

TABLE E-1 Types of Primary Cemented Unicompartmental Knee Replacements as Reported to the Norwegian Arthroplasty Register from 1994 to 2004

Prosthesis (Manufacturer)	Number of Prostheses	Proportion of Prostheses Implanted in Men	Age* (yr)	Proportion of Prostheses Implanted in Patients ≤60 Years Old	Diagnosis (OA/RA/Fracture/Other) † (no. of prostheses)	Proportion of Prostheses with Meniscal Bearing	Proportion of Prostheses with All-Polyethylene Tibial Component	Proportion of Prostheses Implanted in Patients with a Previous Operation	No. of Hospitals‡	Proportion of Procedures After Which Anterior Cruciate Ligament Was Intact
MOD III (Smith and Nephew)	200	25%	70 (42 to 89)	13%	166/1/9/24	0%	0%	32%	11	96%
Genesis Uni (Smith and Nephew)	323	36%	67 (25 to 87)	27%	273/0/8/42	0%	28%	23%	15	94%
Duracon (Stryker)	47	38%	70 (33 to 83)	15%	44/0/1/2	0%	100%	19%	5	98%
Oxford II (Biomet)	45	16%	67 (48 to 83)	24%	43/0/0/2	100%	0%	16%	2	93%
Oxford III (Biomet)	1398	41%	65 (36 to 91)	31%	1263/1/5/129	100%	0%	33%	37	96%
Miller-Galante (Zimmer)	218	37%	63 (35 to 82)	39%	189/1/4/24	0%	100%	31%	17	96%
Preservation (DePuy)	34	41%	67 (40 to 82)	32%	31/0/1/2	74%	26%	44%	5	94%
Others	23				18/0/2/3					
Total	2288	38%	66 (25 to 91)	29%	2027/3/30/228	64%	16%	31%	51	96%

*The values are given as the mean, with the range in parentheses. †OA = osteoarthritis, RA = rheumatoid arthritis. ‡Several hospitals used more than one type of prosthesis during the registration period.

TABLE E-2 Kaplan-Meier Seven and Ten-Year Survival Rates and Cox Relative Risk of Revision, Estimated with All Causes of Revision as the End Point, for Cemented Unicompartmental Knee Replacements and Total Knee Replacements as Reported to the Norwegian Arthroplasty Register from 1994 to 2004 According to Patient Age

Age-Group	No. of Revisions/ Primary Operations	No. of Knees at Risk at 7 Years	7-Year Survival (95% Confidence Interval) (%)	No. of Knees at Risk at 10 Years	10-Year Survival (95% Confidence Interval) (%)	Relative Risk of Revision (95% Confidence Interval)*	P Value
All ages							
Total knee replacement	164/3032	982	93.7 (92.7 to 94.7)	183	92.0 (90.4 to 93.6)	1	
Unicompartmental knee replacement	185/2288	264	85.9 (83.4 to 88.4)	61	80.1 (76.0 to 84.2)	2.0 (1.6 to 2.5)	<0.001
≤60 years							
Total knee replacement	46/460	134	87.5 (84.0 to 91.0)	36	85.5 (81.0 to 90.0)	1	
Unicompartmental knee replacement	79/667	38	75.7 (68.5 to 83.0)	5	NA†	1.7 (1.1 to 2.6)	0.02
61 to 69 years							
Total knee replacement	45/802	296	94.1 (92.3 to 95.9)	61	91.1 (88.0 to 94.2)	1	
Unicompartmental knee replacement	62/779	83	86.0 (81.7 to 90.3)	29	78.8 (71.4 to 86.2)	2.5 (1.6 to 3.9)	<0.001
≥70 years							
Total knee replacement	73/1770	552	95.0 (93.8 to 96.2)	86	94.1 (92.5 to 95.7)	1	
Unicompartmental knee replacement	44/842	143	91.3 (88.4 to 94.2)	27	89.6 (85.9 to 93.3)	1.9 (1.2 to 2.7)	0.002

*Cox regression with adjustment for age (sixty years or less, sixty-one to sixty-nine years, seventy years or more), gender, diagnosis, and type of prosthesis. †NA = not analyzed as only five knees were at risk at ten years.

