TABLE E-1 Comparisons, Between the Treatment Groups, of Outcomes Measured with the General Questionnaire, Short Form-36, and American Academy of Orthopaedic Surgeons (AAOS) Lower Limb Module and Shoe-Comfort Scores

|  | Amputation | Lengthening | P Value | Power Value |
| :---: | :---: | :---: | :---: | :---: |
| General questionnaire (no. [\%] of patients) | $\mathrm{N}=35$ | $\mathrm{N}=26$ |  |  |
| Educational achievement |  |  | 0.891 | 0.063 |
| High school or less | 23 (66\%) | 16 (62\%) |  |  |
| Post-secondary or college | 12 (34\%) | 10 (38\%) |  |  |
| Employed | 22 (63\%) | 18 (69\%) | 0.459 | 0.081 |
| Income |  |  | 0.236 | 0.447 |
| <\$10,000 | 12 (34\%) | 4 (15\%) |  |  |
| \$10,000-\$25,000 | 12 (34\%) | 9 (35\%) |  |  |
| >\$25,000 | 11 (31\%) | 13 (50\%) |  |  |
| Receiving welfare/public assistance | 7 (20\%) | 3 (12\%) | 0.412 | 0.143 |
| Receiving SSI/SSDI | 1 (3\%) | 3 (12\%) | 0.162 | 0.273 |
| Has pain in limb | 9 (26\%) | 6 (23\%) | 0.880 | 0.056 |
| Regular use of pain medicines |  |  | 0.909 | 0.068 |
| None | 29 (83\%) | 21 (81\%) |  |  |
| Non-narcotic medicines | 3 (9\%) | 2 (8\%) |  |  |
| Narcotic medicines | 3 (9\%) | 3 (12\%) |  |  |
| Participates in sports | 11 (31\%) | 5 (19\%) | 0.324 | 0.188 |
| Participates in recreational activities/hobbies | 9 (26\%) | 4 (15\%) | 0.368 | 0.089 |
| Limb restricts activity | 6 (17\%) | 9 (35\%) | 0.096 | 0.347 |
| Dislikes limb appearance | 4 (11\%) | 3 (12\%) | 0.946 | 0.050 |
| Mean comfort level wearing shorts (010)* | 6.15 | 5.25 | 0.143 | 0.271 |
| Satisfaction with treatment |  |  | 0.742 | 0.100 |
| Yes | 23 (66\%) | 15 (58\%) |  |  |
| No | 3 (9\%) | 3 (12\%) |  |  |
| Undecided | 9 (26\%) | 8 (31\%) |  |  |
| Short Form-36 (mean of normative scores) | $\mathrm{N}=21$ | $\mathrm{N}=11$ |  |  |
| Physical functioning | 50.8 | 49.7 | 0.709 | 0.065 |
| Physical role functioning | 49.2 | 48.5 | 0.888 | 0.052 |
| Bodily pain | 56.4 | 53.0 | 0.349 | 0.145 |
| General health | 46.7 | 47.0 | 0.941 | 0.051 |
| Vitality | 53.4 | 49.8 | 0.229 | 0.209 |


| Social functioning | 49.9 | 48.8 | 0.718 | 0.064 |
| :--- | :--- | :--- | :--- | :--- |
| Emotional role functioning | 51.8 | 43.8 | 0.057 | 0.471 |
| Mental health | 48.3 | 46.0 | 0.520 | 0.094 |
| Physical component summary | 51.3 | 51.6 | 0.922 | 0.051 |
| Mental component summary | 50.1 | 45.0 | 0.116 | 0.332 |
| AAOS Outcomes Instruments (mean of <br> normative scores) | $\mathrm{N}=20$ | $\mathrm{~N}=11$ |  |  |
| Lower Limb Module | 52.3 | 49.8 | 0.330 | 0.152 |
| Shoe-comfort score | 47.2 | 48.8 | 0.702 | 0.066 |

*The value is given as the mean score.

TABLE E-2 Comparisons, Between the Treatment and Control Groups, of Outcomes Measured with the Beck Depression Inventory-II and Quality of Life Questionnaire

