

TABLE E-1 Surgical Data\*

| Patient | Age (yr) | Sex | Diagnosis                                   | Length of Follow-up (mo) | Femoral Component Revised | Operative Time (min) | Previous Approach | Femoral Component         | Acetabular Component           | Complication                                                                    | WOMAC Score |
|---------|----------|-----|---------------------------------------------|--------------------------|---------------------------|----------------------|-------------------|---------------------------|--------------------------------|---------------------------------------------------------------------------------|-------------|
| 1       | 41       | M   | Aseptic loosening (cup and stem)            | 160                      | Yes                       | 120                  | Ant               | Sulzer uncemented         | Sulzer uncemented              | Trochanteric fracture with nonunion                                             | 73          |
| 2       | 67       | M   | Aseptic loosening (cup and stem)            | 126                      | Yes                       | 199                  | Ant               | Sulzer uncemented         | Cage reconstruction graft MOM  | No                                                                              | 84          |
| 3       | 65       | F   | Aseptic loosening (cup and stem)            | 116                      | Yes                       | 135                  | Ant               | Sulzer cemented           | Cage reconstruction graft poly | No                                                                              | 81          |
| 4       | 58       | M   | Psoas impingement                           | 115                      | No                        | 145                  | Ant               | N/A                       | Medacta Versafit uncemented    | Continued pain. Heterotopic bone. Patient underwent arthroscopic psoas release. | 66          |
| 5       | 50       | F   | Aseptic loosening (cup and stem)            | 110                      | Yes                       | 20                   | Ant               | Sulzer uncemented         | Cage reconstruction graft MOM  | No                                                                              | 82          |
| 6       | 64       | F   | Aseptic loosening (cup and stem)            | 108                      | Yes                       | 75                   | Ant               | Medacta Quadra cemented   | Cage reconstruction graft poly | No                                                                              | 44          |
| 7       | 80       | M   | Aseptic loosening (cup only)                | 97                       | Yes                       | 90                   | Ant               | Medacta Quadra uncemented | Medacta Tripolar               | No                                                                              | N/A         |
| 8       | 83       | M   | Ceramic fracture                            | 91                       | No                        | 180                  | Ant               | N/A                       | Cemented poly                  | No                                                                              | 100         |
| 9       | 61       | F   | Psoas impingement (old acetabular fracture) | 88                       | No                        | 65                   | Ant               | N/A                       | Zimmer Spotorno                | No                                                                              | 67          |
| 10      | 74       | F   | Recurrent dislocation                       | 85                       | No                        | 200                  | Ant               | N/A                       | Medacta Tripolar               | No                                                                              | 78          |
| 11      | 41       | M   | Aseptic loosening (cup and stem)            | 82                       | No                        | 115                  | Ant               | N/A                       | Uncemented MOM                 | No                                                                              | 73          |
| 12      | 65       | F   | Infection (2 revisions)                     | 77                       | Yes                       | 75                   | Ant               | Medacta Quadra uncemented | Medacta Tripolar               | No                                                                              | Deceased    |
| 13      | 88       | F   | Periprosthetic femoral fracture             | 77                       | Yes                       | 65                   | Ant               | Medacta Quadra cemented   | Medacta Tripolar               | No                                                                              | 52          |
| 14      | 51       | F   | Durom problem (old acetabular fracture)     | 74                       | No                        | 170                  | Ant               | N/A                       | Medacta Versafit uncemented    | No                                                                              | 82          |
| 15      | 79       | F   | Aseptic loosening (cup and stem)            | 73                       | No                        | 75                   | Post              | N/A                       | Medacta Tripolar               | No                                                                              | 61          |
| 16      | 42       | F   | Durom (metal-on-metal)                      | 73                       | No                        | 70                   | Ant               | N/A                       | Medacta Versafit uncemented    | No                                                                              | 99          |
| 17      | 45       | M   | Durom (metal-on-metal)                      | 72                       | No                        | 75                   | Troch             | N/A                       | Cage reconstruction graft poly | No                                                                              | 78          |
| 18      | 80       | M   | Aseptic loosening (cup and stem)            | 71                       | Yes                       | 75                   | Ant               | Medacta Quadra cemented   | Cage reconstruction graft poly | No                                                                              | 89          |
| 19      | 75       | M   | Infection                                   | 71                       | Yes                       | 145                  | Ant               | Medacta Quadra uncemented | Medacta Versafit uncemented    | No                                                                              | 99          |
| 20      | 77       | M   | Aseptic loosening (cup and stem)            | 69                       | Yes                       | 100                  | Post              | Medacta Quadra cemented   | Medacta Versafit uncemented    | No                                                                              | 89          |
| 21      | 47       | M   | Infection                                   | 66                       | Yes                       | 95                   | Ant               | Medacta Quadra uncemented | Medacta Versafit uncemented    | No                                                                              | 100         |
| 22      | 47       | F   | Psoas impingement                           | 61                       | No                        | 60                   | Ant               | N/A                       | Medacta Versafit uncemented    | No                                                                              | 65          |

