TABLE E-1 Table Showing Details of the Patients, Their Treatment, and the Outcomes

Case	Age /Sex at Diagnosis	Diagnosis	Prosthesis	Hip Replacement	Head Size	Radiotherapy	No. of Lengthenings	Survival Time in Yrs	Dead or Alive	Age Last Seen	Revision	Current Hip	Survival First Hip	Complications
1	2 m	Ewing	ETF	Unipolar	28		24	10.8	Alive	13	Shelf / revise x2	MoM revision	5.0	Subluxation of unipolar, failed shelf, now MoM
2	3 f	Ewing	EPF	Unipolar	32		15	13.7	Alive	16	Shelf / revise x3	MoM revision	8.6	Subluxation of unipolar, failed shelf, later two stage revision for infection
3	6 m	Ewing	EPF	Cemented	35/25		5	18.0	Alive	24	Revise x4	MoM revision	4.2	Loosening of original cup, revised to further cemented cup x2, now MoM
4	7 m	Ewing	EPF	Cemented	35/25	+	14	17.8	Alive	34	Revise x3	Amputation	0.3	Repeated revisions for infection, amputation at 6 yrs
5	7 f	Ewing	EPF	Unipolar	32		3	8.8	Alive	15	Revise x1	MoM revision	8.2	Subluxation of unipolar
6	7 f	Ewing	PF	Cemented	35/25			18.5	Alive	26	Revise x2	Uncemented	4.8	Loosening original cup, recurrent dislocations
7	8 m	Ewing	PF	Cemented	44/28			9.8	Alive	17		Original cemented	9.8	
8	8 f	Ewing	EPF	Unipolar	36		1	2.8	Alive	11	Osteotomy / revise x1	MoM revision	1.8	Subluxation, osteotomy unsuccessful
9	9 f	Ewing	ETF	Cemented	40/25		7	14.2	Alive	23		Original cemented	14.2	
10	9 f	Ewing	PF	Cemented	45/29			20.8	Alive	30	Revise x3	Cemented revision	6.7	Loosening x3
11	9 f	Ewing	EPF	Cemented	40/28		1	9.7	Alive	18	Revise x1	Cemented revision	8.4	Loosening original cup

12	11 f	Ewing	PF	Unipolar	40			7.9	Alive	19	Revise x3	MoM revision	3.1	Pain with unipolar, revised to cemented but repeated dislocations, revised again then changed to metal on metal
13	12 f	OS	PF	Cemented	40/32			12.0	Alive	23	Revise x1	Cemented revision	12.0	
14	12 m	DBD	EPF	Cemented	40/32		8	3.0	Alive	28		Original cemented	3.0	Progressive bone resorption and loosening
15	13 m	OS	PF	Cemented	45/29			7.4	Alive	20		Original cemented	7.4	
16	13 f	Ewing	PF	Cemented	45/29			14.8	Alive	27		Original cemented	14.8	
17	14 f	OS	TF	Cemented	45/29			17.7	Alive	32		Original cemented	17.7	
18	15 f	MPNST	PF	Unipolar	42			7.5	Alive	22		Original unipolar	7.5	
19	15 f	Ewing	PF	Cemented	45/29	+		21.3	Alive	38		Original cemented	21.3	
20	15 m	Ewing	PF	Cemented	45/29	+		16.8	Alive	31	Revise x3	Uncemented	5.1	Loosening original cup, recurrent dislocations, eventually infected
21	15 m	OS	PF	Cemented	45/29			11.1	Alive	26		Original cemented	11.1	
22	4 m	OS	EPF	Unipolar	28			1.8	Dead				1.8	
23	6 m	OS	EPF	Cemented	35/25			2.2	Dead				2.2	
24	9 m	OS	PF	Cemented	40/25			0.4	Dead				0.4	
25	10 f	Ewing	EPF	Unipolar	38			1.4	Dead				1.4	
26	10 m	OS	EPF	Cemented	40/32			0.8	Dead				0.8	Amputation at 0.7 yrs for local recurrence

27	11 m	OS	EPF	Cemented	40/32			1.5	Dead				1.5	
28	12 m	Ewing	PF	Unipolar	45			5.0	Dead				1.0	
29	12 m	Ewing	PF	Unipolar	44	+		6.6	Dead				5.6	Amputation at 5.6 yrs for radiation induced sarcoma of pelvis
30	12 f	Ewing	PF	Uncemented	48/28			1.0	Dead				1.0	
31	12 m	OS	PF	Cemented	40/32			11.1	Dead		Revise x2		3.5	Loosening x2, amputation for local recurrence at 9.6 yrs
32	13 f	Ewing	PF	Cemented	48/28			0.4	Dead				0.4	
33	13 f	Ewing	PF	Cemented	45/29			2.1	Dead				2.1	
34	13 f	Ewing	PF	Cemented	45/29			0.6	Dead				0.5	
35	13 f	OS	PF	Uncemented	54/28			0.7	Dead				0.7	
36	14 f	OS	TF	Cemented	45/32			3.3	Dead				3.3	
37	14 f	OS	PF	Cemented	45/28			3.2	Dead				3.2	
38	15 f	Ewing	PF	Cemented	44/28			1.8	Dead				1.8	
39	15 m	Ewing	PF	Uncemented	54/28	+		3.9	Dead				3.9	
40	15 f	OS	PF	Cemented	45/28			4.4	Dead				4.4	

Prosthesis type codes: ETF = Extendable Total Femur; EPF = Extendable Proximal Femur; TF = Total Femur Replacement; PF = Proximal Femoral Replacement. Diagnosis: OS = Osteosarcoma, DBD = Disappearing bone disease, and MPNST = malignant peripheral nerve sheath tumor. Current hip: MoM = Metal on metal. All times are in years.