

## Supplementary data

### Codes used in the study

Description	Coding system	Data source
<b>Study Population</b>		
Primary TKA surgery in a public or private hospital in Denmark during the study period from 1 January 2010 to 21 September 2021, as registered in the DKR.		DKR
<b>Exposure</b>		
Family income		Statistics Denmark
Cohabiting status		Statistics Denmark
Education level		Statistics Denmark
<b>Covariates</b>		
<b>Diabetes mellitus</b>	<b>ICD-10<sup>a</sup></b>	
Diabetes mellitus	E10-E14	DNPR
<b>Glucose-lowering medication</b>	<b>ATC<sup>b</sup></b>	
Biguanides	A10BA	Prescription Database
Sulphonylureas	A10BB	Prescription Database
Thiazolidinediones	A10BG	Prescription Database
Meglitides	A10B	Prescription Database
Dipeptidyl peptidase-4 inhibitors	A10BH	Prescription Database
Insulin	A10A	Prescription Database
Glucagon-Like Peptide-1 Receptor Agonist	A10BJ	Prescription Database
Sodium-Glucose cotransporter-2 Inhibitors	A10BK	Prescription Database
<b>Psychiatric disease</b>	<b>ICD-10<sup>a</sup></b>	
Organic, including symptomatic, mental disorders	F00-F03, G30	DNPR
Mental and behavioral disorders due to psychoactive substance use	F10-F13, F19	DNPR
Schizophrenia, schizotypal, and delusional disorders	F20-F29	DNPR
Mood [affective] disorders	F30, F31, F322, F323, F332, F333, F320, F321, F328, F329, F330, F331, F338, F339, F34, F38, F39	DNPR
Neurotic, stress-related, and somatoform disorders	F40 - F45, F48	DNPR
Behavioral syndromes associated with physiological disturbances and physical factors	F500, F502, F505, F509	DNPR

Disorders of adult personality and behavior	F60-F61	DNPR
Intellectual disability	F70-F79	DNPR
Disorders of psychological development	F82, F84	DNPR
Behavioral and emotional disorders with onset usually occurring in childhood and adolescence	F90, F98-8, F98-9	DNPR
Any mental disorder	F00-F98	DNPR
<b>Outcome: PJI (and any revision)</b>		
<b>In the DKR a revision is defined as any later procedure that involves a supplement to, exchange, removal, or modification of an already existing arthroplasty.</b>		
<b>Revision due to PJI in the DKR:</b>		
Deep infection (verified by microbiology)		DKR
Deep infection (suspected)		DKR
<b>Any revision as recorded in the DKR</b>		
Aseptic loosening		DKR
Pain without loosening		DKR
Instability		DKR
Deep infection (verified by microbiology)		DKR
Deep infection (suspected)		DKR
Secondary insertion of patella component		DKR
Wear of polyethylene (patella)		DKR
Wear of polyethylene (tibia)		DKR
Progression of osteoarthritis		DKR
Other (seldom used)		DKR
<b>From: the DNPR/MiBa in combination</b>		
<b>PJI: A combination of “any revision” from the DNPR AND 2 positive samples from MiBa</b>		
<b>Any revision from the DNPR</b>	<b>NOMESCO</b>	
Open exploration of soft tissues in the knee	KNGA02A	DNPR
Open exploration of the knee joint	KNGA12	DNPR
Open joint biopsy in the knee	KNGA22A	DNPR
Open soft tissue biopsy in the knee	KNGA22C	DNPR
Secondary insertion of all components of uncemented total knee prosthesis	KNGC20	DNPR
Secondary insertion of proximal components of uncemented total knee prosthesis	KNGC21	DNPR