TABLE E-3 Kaplan-Meier Estimated Five and Ten-Year Survival Rates and Cox Relative Risk of Revision, Estimated with All Causes of Revision as the End Point, for Cemented Unicompartmental Knee Replacements as Reported to the Norwegian Arthroplasty Register from 1994 to 2004

Type of Prosthesis	No. of Revisions/Primary Operations	Median Duration of Follow-up (yr)	No. of Knees at Risk at 5 Years	5-Year Survival (95% Confidence Interval) (%)	5-Year Adjusted Relative Risk of Revision (95% Confidence Interval)*†	P Value	No. of Knees at Risk at 10 Years	10-Year Survival (95% Confidence Interval) (%)	10-Year Adjusted Relative Risk of Revision (95% Confidence Interval)*	P Value
MOD III	29/200	8.2	158	92.2 (88.5 to 95.9)	1		28	78.8 (70.8 to 86.8)	1	
Genesis Uni	32/323	5.2	163	91.0 (87.7 to 94.3)	1.2 (0.61 to 2.2)	0.6	24	85.4 (80.1 to 90.7)	0.91 (0.54 to 1.5)	0.7
Oxford II	7/45	7.1	34	88.5 (79.1 to 97.9)	1.2 (0.45 to 3.4)	0.7	5	NA‡	0.97 (0.42 to 2.2)	0.9
Duracon	12/47	7.3	34	80.3 (68.7 to 91.9)	3.0 (1.3 to 6.8)	0.01	4	NA‡	2.1 (1.1 to 4.2)	0.04
Miller-Galante	27/218	3.8	36	83.0 (76.3 to 89.7)	1.7 (0.87 to 3.2)	0.12				
Oxford III	68/1398	1.9	44	91.1 (88.7 to 93.5)	0.95 (0.53 to 1.7)	0.9				

*Regression analyses with adjustment for age (sixty years or less, sixty-one to sixty-nine years, seventy years or more), gender, and diagnosis. †The relative risk of revision estimate for the Miller-Galante prosthesis as compared with the Oxford III prosthesis at five years of follow-up was 1.8 (95% confidence interval, 1.1 to 2.8) ($p = 0.01$). ‡NA = not analyzed as less than twenty knees were at risk at ten years.