|    |    |   |                                         |    |             |     |       |                           |                                                       |                                   |     |
|----|----|---|-----------------------------------------|----|-------------|-----|-------|---------------------------|-------------------------------------------------------|-----------------------------------|-----|
| 23 | 51 | F | Durom (metal-on-metal)                  | 52 | Yes         | 85  | Ant   | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 100 |
| 24 | 57 | F | Psoas impingement                       | 52 | Yes         | 150 | Ant   | Medacta Quadra uncemented | Medacta Versafit uncemented, grafting Levine approach | No                                | 57  |
| 25 | 64 | F | Aseptic loosening (metal-on-metal)      | 52 | Yes         | 150 | Ant   | Medacta Quadra cemented   | Medacta Versafit uncemented                           | No                                | 100 |
| 26 | 63 | M | Infection                               | 50 | Yes         | 55  | Ant   | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 100 |
| 27 | 51 | F | Stem malposition (too long)             | 50 | Yes         | 130 | Ant   | Medacta Quadra uncemented | N/A                                                   | Continued limb-length discrepancy | 52  |
| 28 | 74 | F | Aseptic loosening (cup and stem)        | 47 | Yes         | 135 | Ant   | Medacta Quadra Cemented   | Medacta Versafit uncemented                           | Acetabular loosening (revised)    | 97  |
| 29 | 33 | M | Aseptic loosening (cup only)            | 46 | Yes         | 120 | Ant   | Medacta Quadra Cemented   | Medacta Versafit uncemented                           | No                                | 82  |
| 30 | 68 | M | Aseptic loosening (cup and stem)        | 46 | Yes         | 135 | Ant   | Medacta Quadra uncemented | Cage reconstruction graft poly                        | Acetabular loosening (revised)    | 82  |
| 31 | 62 | F | Aseptic loosening (cup and stem)        | 40 | Yes         | 135 | Post  | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 98  |
| 32 | 68 | M | Aseptic loosening (cup only)            | 40 | No          | 140 | Ant   | N/A                       | Medacta Versafit uncemented                           | No                                | 82  |
| 33 | 52 | F | Metal hypersensitivity (metal-on-metal) | 36 | No          | 80  | Troch | N/A                       | Medacta Versafit uncemented                           | No                                | 50  |
| 34 | 60 | F | Aseptic loosening (cup only)            | 30 | No          | 95  | Post  | N/A                       | Medacta Versafit uncemented                           | No                                | 75  |
| 35 | 57 | M | Failed resurfacing (ALVAL)              | 29 | Resurfacing |     | Post  | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 98  |
| 36 | 82 | F | Aseptic loosening (cup only)            | 28 | No          | 75  | Post  | N/A                       | Cage reconstruction graft poly                        | No                                | 86  |
| 37 | 42 | F | Aseptic loosening (cup only)            | 26 | No          | 90  | Ant   | N/A                       | Cage reconstruction graft poly                        | No                                | 65  |
| 38 | 60 | M | Durom (metal-on-metal)                  | 21 | No          | 65  | Post  | N/A                       | Medacta Versafit uncemented                           | No                                | 92  |
| 39 | 47 | M | Aseptic loosening (cup and stem)        | 18 | Yes         | 100 | Ant   | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 100 |
| 40 | 53 | M | Failed resurfacing (ALVAL)              | 18 | Resurfacing |     | Post  | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 98  |
| 41 | 61 | F | Durom (metal-on-metal)                  | 17 | No          | 80  | Ant   | N/A                       | Medacta Versafit uncemented                           | No                                | 100 |
| 42 | 77 | M | Metal hypersensitivity (metal-on-metal) | 16 | No          | 140 | Post  | N/A                       | Cage reconstruction graft poly                        | No                                | 88  |
| 43 | 82 | F | Aseptic loosening (cup only)            | 15 | Resurfacing |     | Post  | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 86  |
| 44 | 34 | F | Failed resurfacing (osteonecrosis)      | 14 | Resurfacing |     | Post  | Medacta Quadra uncemented | Medacta Versafit uncemented                           | No                                | 98  |
| 45 | 76 | F | Recurrent dislocation                   | 13 | No          | 65  | Ant   | N/A                       | Medacta Tripolar                                      | No                                | 65  |
| 46 | 63 | M | Aseptic loosening (cup only)            | 13 | No          | 105 | Post  | N/A                       | Medacta Tripolar                                      | No                                | 87  |

|    |    |   |                                    |    |             |     |      |                           |                                |    |     |
|----|----|---|------------------------------------|----|-------------|-----|------|---------------------------|--------------------------------|----|-----|
| 47 | 66 | M | Aseptic loosening (cup only)       | 11 | No          | 195 | Post | N/A                       | Cage reconstruction graft poly | No | 81  |
| 48 | 50 | M | Failed resurfacing (ALVAL)         | 10 | Resurfacing |     | Post | Medacta Quadra uncemented | Medacta Versafit uncemented    | No | 100 |
| 49 | 49 | M | Failed resurfacing (ALVAL)         | 10 | Resurfacing |     | Post | Medacta Quadra uncemented | Medacta Versafit uncemented    | No | 100 |
| 50 | 68 | M | Failed resurfacing (neck fracture) | 10 | Resurfacing |     | Post | Medacta Quadra uncemented | Medacta Versafit uncemented    | No | 95  |
| 51 | 43 | M | Failed resurfacing (ALVAL)         | 8  | Resurfacing |     | Post | Medacta Quadra uncemented | Medacta Versafit uncemented    | No | 100 |

\*WOMAC = Western Ontario and McMaster Universities Osteoarthritis Index, Ant = anterior, Post = posterior, Troch = trochanteric osteotomy, N/A = not applicable, MOM = metal-on-metal, poly = polyethylene, ALVAL = aseptic lymphocytic vasculitis-associated lesions. Product info: Sulzer Orthopedics, Winterthur, Switzerland; Medacta, Castel San Pietro, Switzerland; Zimmer, Warsaw, Indiana; and Durom (Zimmer, Warsaw, Indiana).