

## Appendix

TABLE E-1 Baseline Scores, by Surgery Type, for Additional SF-36 Domains

	Arthrodesis (N = 93)*	TAR			
		All Devices (N =157)*	P Value†	Salto Talaris Only*	P Value‡
RP	21.2 [31.0], 0-100	21.0 [32.9], 0-100	0.95	18.2 [31.3], 0-100	0.51
GH	68.6 [19.0], 15-100	71.9 [17.3], 15-100	0.16	70.6 [18.3], 15-100	0.46
VT	50.3 [20.9], 5-100	51.8 [20.6], 0-100	0.59	51.3 [20.4], 0-90	0.75
SF	61.3 [26.3], 0-100	63.1 [26.3], 0-100	0.61	63.4 [27.6], 0-100	0.59
RE	58.4 [41.9], 0-100	66.9 [41.4], 0-100	0.12	64.6 [42.7], 0-100	0.32
MH	71.9 [15.8], 28-96	74.1 [17.4], 24-100	0.32	73.3 [18.3], 24-100	0.60

\*The values are given as the mean with the standard deviation in brackets followed by the range. †Two-sample t test for differences between arthrodesis and TAR. ‡Two-sample t test for differences between arthrodesis and TAR using the Salto Talaris device.

TABLE E-2 Improvement in Additional SF-36 Outcomes from Preoperative Status by Surgery Type

	Arthrodesis* (N = 103)	TAR* (N = 170)	TAR – Arthrodesis Difference*	P Value†	Salto Talaris – Arthrodesis Difference*	P Value†
<b>RP</b>						
6 mo – preop.	25.6 [4.9]	34.7 [3.5]	9.1 [6.1] (-7.0, 25.2)		12.3 [6.9] (-5.7, 30.2)	
1 yr – preop.	36.2 [5.0]	43.9 [3.5]	7.7 [6.2] (-8.6, 24.1)		12.4 [7.0] (-5.8, 30.60)	
2 yr – preop.	38.2 [5.1]	43.6 [3.6]	5.4 [6.3] (-11.4, 22.1)		10.6 [7.2] (-8.0, 29.3)	
3 yr – preop.	38.0 [5.3]	40.8 [3.6]	2.8 [6.4] (-14.3, 19.8)		1.3 [7.3] (-17.8, 20.3)	
Trajectory of improvement over successive visits				0.57		0.20
6 mo to 3 yr average – preop.	33.1 [4.5]	40.5 [3.2]	7.5 [5.6] (-3.5, 18.4)	0.18	10.1 [6.4] (-2.4, 22.6)	0.11
<b>GH</b>						
6 mo – preop.	-1.0 [1.7]	2.4 [1.2]	3.3 [2.1] (-2.3, 9.0)		5.3 [2.4] (-1.0, 11.5)	
1 yr – preop.	1.7 [1.7]	1.7 [1.2]	0.0 [2.2] (-5.8, 5.7)		0.9 [2.5] (-5.5, 7.3)	
2 yr – preop.	1.5 [1.8]	0.5 [1.3]	-1.0 [2.2] (-6.9, 4.8)		-1.0 [2.6] (-7.5, 5.5)	
3 yr – preop.	0.2 [1.9]	-1.2 [1.3]	-1.4 [2.3] (-7.4, 4.5)		-1.0 [2.6] (-7.7, 5.7)	
Trajectory of improvement over successive visits				0.22		0.069
6 mo to 3 yr average – preop.	0.3 [1.5]	0.9 [1.0]	0.5 [1.8] (-3.1, 4.1)	0.78	1.3 [2.1] (-2.8, 5.3)	0.53
<b>VT</b>						
6 mo – preop.	9.3 [2.1]	12.9 [1.5]	3.5 [2.6] (-3.3, 10.3)		4.6 [2.9] (-3.0, 12.2)	
1 yr – preop.	9.5 [2.1]	13.9 [1.5]	4.4 [2.6] (-2.5, 11.3)		6.5 [3.0] (-1.2, 14.2)	
2 yr – preop.	11.1 [2.2]	11.8 [1.5]	0.7 [2.7] (-6.3, 7.8)		1.4 [3.0] (-6.5, 9.3)	
3 yr – preop.	11.0 [2.2]	13.3 [1.5]	2.3 [2.7] (-4.9, 9.5)		3.1 [3.1] (-5.0, 11.1)	
Trajectory of improvement over successive visits				0.41		0.20
6 mo to 3 yr average – preop.	9.9 [2.0]	13.0 [1.4]	3.1 [2.5] (-1.8, 7.9)	0.11	4.3 [2.8] (-1.2, 9.7)	0.12
<b>SF</b>						
6 mo – pre-op.	11.2 [3.0]	15.9 [2.1]	4.7 [3.7] (-5.0, 14.4)	0.56	5.0 [4.2] (-5.9, 15.8)	0.46
1 yr – pre-op.	15.5 [3.0]	18.3 [2.1]	2.8 [3.7] (-7.1, 12.7)		4.0 [4.2] (-7.0, 15.0)	
2 yr – pre-op.	18.1 [3.1]	17.8 [2.2]	-0.3 [3.8] (-10.4, 9.8)		-1.1 [4.3] (-12.4, 10.2)	
3 yr – pre-op.	19.1 [3.2]	18.4 [2.2]	-0.6 [3.9] (-10.9, 9.6)		-1.2 [4.1] (-12.8, 10.3)	