Secondary insertion of distal components of uncemented total knee prosthesis	KNGC22	DNPR
Secondary insertion, patellofemoral component, uncemented total knee prosthesis	KNGC23	DNPR
Secondary insertion of uncemented total knee prosthesis, unspecified	KNGC29	DNPR
Secondary insertion of all components of hybrid total knee prosthesis	KNGC30	DNPR
Secondary insertion of proximal components of hybrid total knee prosthesis	KNGC31	DNPR
Secondary insertion of distal components of hybrid total knee prosthesis	KNGC32	DNPR
Secondary insertion, patellofemoral component, hybrid total knee prosthesis	KNGC33	DNPR
Secondary insertion of hybrid total knee prosthesis, unspecified	KNGC39	DNPR
Secondary insertion of all components of cemented total knee prosthesis	KNGC40	DNPR
Secondary insertion of proximal components of cemented total knee prosthesis	KNGC41	DNPR
Secondary insertion of distal components of cemented total knee prosthesis	KNGC42	DNPR
Secondary insertion, patellofemoral component, cemented total knee prosthesis	KNGC43	DNPR
Secondary insertion of cemented total knee prosthesis, unspecified	KNGC49	DNPR
Secondary insertion of interpositional prosthesis in the knee joint	KNGC59	DNPR
Other secondary insertion of knee joint prosthesis	KNGC99	DNPR
Open total synovectomy in the knee joint	KNGF02	DNPR
Open partial synovectomy in the knee joint	KNGF12	DNPR
Resection arthroplasty in the knee	KNGG09	DNPR
Interpositional arthroplasty in the knee	KNGG19	DNPR
Other arthroplasty without prosthesis in the knee	KNGG29	DNPR

Arthrodesis with external fixation in the knee	KNGG59	DNPR
Open release of adhesions in the knee joint	KNGH32	DNPR
Other open knee joint surgery	KNGH92	DNPR
Fenestration or perforation of bone in the knee/leg	KNGK29	DNPR
Excision of a bursa in the knee/leg	KNGM79	DNPR
Disarticulation of the knee joint	KNGQ09	DNPR
Other amputation surgery on the knee/leg	KNGQ99	DNPR
Incision and revision of infection in the knee joint	KNGS19	DNPR
Incision/revision of bone infection in the knee/leg	KNGS29	DNPR
Incision/revision with the installation of drugs for infection in the knee joint	KNGS49	DNPR
Incision/revision/installation of drugs for bone infection in the knee/leg	KNGS59	DNPR
Other operations for infection in the tendon, joint, or bone in the knee/leg	KNGS99	DNPR
Removal of all components of total knee prosthesis	KNGU10	DNPR
Removal of the medial part of total knee prosthesis	KNGU11	DNPR
Removal of the lateral part of total knee prosthesis	KNGU12	DNPR
Removal of total knee prosthesis, unspecified	KNGU19	DNPR
Removal of another implant in the knee/leg	KNGU99	DNPR
Reoperation for superficial infection after surgery on the knee/leg	KNGW59	DNPR
Reoperation for deep infection after surgery on the knee/leg	KNGW69	DNPR
Reoperation for deep hemorrhage after surgery on the knee/leg	KNGW89	DNPR
Other reoperation after surgery on the knee/leg	KNGW99	DNPR
<b>From: MiBa</b>		

**Cultures were taken between 24 hours before revision surgery and 48 hours after revision surgery if a minimum of 2 samples out of a minimum of 3 samples were positive for the same microorganism. If only 1/5 of biopsies were positive or 2/5 were positive for different pathogens, contamination was considered to be present.**

<b>Samples considered from MiBa</b>		
Tissue		MiBa
Biopsy		MiBa
Bone		MiBa
Kamme Lindberg biopsies		MiBa
Tissue from the joint capsule		MiBa

Abbreviations: ATC - Anatomical Therapeutic Chemical Classification System; DNPR - Danish National Patient Registry; DKR - Danish Knee Arthroplasty Registry; ICD - *International Classification of Diseases*; MiBa - Danish Microbiology Database; NOMESCO - The Nordic Medico-Statistical Committee procedure codes; PJI - Periprosthetic Joint Infection; TKA - Total Knee Arthroplasty.