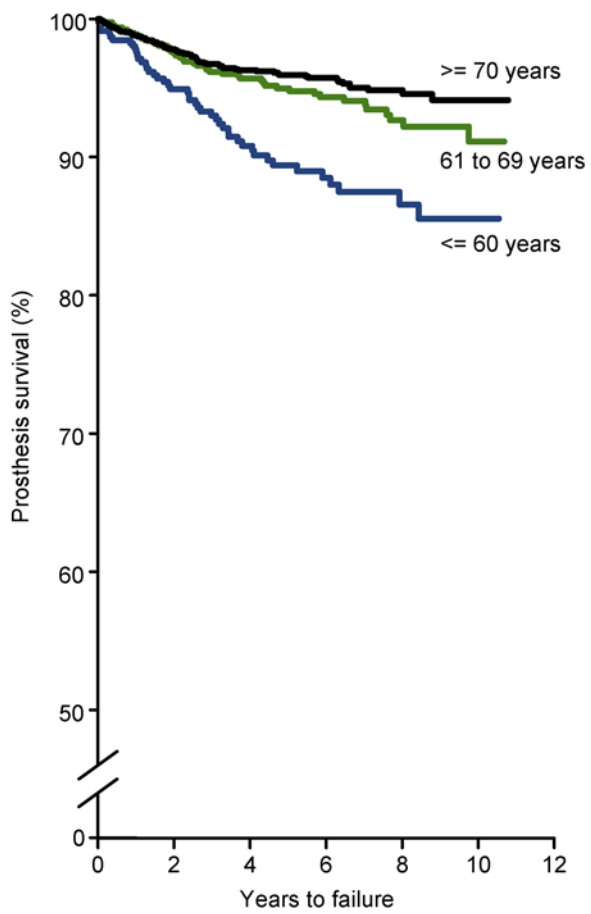


Fig. E-1A

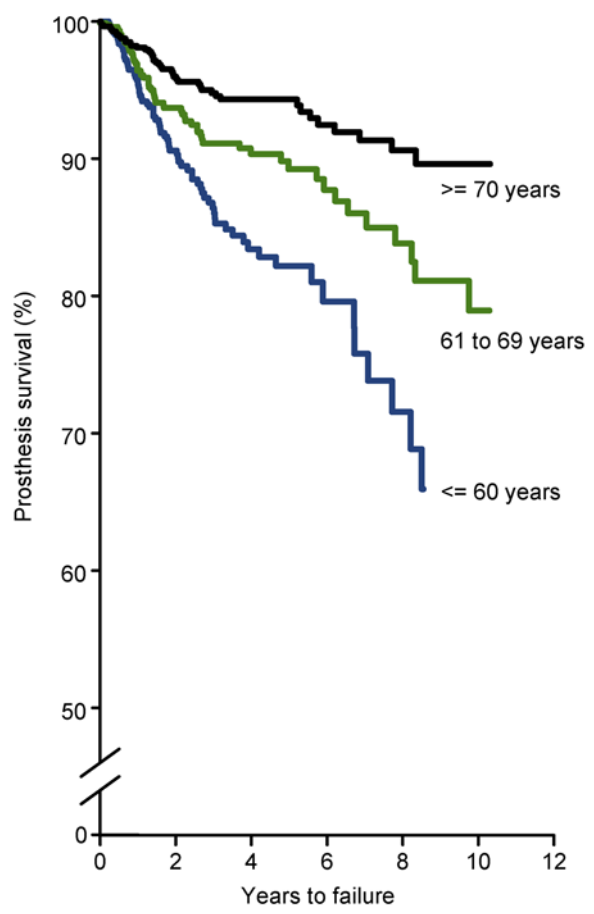
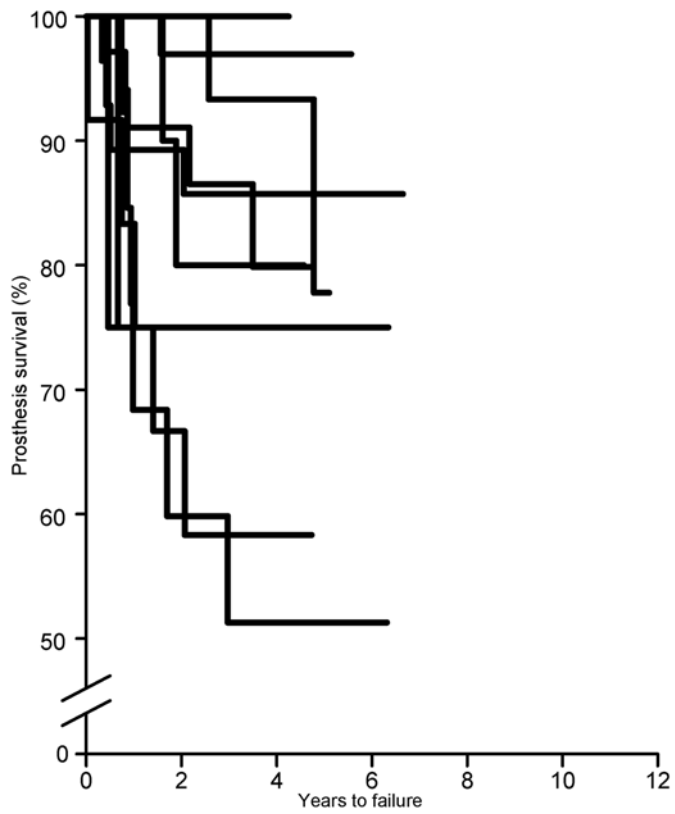


Fig. E-1B

Fig. E-1A Kaplan-Meier survival curves for cemented tricompartmental total knee replacements in different age-groups. **Fig. E-1B** Kaplan-Meier survival curves for cemented unicompartmental knee replacements in different age-groups.



Miller Galante

Fig. E-2
Kaplan-Meier survival curves for the primary cemented Miller-Galante unicompartmental knee replacement at various hospitals in Norway.