

TABLE E-1 Clinical Cases Analyzed for Intra-Prosthesis Motion Distribution*

Publication	Age (yr)/ Sex	Operated Levels	ODI, Preop./Postop.	VAS, Preop./Postop.	Duration of Follow-Up	Prosthesis Motion (deg)	Superior:Inferior Motion Ratio
Monosegmental, CHARITÉ III							
Cinotti ³³ Fig. 2	NR	L4-5	NR	NR	Mean, 3.2 yr (range, 2-5 yr)	20.0	2.5
Sott ⁴³ Figs. 1a,b	39/F	L4-5	NR	NR	14 mo	11.2	2.6
McAfee ³⁷ Fig. 3	48/M	L4-5	76/20	99/8	2 yr	10.6	10.8
Guyer ³⁵ Fig. 6	42/F	L4-5	58/16	75/8	2 yr	10.4	1.2
Blumenthal ³¹ Fig. 6	38/M	L4-5	80% improvement	85% improvement	4 yr	12.3	1.9
David ³⁴ Fig. 1	37/F	L4-5	NR‡	NR‡	10 yr	19.7	1.3
Tortolani ³⁸ Figs. 1b,c	NR	L4-5	≈48/24†	≈73/36†	2 yr	15.1	2.7
Cinotti ³³ Fig. 1	NR	L5-S1	NR	NR	Mean, 3.2 yr (range, 2-5 yr)	12.8	1.0
Hochschul ⁴² Figs. 5a,b	46/M	L5-S1	46/<10	58/<10	1 yr	4.9	1.3
McAfee ³⁷ Fig. 1	33/F	L5-S1	42/0	74 ± 15/ 30 ± 29†	2 yr	7.2	71§
McAfee ³⁷ Fig. 4	42/M	L5-S1	62/8	65/12	2 yr	18.1	2.0
Geisler ⁴¹ Fig. 8	NR	L5-S1	50.6/25.8†	72/30.6†	2 yr	12.4	1.4
Lemaire ³⁶ Fig. 2	45/M	L5-S1	NR	NR	10 yr	13.3	1.8
David ³⁴ Fig. 2	40/M	L5-S1	NR‡	NR‡	10 yr	11.4	1.7
Guyer ³⁹ Fig. 7	NR	L5-S1	Improved 24 points†	Improved 39 points†	5 yr	19.2	1.4
Bisegmental, CHARITÉ III							
Lemaire ³⁶ Fig. 3	41/F	L4-5	NR	NR	10.2 yr	10.6	9.6
Lemaire ³⁶ Fig. 3	41/F	L5-S1	NR	NR	10.2 yr	13.1	1.9
Lemaire ³⁶ Fig. 4	38/F	L4-5	NR	NR	11.4 yr	9.3	1.9
Lemaire ³⁶ Fig. 4	38/F	L5-S1	NR	NR	11.4 yr	2.7	1.5
Büttner-Jan ³² Fig. 6	36/M	L4-5	NR	NR	7 yr	12.3	1.6
Büttner-Jan ³² Fig. 6	36/M	L5-S1	NR	NR	7 yr	9.7	1.0

*NR = patient-specific data not reported, ODI = Oswestry Disability Index, and VAS = visual analog scale pain.

†Patient-specific data not reported; value given is the mean for the patients in that study. ‡Excellent clinical result reported. §Excluded from statistical analysis as an outlier.