6 mo to 3 yr average – pre-op.	15.4 [2.9]	17.6 [2.1]	2.2 [3.6] (-4.9, 9.2)	0.54	2.1 [4.1] (-5.9, 10.1)	0.61
RE						
6 mo – preop.	17.1 [4.8]	11.4 [3.5]	-5.7 [6.0] (-21.6, 10.2)		-1.0 [6.8] (-18.8, 16.7)	
1 yr – preop.	9.2 [4.9]	16.6 [3.5]	7.4 [6.1] (-8.7, 23.5)		11.6 [6.9] (-6.3, 29.6)	
2 yr – preop.	17.1 [5.0]	12.3 [3.5]	-4.8 [6.2] (-21.2, 11.7)		-0.1 [7.1] (-18.5, 18.3)	
3 yr – preop.	20.4 [5.2]	11.5 [3.5]	-8.9 [6.3] (-25.7, 7.8)		-7.7 [7.2] (-26.5, 11.1)	
Trajectory of improvement over successive visits				0.093		0.12
6 mo to 3 yr average – preop.	15.7 [4.5]	13.0 [3.2]	2.6 [5.6] (-13.6, 8.4)	0.63	1.2 [6.4] (-11.3, 13.7)	0.85
MH						
6 mo – preop.	5.4 [1.7]	5.2 [1.2]	-0.2 [2.2] (-5.9, 5.5)		0.8 [2.5] (-5.6, 7.1)	
1 yr – preop.	4.3 [1.8]	7.2 [1.2]	3.0 [2.2] (-2.8, 8.8)		4.0 [2.5] (-2.4, 10.4)	
2 yr – preop.	5.1 [1.8]	5.8 [1.3]	0.7 [2.2] (-5.2, 6.6)		0.9 [2.5] (-5.7, 7.6)	
3 yr – preop.	7.9 [1.9]	7.2 [1.3]	-0.7 [2.3] (-6.7, 5.3)		-0.1 [2.6] (-6.9, 6.7)	
Trajectory of improvement over successive visits				0.51		0.48
6 mo to 3 yr average – preop.	5.4 [1.6]	6.4 [1.1]	0.9 [2.0] (-2.9, 4.8)	0.64	1.7 [2.2] (-2.7, 6.0)	0.45

\*The values are given as the mean with the standard error in brackets, with the addition of the 95% confidence interval in parentheses for the difference in improvement between surgery types estimated from linear mixed-effects regression analysis of follow-up visit-by-surgery type interaction with study participant as a random effect and adjusted for differences in improvement by age and BMI. †Significance of follow-up visit-by-surgery type interaction.