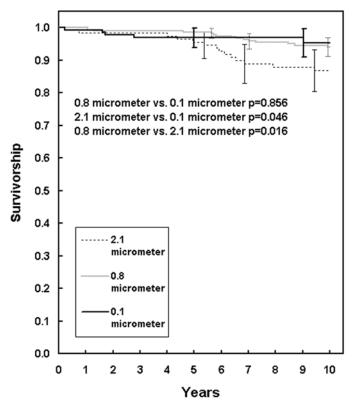
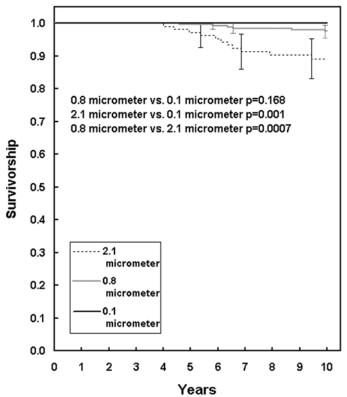
Revision for Any Reason of the Femoral and/or Acetabular Component



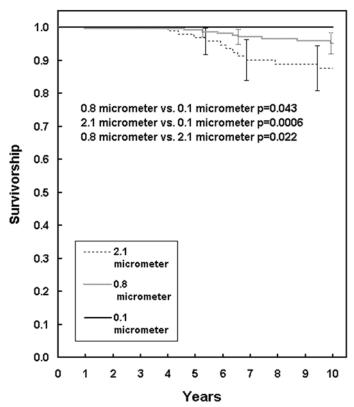
Figs. E-1A **Figs. E-1A through E-1E** Survivorship curves as determined with the Kaplan-Meier method ¹⁷. The three lines represent the three comparison groups with different surface roughnesses (0.1 μ m Ra, 0.8 μ m Ra, and 2.1 μ m Ra). **Fig. E-1A** Survivorship curve with revision of the femoral and/or acetabular component for any reason as the end point.

Revision for Aseptic Loosening of the Femoral Component



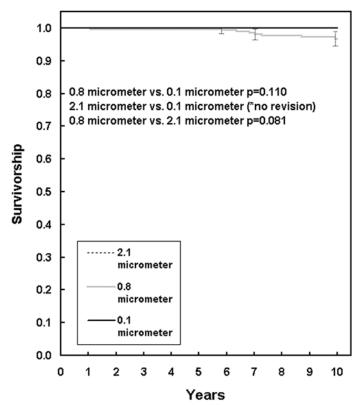
 ${\rm Fig.\,E\textsc{-}1B}$ Survivorship curve with revision of the femoral component due to a septic loosening as the end point.

Radiographic Loosening of the Femoral Component



 $Fig.\ E-1C$ Survivorship curve with radiographic loosening of the femoral component, defined as definite or probable radiographic loosening or revision because of aseptic loosening, as the end point.

Revision for Aseptic Loosening of the Acetabular Component



 ${\rm Fig.\,E\textsc{-}1D}$ Survivorship curve with revision of the acetabular component due to aseptic loosening as the end point.

Radiographic Loosening of the Acetabular Component

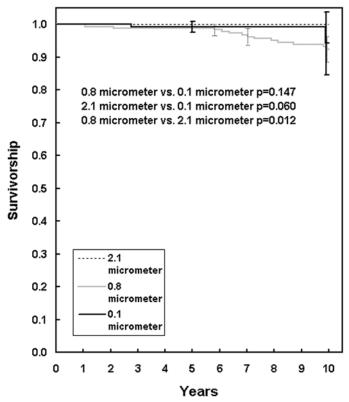


Fig. E-1E
Survivorship curve with radiographic loosening of the acetabular component, defined as definite or probable radiographic loosening or revision because of aseptic loosening, as the end point.

Table E-1. Revisions for any reason

Case number	Gender	Age at primary operation (years)	Original pathology	Months to revision	Reason for reoperation
1	F	75	Femoral neck fracture	3	Dislocation
2	M	71	Primary osteoarthritis	109	Polyethylene wear
3	M	39	Acetabular fracture	33	Prosthesis removed for deep hip infection
4	M	71	Primary osteoarthritis	19	Prosthesis removed for deep hip infection
5	F	77	Primary osteoarthritis	18	Dislocation
6	M	62	Primary osteoarthritis	21	Dislocation

Demographics, original diagnosis, time to reoperation, and reason for reoperation in the revision cases. There were six revisions (4.0%) in the 149 hips in the entire series of polished (0.1- micrometer Ra) femoral constructs. No hip was revised because of aseptic loosening. Three hips (2.0%) were revised because of dislocation, two hips (1.3%) were revised because of deep hip infection, and one hip (<1.0%) was revised because of polyethylene wear.