



Fig. E-1

EBRA-(Ein Bild Roentgen Analyse) Digital software. The contour of the metallic shell is related to a grid of three horizontal and vertical tangents. The grid serves to automatically exclude rotated radiographs with use of a comparability algorithm. EBRA uses at least four consecutive radiographs for the measurement of migration.

TABLE E-1 Life Table for Harris-Galante Cups with Bulk Grafting with Revision as the End Point

Years	Number at Start	Withdrawn During Interval	Number at Risk	Failures	Survival Rate (%)
1	56	2	54.5	0	100
2	54	1	53.5	0	100
3	53	0	53	1	98.1
4	52	2	51	0	98.1
5	50	1	49.5	0	98.1
6	49	2	48	1	96.1
7	46	1	45.5	0	96.1
8	45	2	44	1	93.9
9	42	3	40.5	1	91.6
10	38	8	34	0	91.6
11	30	15	22.5	0	91.6

TABLE E-2 Life Table for Harris-Galante Cups in Combination with Bulk Grafting with Loosening as the End Point

Years	Number at Start	Withdrawn During Interval	Number at Risk	Failures	Survival Rate (%)
1	56	2	54.5	0	100
2	54	1	53.5	0	100
3	53	0	53	1	98.1
4	52	2	51	0	98.1
5	50	1	49.5	0	98.1
6	49	2	48	1	96.1
7	46	1	45.5	0	96.1
8	45	2	44	1	93.9
9	42	3	40.5	1	91.6
10	38	7	34.5	1	88.9
11	30	15	22.5	0	88.9

TABLE E-3 Life Table for the Migrated Harris-Galante Cups with Bulk Grafting

Years	Number at Start	Withdrawn During Interval	Number at Risk	Failures	Survival Rate (%)
1	20	2	18.5	0	100
2	18	0	18	0	100
3	18	0	18	1	94.4
4	17	0	17	0	94.4
5	17	0	17	0	94.4
6	17	1	16.5	1	88.7
7	15	0	15	0	88.7
8	15	1	14.5	1	82.6
9	13	0	13	1	76.2
10	12	2	11	1	69.3
11	9	3	7.5	0	69.3

TABLE E-4 Loosening and Migration*

	No Migration	Secondary Stabilizing	Early Migration	Late Migration
number	35	1	6	13
loosened/non-loosened	0/35	0/1	3/3	3/10
horizontal migration [mm]	0.4 ± 0.3	1.2	2.9 ± 1.6	1.7 ± 0.9
vertical migration [mm]	0.3 ± 0.3	1.1	1.0 ± 1.3	0.6 ± 0.9
pain value [pts.]	41.9 ± 3.6	44	38.4 ± 10.4	40 ± 4.9
migration rate [mm/y]	0.09 ± 0.09	0.99	1.1 ± 1.3	0.14 ± 0.05

*Non-migrated cups were compared with the one implant with a secondary stabilization and with the cups showing early and late migration. One implant without clinical or radiographic signs of loosening could not be measured with EBRA.