

TABLE E-1 Results of Postoperative Limb Alignment Depending on Preoperative Alignment*

	Men	Women	All Knees
Preop. varus	149 (37.4%)	127 (31.9%)	276 (69.3%)
Postop. varus	26 (6.5%)	13 (3.3%)	39 (9.8%)
Postop. aligned	109 (27.4%)	99 (24.9%)	208 (52.3%)
Postop. valgus	14 (3.5%)	15 (3.8%)	29 (7.3%)
Preop. aligned	20 (5%)	38 (9.5%)	58 (14.6%)
Postop. varus	1 (0.25%)	2 (0.50%)	3 (0.75%)
Postop. aligned	16 (4%)	27 (6.8%)	43 (10.8%)
Postop. valgus	3 (0.75%)	9 (2.3%)	12 (3%)
Preop. valgus	13 (3.3%)	51 (12.8%)	64 (16.1%)
Postop. varus	1 (0.25%)	2 (0.50%)	3 (0.75%)
Postop. aligned	11 (2.8%)	30 (7.5%)	41 (10.3%)
Postop. valgus	1 (0.25%)	19 (4.8%)	20 (5%)

*The percentages are based on 398 knees.

TABLE E-2 Results of Univariate Analysis*

Parameters Tested	End Point 1		End Point 2		End Point 3	
	Hazard Ratio	P Value	Hazard Ratio	P Value	Hazard Ratio	P Value
Male sex	0.835	0.49	0.855	0.66	0.661	0.28
Age	0.96	0.002	0.95	<0.001	0.94	<0.0001
Body-mass index	1.079	0.0127	1.125	0.0029	1.119	0.0008
Ahlbäck classification	0.816	0.3151	0.638	0.7	0.610	0.1037
Preop. diagnosis						
Rheumatoid arthritis vs. osteoarthritis	1.678	0.17	0.414	0.37	†	†
Other vs. osteoarthritis	0.627	0.6466	1.101	0.90	†	†
Bilateral involvement	1.044	0.87	1.789	0.13	2.180	0.12
Implant type (Kinematic Condylar II vs. Press-Fit Condylar)‡	1.114	0.77	2.758	0.12	1.243	0.76
Implant type (GENESIS vs. Press-Fit Condylar)‡	1.1	0.77	2.676	0.11	1.924	0.31
Preop. hip-knee-ankle angle	0.995	0.77	0.979	0.32	0.968	0.19
Preop. tibial plateau-ankle angle	0.989	0.71	0.97	0.45	0.98	0.71
Preop. condylar-hip angle	1.025	0.69	0.96	0.67	1.000	0.98
Preop. D/T ratio§	1.003	0.59	1.004	0.59	1.002	0.79
Postop. tibial plateau-ankle angle	1.048	0.392	1.036	0.58	0.995	0.95
Postop. condylar-hip angle	0.941	0.46	0.98	0.85	0.866	0.13
Postop. D/T ratio	0.985	0.25	0.98	0.39	0.99	0.96
Postop. hip-knee-ankle angle (being aligned)	1.037	0.9	0.992	0.98	1.395	0.54

*End Point 1 = revision for any reason; End Point 2 = revision because of mechanical failure, aseptic loosening, radiographic wear, or patellar complications; and End Point 3 = revision for mechanical failure, aseptic loosening, or radiographic wear, with exclusion of patellar complications. †There were insufficient events to allow for stable fitting of the model. ‡Kinematic Condylar II (Howmedica, Rutherford, New Jersey), Press-Fit Condylar (DePuy Orthopaedics, Warsaw, Indiana), GENESIS (Smith & Nephew, Memphis, Tennessee). §Ratio of the distance “D” between the mechanical axis and the center of the knee as defined by the midpoint of the tibial plateau width “T.”

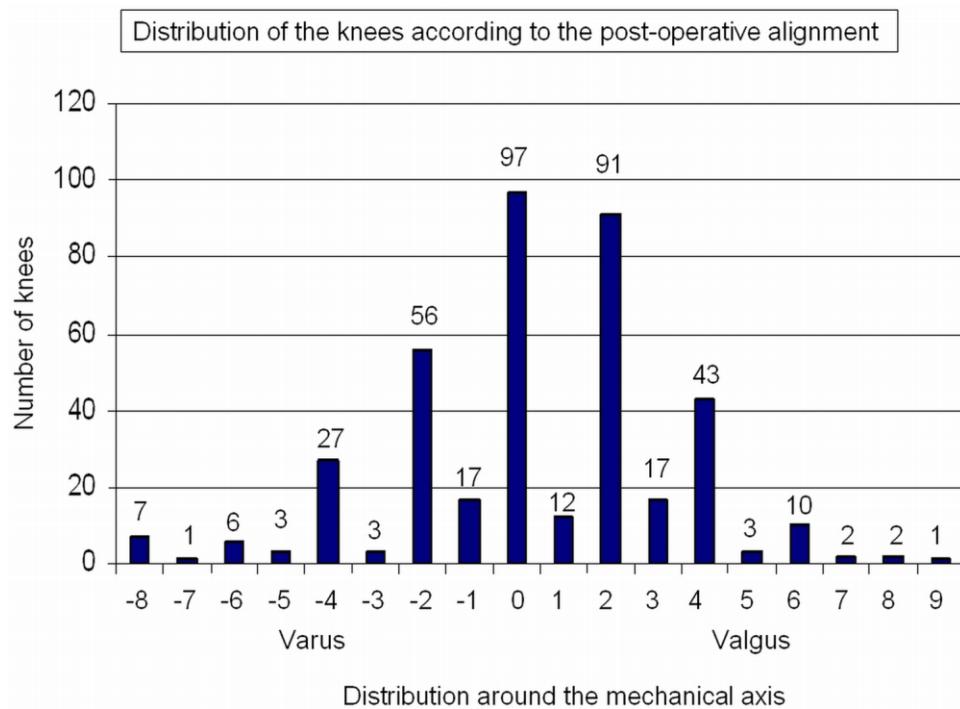


Fig. E-1

Bar graph showing the distribution of the postoperative alignment around the mechanical axis. Negative values indicate varus alignment, and positive values represent valgus alignment. (With permission of the Mayo Foundation.)