

Table S1. Results from the Barthel Index, the Manual Independence Function and SF-36 tests, and the active and passive joint range (in mm) measured using HandTutor. Initial and follow-up evaluation data with confidence intervals, p-values, and significance.

| | Initial evaluation Mean±SD [Q1, Q3] | Follow-up Mean±SD [Q1, Q3] | Confidence interval | p-value | Sig. |
|--|--|-------------------------------|------------------------|---------|------|
| BARTHEL INDEX (BI) | | | | | |
| Self-care index | 31.92±12.02 [21, 42] | 45.54±12.51 [44, 53] | [-23.05, -3.68] | 0.0093 | * |
| Mobility index | 24.30±17.28 [10, 37] | 33.15±15.24 [25, 47] | [-22.05, 4.36] | 0.1793 | |
| Total score | 56.23±28.75 [31, 83] | 78.69±27.07 [69, 100] | [-45.07, 0.15] | 0.0514 | |
| Functional Independence Measure (FIM) | | | | | |
| Communication | 6.31±1.19 [5.5, 7] | 6.46±1.03 [7, 7] | [-0.77, 0.47] | 0.6206 | |
| Locomotion | 3.77±2.23 [1.25, 5] | 5.12±2.16 [4, 7] | [-2.57, -0.12] | 0.0318 | * |
| Self-Care | 4.22±1.99 [3, 6.25] | 5.89±1.74 [4, 7] | [-2.27, -1.07] | 0.0000 | * |
| Social cognition | 6.59±0.94 [7, 7] | 6.69±0.77 [7, 7] | [-0.49, 0.28] | 0.5985 | |
| Sphincter control | 5.38±2.10 [3, 7] | 6.38±1.47 [7, 7] | [-2.01, 0.01] | 0.0528 | |
| Transfers | 4.91±1.47 [2, 7] | 6.00±1.37 [4, 7] | [-2.52, -0.45] | 0.0054 | * |
| Total | 87.62±26.34 [62, 112] | 107.15±24.87 [102, 124] | [-40.28, 1.20] | 0.0636 | |
| SF-36 | | | | | |
| Bodily Pain (BP) | 55.19±34.32 [22.5, 87.5] | 92.50±12.87 [90, 100] | [-58.94, -15.68] | 0.0022 | * |
| General Health (GH) | 37.31±24.63 [20, 45] | 58.85±22.28 [45, 80] | [-40.56, -2.52] | 0.0281 | * |
| Mental Health (MH) | 45.85±22.01 [36, 52] | 74.46±22.18 [60, 96] | [-46.50, -10.73] | 0.0030 | * |
| Physical Functioning (PF) | 22.31±30.04 [0, 25] | 52.69±38.11 [15, 90] | [-58.24, -2.52] | 0.0339 | * |
| Role Emotional (RE) | 10.26±28.50 [0, 0] | 51.28±48.33 [0, 100] | [-73.55, -8.50] | 0.0161 | * |
| Role Physical (RP) | 7.69±27.74 [0, 0] | 34.62±43.94 [0, 75] | [-56.96, 3.12] | 0.0763 | |
| Social Functioning (SF) | 25.00±28.41 [0, 37.5] | 66.35±38.32 [37.5, 100] | [-68.78, -13.92] | 0.0049 | * |
| Vitality (VT) | 40.77±21.30 [30, 55] | 68.08±24.54 [55, 85] | [-45.93, -8.69] | 0.0059 | * |
| Active flexion (mm) | | | | | |
| Thumb | 7.93±5.69 [3.00, 12.50] | 15.38±7.27 [11, 20] | [-12.62, -2.28] | 0.0067 | * |
| Index | 11.47±5.90 [8.50, 15.50] | 17.38±5.85 [13, 21] | [-10.50, -1.34] | 0.0134 | * |
| Middle | 14.80±6.82 [12.00, 20.50] | 20.15±7.67 [20, 26] | [-11.05, 0.34] | 0.0642 | |
| Ring | 12.93±6.11 [12.93, 20.50] | 19.54±8.85 [17, 27] | [-12.67, -0.54] | 0.0343 | * |
| Little | 7.87±4.39 [5.50, 11.00] | 14.92±7.82 [12, 19] | [-12.19, -1.92] | 0.0097 | * |
| Passive flexion (mm) | | | | | |
| Thumb | 15.07±6.55 [11.0, 19.0] | 19.46±4.74 [16.0, 23.0] | [-8.80, 0.01] | 0.0507 | |
| Index | 17.80±5.25 [14.0, 21.5] | 21.38±5.22 [18.0, 24.0] | [-7.67, 0.50] | 0.0826 | |
| Middle | 20.67±3.75 [18.0, 24.0] | 25.00±5.34 [21.0, 29.0] | [-8.01, -0.65] | 0.0231 | * |
| Ring | 18.67±4.27 [16.0, 22.0] | 24.85±6.22 [22.0, 29.0] | [-10.44, -1.92] | 0.0066 | * |
| Little | 12.67±4.03 [11.0, 15.0] | 18.69±6.29 [16.0, 21.0] | [-10.26, -1.79] | 0.0077 | * |

* indicates significant differences identified by a paired t-test at the p<0.05 level.