

TABLE E-1 Demographic and Follow-up Characteristics of 7989 Patients Who Had Undergone Primary Total Hip Arthroplasty Operations at the Mayo Clinic with Uncemented Acetabular Components

Acetabular Component	Time Period	No. of Hips	Duration of Follow-up* (yr)	No. of Patients	Age at Index Procedure† (yr)	No. of Women (%)
HG-I/standard	1984-1992	362	15.0	297	56 ± 14	132 (44%)
HG-II/standard	1988-1997	1200	10.7	983	61 ± 13	444 (45%)
PCA/standard	1984-1988	363	14.5	298	54 ± 11	123 (41%)
Dual Geometry/standard	1985-1995	521	13.0	405	54 ± 12	172 (42%)
Omnifit PSL/standard	1990-2004	1747	9.2	1462	63 ± 14	754 (52%)
Spherical/ standard	1987-1990	119	11.3	98	53 ± 14	57 (58%)
PFC/standard	1990-1995	136	10.0	114	67 ± 9	53 (46%)
Implex titanium/standard	1994-1999	96	8.2	77	60 ± 13	31 (40%)
Trilogy/standard	1993-2004	1243	6.3	1045	69 ± 13	579 (55%)
Trilogy/cross-linked	1999-2004	950	5.2	805	58 ± 13	382 (47%)
Reflection/standard	1995-1999	148	9.0	120	60 ± 15	58 (48%)
Reflection/cross-linked	1996-2004	576	7.4	482	63 ± 14	237 (49%)
TM Monoblock/standard	1997-2004	481	4.7	408	66 ± 12	208 (51%)
TM Monoblock/cross-linked	2000-2002	59	5.6	43	59 ± 10	15 (35%)
Pinnacle/standard	2001-2004	236	3.9	199	76 ± 6	122 (61%)
Pinnacle/cross-linked	2000-2004	854	3.9	713	61 ± 12	358 (50%)
TM Revision Shell/standard	2000-2004	101	4.4	89	68 ± 13	40 (45%)
TM Revision Shell/cross-linked	1999-2004	183	3.8	162	51 ± 14	73 (45%)
Trident PSL/cross-linked	2001-2004	116	4.2	107	68 ± 12	58 (54%)
Trident/ceramic-on-ceramic	2003-2004	93	3.2	82	41 ± 13	24 (29%)
Total		9584		7989	62 ± 14	3920 (49%)

\*The values are given as the mean. †The values are given as the mean and the standard deviation.

TABLE E-2 List of Acetabular Components Included in Study

Cup/Liner	Manufacturer	Catalog Numbers
HG-I/standard	Zimmer, Warsaw, IN	6522-xx, 6526-xx, 6528-xx, 6532-xx
HG-II/standard	Zimmer, Warsaw, IN	6610-xx-xx
PCA/standard	Howmedica, Rutherford, NJ	6287-3-xxx, 6287-5-xxx, 6289-2-xxx, 6289-3-xxx, 6289-5-xxx
Dual Geometry/standard	Osteonics, Allendale, NJ	2002-00xx, 2015-00xx, 2025-00xx, 2035-00xx, 2052-00xx, 2062-00xx, 2072-00xx
Omnifit PSL/standard	Osteonics, Allendale, NJ	2017-00xx (Omnifit M/A PSL shell), 2054-00xx (Omnifit HA dual radius PSL shell), S-1478-HAxx (Microstructured PSL cup), S-1790-HAxx (PSL M/S 3-hole cup)
Spherical/standard	Osteonics, Allendale, NJ	2016-00xx
PFC/standard	DePuy Orthopedics, Warsaw, IN	85-14xx, 85-71xx, 2-6910-xx (custom PFC 4 tab shell)
Implex titanium/standard	Implex, Allendale, NJ	02-230-xxxxxx, 02-232-xxxxxx, 02-233-xxxxxx
Trilogy/standard	Zimmer, Warsaw, IN	00-6200-xx-xx
Trilogy/cross-linked	Zimmer, Warsaw, IN	00-6200-xx-xx
Reflection/standard	Smith & Nephew, Memphis, TN	713300xx, 713330xx, 713350xx, 713360xx, 719224xx
Reflection/cross-linked	Smith & Nephew, Memphis, TN	713300xx, 713340xx, 713350xx, 713360xx, 713364xx
TM Monoblock/standard	Implex, Allendale, NJ	00-7255-0xx-28, 00-7260-0xx-28, 02-242-28xxx, 02-243-28xxx
TM Monoblock/cross-linked	Implex, Allendale, NJ	02-283-28xxx
Pinnacle/standard	DePuy Orthopedics, Warsaw, IN	1217-10-xxx, 1217-20-xxx
Pinnacle/cross-linked	DePuy Orthopedics, Warsaw, IN	1217-10-xxx, 1217-20-xxx
TM Revision Shell/standard	Implex, Allendale, NJ	00-7000-0xx-20, 02-210-00xxx
TM Revision Shell/cross-linked	Implex, Allendale, NJ	00-7000-0xx-20, 02-210-00xxx
Trident PSL/cross-linked	Osteonics and Howmedica	542-11-xxx (Trident PSL with purefix HA cluster shell)
Trident/ceramic-on-ceramic	Howmedica, Rutherford, NJ	502-01-xxx (Trident hemispherical cluster shell), 508-11-xxx (Trident hemispherical multihole shell)

TABLE E-3 Overall Survival Estimates for Various Revision End Points in Primary Total Hip Arthroplasty

	5 Years		10 Years		15 Years		20 Years	
	No. at Risk	Kaplan-Meier Survival Estimate* (%)	No. at Risk	Kaplan-Meier Survival Estimate* (%)	No. at Risk	Kaplan-Meier Survival Estimate* (%)	No. at Risk	Kaplan-Meier Survival Estimate* (%)
Cup (metal shell plus liner) revisions	7013		3206		1192		276	
Overall		98.3 (98.1, 98.6)		93.4 (92.7, 94.1)		84.4 (83.0, 85.9)		72.8 (70.1, 75.6)
Aseptic loosening		99.7 (99.6, 99.8)		98.2 (97.8, 98.6)		94.9 (94.0, 95.8)		89.8 (87.7, 91.8)
Wear or osteolysis		99.7 (99.6, 99.8)		97.1 (96.6, 97.6)		90.5 (89.3, 91.7)		81.7 (79.2, 84.3)
Polyethylene liner only revisions	6998		3192				283	
Overall		98.7 (98.5, 99.0)		94.3 (93.7, 95.0)	1192	87.4 (86.1, 88.7)		81.4 (79.2, 83.7)
Wear or osteolysis		99.8 (99.8, 99.9)		97.2 (96.7, 97.7)		91.9 (90.7, 93.0)		86.3 (84.2, 88.4)
Revision of either the cup (metal shell plus liner) or liner	7007		3184		1180		273	
Overall		97.1 (96.7, 97.4)		88.0 (87.1, 88.9)		73.9 (72.3, 75.6)		59.3 (56.5, 62.1)
Wear or osteolysis		99.5 (99.4, 99.7)		94.2 (93.5, 94.9)		83.2 (81.7, 84.7)		70.3 (67.5, 73.2)

\*The 95% confidence interval is given in parentheses.