|  | Amputation | Lengthening | Control | $\begin{gathered} \mathrm{P} \\ \text { Value* } \end{gathered}$ | Comparisons $\dagger$ | Difference of the Means (95\% Confidence Interval) | Power <br> Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beck Depression Inventory-II | $\mathrm{N}=34$ | $\mathrm{N}=25$ | $\mathrm{N}=28$ |  |  |  |  |
| Mean score | 0.77 | 1.24 | 2.11 | 0.022 | A-L |  | 0.204 |
|  |  |  |  |  | A-C | -1.36 (-2.30, -0.43) |  |
|  |  |  |  |  | L-C |  | 0.286 |
| Quality of Life Questionnaire (mean score) | $\mathrm{N}=33$ | $\mathrm{N}=26$ | $\mathrm{N}=28$ |  |  |  |  |
| Material well-being | 51.6 | 51.2 | 42.8 | <0.001 | A-L |  | 0.059 |
|  |  |  |  |  | A-C | 8.8 (4.5, 13.1) |  |
|  |  |  |  |  | L-C | 8.4 (3.8, 13.0) |  |
| Physical well-being | 53.5 | 51.2 | 44.7 | 0.0002 | A-L |  | 0.269 |
|  |  |  |  |  | A-C | 8.5 (3.7, 13.4) |  |
|  |  |  |  |  | L-C | 6.5 (1.3, 11.7) |  |
| Personal growth | 52.9 | 53.1 | 48.7 | 0.014 | A-L |  | 0.051 |
|  |  |  |  |  | A-C | 4.2 (0.3, 8.1) |  |
|  |  |  |  |  | L-C | 4.4 (0.2, 8.6) |  |
| Marital relations | 56.7 | 54.1 | 49.4 | 0.0007 | A-L |  | 0.436 |
|  |  |  |  |  | A-C | 7.4 (2.8, 11.9) |  |
|  |  |  |  |  | L-C |  | 0.581 |
| Parent-child relations | 54.8 | 54.4 | 48.3 | 0.003 | A-L |  | 0.057 |
|  |  |  |  |  | A-C | 6.5 (1.8, 11.2) |  |
|  |  |  |  |  | L-C | 6.1 (1.1, 11.1) |  |
| Extended family relations | 53.4 | 50.8 | 49.1 | 0.0256 | A-L |  | 0.426 |
|  |  |  |  |  | A-C | 4.2 (0.4, 8.0) |  |
|  |  |  |  |  | L-C |  | 0.154 |
| Extramarital relations | 52.1 | 51.8 | 49.4 | 0.143 | A-L |  | 0.057 |
|  |  |  |  |  | A-C |  | 0.36 |
|  |  |  |  |  | L-C |  | 0.3 |
| Altruistic behavior | 54.7 | 53.8 | 51.5 | 0.088 | A-L |  | 0.12 |
|  |  |  |  |  | A-C |  | 0.466 |
|  |  |  |  |  | L-C |  | 0.278 |
| Political behavior | 50.4 | 52.1 | 50.6 | 0.558 | A-L |  | 0.174 |


|  |  |  |  |  | A-C |  | 0.052 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | L-C |  | 0.125 |
| Job characteristics | 52.4 | 52.1 | 47.9 | 0.028 | A-L |  | 0.501 |
|  |  |  |  |  | A-C | 4.5 (0.1, 8.9) |  |
|  |  |  |  |  | L-C |  | 0.594 |
| Occupational relations | 52.7 | 49.8 | 49 | 0.102 | A-L |  | 0.315 |
|  |  |  |  |  | A-C |  | 0.407 |
|  |  |  |  |  | L-C |  | 0.072 |
| Job satisfiers | 54 | 49.8 | 51.6 | 0.015 | A-L $\ddagger$ | 4.2 (0.7, 7.8) |  |
|  |  |  |  |  | A-C |  | 0.285 |
|  |  |  |  |  | L-C |  | 0.22 |
| Creative/aesthetic behavior | 56.8 | 52.7 | 51.9 | 0.015 | A-L |  | 0.904 |
|  |  |  |  |  | A-C | 4.9 (0.5, 9.2) |  |
|  |  |  |  |  | L-C |  | 0.067 |
| Sports activity | 52.6 | 48.8 | 49.7 | 0.114 | A-L |  | 0.424 |
|  |  |  |  |  | A-C |  | 0.36 |
|  |  |  |  |  | L-C |  | 0.072 |
| Vacation behavior | 55.8 | 53.9 | 48.9 | <0.0001 | A-L |  | 0.284 |
|  |  |  |  |  | A-C | 6.6 (3.0, 10.2) |  |
|  |  |  |  |  | L-C | 5.0 (1.1, 8.9) |  |
| Social desirability | 54.7 | 51.8 | 47.5 | $<0.0001$ | A-L |  | 0.778 |
|  |  |  |  |  | A-C | 7.3 (3.6, 11.0) |  |
|  |  |  |  |  | L-C | 4.3 (0.4, 8.3) |  |
| Total quality of life | 53.3 | 51.5 | 48.9 | 0.0003 | A-L |  | 0.52 |
|  |  |  |  |  | A-C | 4.4 (1.9, 6.9) |  |
|  |  |  |  |  | L-C |  | 0.557 |

*The p value was derived with an analysis of variance comparing all three groups (A, L, and C). $\dagger \mathrm{A}=$ amputation, $\mathrm{L}=$ lengthening, and $\mathrm{C}=$ control. $\ddagger$ Only significant difference between treatment groups.

