

Appendix**Reasons for Revision**

Reasons for revision are reported in 2 ways:

(1) Percentage of primary procedures revised. This shows the proportional contribution of each revision diagnosis as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of being revised for that diagnosis. Differing percentages among the groups, with the same distribution of follow-up time, may identify problems of concern.

(2) Percentage of all revision procedures. The number of revisions for each diagnosis is expressed as a percentage of the total number of revisions. This shows the distribution of reasons for revision within a group but cannot be used as a comparison between groups.

TABLE E-1 Revision Diagnosis According to Implantation Method Used in Primary TKA*

Revision Diagnosis	Computer-Navigated			IDI			Other Total Knee		
	No.	% of Primaries Revised	% of Revisions	No.	% of Primaries Revised	% of Revisions	No.	% of Primaries Revised	% of Revisions
Infection	206	0.6	42.8	24	0.4	28.6	326	0.7	46.0
Loosening	83	0.3	17.3	20	0.4	23.8	139	0.3	19.6
Instability	63	0.2	13.1	12	0.2	14.3	64	0.1	9.0
Arthrofibrosis	11	0.0	2.3	3	0.1	3.6	37	0.1	5.2
Pain	23	0.1	4.8	7	0.1	8.3	34	0.1	4.8
Fracture	17	0.1	3.5	3	0.1	3.6	31	0.1	4.4
Malalignment	17	0.1	3.5	2	0.0	2.4	15	0.0	2.1
Incorrect sizing	14	0.0	2.9	2	0.0	2.4	11	0.0	1.6
Implant breakage, patella	3	0.0	0.6	0	0.0	0.0	6	0.0	0.8
Lysis	6	0.0	1.2	0	0.0	0.0	5	0.0	0.7
Implant breakage, tibial insert	3	0.0	0.6	0	0.0	0.0	5	0.0	0.7
Metal-related pathology	3	0.0	0.6	0	0.0	0.0	4	0.0	0.6
Patellar maltracking	3	0.0	0.6	2	0.0	2.4	4	0.0	0.6
Wear of the tibial insert	2	0.0	0.4	1	0.0	1.2	4	0.0	0.6
Bearing dislocation	1	0.0	0.2	1	0.0	1.2	3	0.0	0.4
Osteonecrosis	2	0.0	0.4	1	0.0	1.2	3	0.0	0.4
Patellofemoral pain	2	0.0	0.4	3	0.1	3.6	1	0.0	0.1
Prosthesis dislocation	2	0.0	0.4	0	0.0	0.0	2	0.0	0.3
Synovitis	1	0.0	0.2	1	0.0	1.2	2	0.0	0.3
Implant breakage, femoral	1	0.0	0.2	1	0.0	1.2	0	0.0	0.0
Wear of the patella	0	0.0	0.0	0	0.0	0.0	1	0.0	0.1

Other	18	0.1	3.7	1	0.0	1.2	11	0.0	1.6
Total	481	1.5	100.0	84	1.5	100.0	708	1.5	100.0
Total no. of primary procedures	32,360			5,486			45,977		

*Primary diagnosis of osteoarthritis.

Types of Revision

Types of revision are reported in 2 ways:

(1) Percentage of primary procedures revised. This shows the proportional contribution of each type of revision as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of having that type of revision. Differing percentages among the groups, with the same distribution of follow-up time, may identify problems of concern.

(2) Percentage of all revision procedures. The number of revisions for each type of revision is expressed as a percentage of the total number of revisions. This shows the distribution of types of revision within a group but cannot be used as a comparison between groups.

TABLE E-2 Type of Revision According to Implantation Method Used in Primary TKA*

Type of Revision	Computer-Navigated			IDI			Other Total Knee		
	No.	% of Primaries Revised	% of Revisions	No.	% of Primaries Revised	% of Revisions	No.	% of Primaries Revised	% of Revisions
Insert only	238	0.7	49.5	34	0.6	40.5	334	0.7	47.2
Total knee replacement (tibial/femoral)	88	0.3	18.3	15	0.3	17.9	143	0.3	20.2
Tibial component	45	0.1	9.4	6	0.1	7.1	58	0.1	8.2
Cement spacer	37	0.1	7.7	6	0.1	7.1	56	0.1	7.9
Femoral component	43	0.1	8.9	5	0.1	6.0	51	0.1	7.2
Patella only	17	0.1	3.5	12	0.2	14.3	39	0.1	5.5
Insert + patella	7	0.0	1.5	5	0.1	6.0	22	0.0	3.1
Removal of prostheses	5	0.0	1.0	1	0.0	1.2	4	0.0	0.6
Minor components	1	0.0	0.2	0	0.0	0.0	0	0.0	0.0
Reinsertion of components	0	0.0	0.0	0	0.0	0.0	1	0.0	0.1
Total	481	1.5	100.0	84	1.5	100.0	708	1.5	100.0
Total no. of primary procedures	32,360			5,486			45,977		

*Primary diagnosis of osteoarthritis.