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PRIMARY LINKED SEMICONSTRAINED TOTAL ELBOW ARTHROPLASTY FOR RHEUMATOID ARTHRITIS: A SINGLE-INSTITUTION EXPERIENCE WITH 461 ELBOWS OVER THREE DECADES http://dx.doi.org/10.2106/JBJS.15.00649

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## Appendix E-1: Subset of Elbows Followed for a Minimum of 10 Years

Of the whole cohort of 387 patients (461 elbows), 198 patients (233 elbows) were followed for a minimum of 10 years without implant revision or removal. Ninety-two of these 198 patients had died at the time of the most recent follow-up with well-functioning implants at a minimum of 10 years. The remaining 106 patients (123 elbows) had not undergone prosthesis revision or removal after a minimum follow-up of 10 years. The median follow-up duration for this subset of elbows was 15 years (range, 10 to 30 years). Revision surgery was eventually performed in 20 elbows after the 10-year follow-up mark.

For the remaining 103 surviving arthroplasties with at least 10 years of follow-up, the median Mayo Elbow Performance Score (MEPS) was 95 points (interquartile range [IQR], 85 to 100 points), and pain was graded as mild or absent in 89 of the elbows. Arc of motion measurements for this subset of patients showed a mean of 24° for extension (range, 0° to 90°) and a mean of 135° for flexion (range, 60° to 150°), with a flexion-extension arc of >100° in 64 elbows. The median MEPS subscore for function was 25 points (IQR, 20 to 25 points), with full performance of activities of daily living (i.e., combing the hair, feeding oneself, personal hygiene, and putting on pants and shoes) noted for 72 of the elbows.

There were 62 elbows (56 patients) with adequate radiographs at a minimum of 10 years after the index arthroplasty; these represent 60% of the 103 elbows with a minimum clinical follow-up of 10 years and no implant revision or removal. The median radiographic follow-up for these 62 elbows was 13 years (range, 10 to 26 years). At the most recent follow-up, 60 elbows had no radiolucency or minor radiolucency (none, type I, or type II) around both components and 2, around the humeral component. Only 2 elbows had severe radiolucency (type IV or V) around the ulnar component only. The bone graft placed behind the flange of the humeral component was considered to be radiographically incorporated in 56 elbows and partially or completely resorbed in 6 elbows. Bushing wear, defined as an intersection angle of >7° between the humeral and the ulnar component, was identified on the most recent anteroposterior radiograph for 19 elbows.