

TABLE E-1 Analysis of Data-Independent Variables and Harris Scores

	Mean and Standard Deviation	Range
All hips		
Current age (<i>yr</i>)	71.9 ± 15.9	36.3 to 98.2
Age at primary procedure (<i>yr</i>)	58.0 ± 16.1	20.9 to 84.3
Weight (<i>kg</i>)	81.1 ± 48.7	38.0 to 130.0
Duration of follow-up (<i>yr</i>)	12.2 ± 1.8	10.1 to 14.6
Acetabular diameter (<i>mm</i>)	52.2 ± 4.4	41.0 to 65.0
Polyethylene thickness (<i>mm</i>)	4.9 ± 1.9	3.0 to 9.8
Stem diameter (<i>mm</i>)	12.8 ± 2.0	8.0 to 19.5
Revised hips		
Time to revision (<i>yr</i>)	8.9 ± 3.7	0.20 to 13.7
Age at index arthroplasty (<i>yr</i>)	45.4 ± 17.2	20.9 to 64.5
Age at revision (<i>yr</i>)	57.4 ± 14.8	34.7 to 82.6
Unrevised hips		
Harris pain score (<i>points</i>)	32.1 ± 12.9	10 to 44
Harris activity score (<i>points</i>)	7.7 ± 2.7	2 to 12
Harris gait score (<i>points</i>)	22.3 ± 9.0	2 to 33
Harris function score (<i>points</i>)	30.1 ± 10.8	7 to 45

TABLE E-2 Analysis of Harris Hip Scores According to Diagnosis*

Diagnosis	Harris Hip Score† (Maximum = 89)	Harris Pain Score† (Maximum = 44)	Harris Activity Score‡ (Maximum = 12)	Harris Gait Score† (Maximum = 33)	Harris Functional Score† (Maximum = 45)
Osteoarthritis	60.0 ± 21.9	30.9 ± 13.9	7.7 ± 2.5	21.2 ± 8.7	29.0 ± 10.5
Legg-Calvé-Perthes disease	72.5 ± 14.5	29.6 ± 14.9	8.4 ± 1.7	26.4 ± 8.9	34.8 ± 8.4
Slipped capital femoral epiphysis	68.0 ± 11.0	32.5 ± 9.6	8.7 ± 1.2	26.8 ± 4.5	33.3 ± 3.2
Developmental dysplasia of the hip	56.4 ± 10.3	28.8 ± 12.1	6.6 ± 0.9	21.0 ± 5.2	27.6 ± 5.6
Posttraumatic arthritis	68.0 ± 16.5	36.0 ± 13.9	10.0 ± 0.0	31.5 ± 2.1	41.5 ± 2.1
Osteonecrosis	75.8 ± 13.9	37.8 ± 10.2	10.0 ± 1.7	28.0 ± 7.7	38.0 ± 8.5
Inflammatory arthritis	49.5 ± 29.0	20.0 ± 14.1	9.0 ± 1.4	20.5 ± 13.4	29.5 ± 14.9
Rheumatoid arthritis	55.6 ± 16.2	38.9 ± 6.3	3.4 ± 2.2	13.0 ± 11.6	17.0 ± 14.0
Total	62.3 ± 19.7	32.1 ± 12.9	7.7 ± 2.7	22.3 ± 9.0	30.0 ± 10.8

*The values are given as the mean and the standard deviation. †The groups were not significantly different ($p > 0.05$) with regard to age at the time of the primary procedure. ‡Patients with rheumatoid arthritis had a significantly lower Harris activity score than patients with osteoarthritis ($p = 0.0004$), Legg-Calvé-Perthes disease ($p = 0.0075$), slipped capital femoral epiphysis ($p = 0.0245$), osteonecrosis ($p = 0.0000$), and posttraumatic arthritis ($p = 0.0120$) according to Tukey's adjustment for multiple comparisons.

TABLE E-3 Underlying Diagnosis, Acetabular Reaming, and Proportion of Revision

Factor	Total Number of Implants	Number of Implants Revised (or Awaiting Revision) Because of Mechanical Failure	Number of Surviving Implants
Diagnosis ($p = 0.7228$)*			
Osteoarthritis	59	12 (20.3%)	47 (79.7%)
Legg-Calvé-Perthes disease	6	2 (33.3%)	4 (66.7%)
Slipped capital femoral epiphysis	6	2 (33.3%)	4 (66.7%)
Developmental dysplasia of the hip	7	2 (28.6%)	5 (71.4%)
Posttraumatic arthritis	3	0 (0.0%)	3 (100.0%)
Osteonecrosis	13	4 (30.8%)	9 (69.2%)
Inflammatory arthritis	3	1 (33.3%)	2 (66.7%)
Rheumatoid arthritis	7	0 (0.0%)	7 (100.0%)
Total number of hips	104	23 (22.1%)	81 (77.9%)
Reaming ($p = 0.01777$)*			
No	25	3 (12.0%)	22 (88.0%)
Yes	77	20 (26.0%)	57 (74.0%)
Total number of hips	102	23 (22.5%)	79 (77.5%)

*An exact chi-square test was used because >20% of the expected cell frequencies were <5.