



Fig. E-1

Progression in size of osteolytic lesions (OL) measured serially with use of either computed tomography (CT) scans or anteroposterior (AP) radiographs. The results shown are for Assessor 3.

TABLE E-1 Patient and Prosthesis-Related Parameters

Variable	All Hips (N = 30)
Sex (male: female)	19:11
Mean age at time of primary total hip replacement (range) (yr)	57 (43 to 79)
Charnley grade (A:B:C)* at time of initial computed tomography (CT) scan	8:7:15
Activity score (1:2:3:4:5:6)† at time of initial CT scan	0:2:14:6:8:0
Mean time interval between surgery and initial CT scan (range) (yr)	14 (10 to 17)
Number of CT scans (2:3:4:5)	7:13:6:4
Mean time between first and last CT scan (range) (yr)	4 (1 to 9)

*A = only one hip involved and with no other condition that interferes with walking, B = both hips involved but the rest of the body normal, C = some other factor that interferes with walking ability¹⁶. †1 = bedridden or confined to wheelchair, 2 = sedentary (minimum capacity for walking or other activity), 3 = semi-sedentary (white-collar job, bench work, light housekeeping), 4 = light labor or sports (heavy housecleaning, yard work, assembly line, or light sports [e.g., walking ≤5 km]), 5 = moderate manual labor or sports (lifts ≤23 kg, moderate sports [e.g., walking or bicycling >5 km]), 6 = heavy manual labor (frequently lifts 23 to 45 kg) or vigorous sports (e.g., singles tennis or racquetball)¹⁷.

TABLE E-2 Correlation Between CT and Radiographic Measurement of Progression in Size of Periacetabular Osteolytic Lesions

	Spearman r Coefficient	Lower 95% CI	Upper 95% CI	P Value
Assessor 1				
Using anteroposterior radiograph	0.495	0.14	0.74	0.007
Using anteroposterior + oblique	0.230	−0.18	0.57	0.249
Assessor 2				
Using anteroposterior radiograph	0.501	0.15	0.74	0.007
Using anteroposterior + oblique	0.306	−0.10	0.62	0.120
Assessor 3				
Using anteroposterior radiograph	0.550	0.21	0.77	0.002
Using anteroposterior + oblique	0.485	−0.12	0.74	0.010