reference category. \*\*Isolated knee osteoarthritis as reference category. COPD: chronic obstructive pulmonary disease. NSAIDs: Non-steroidal anti-inflammatory drugs. OA: osteoarthritis.