

S3 Table. Details of closed-loop prosthetic hand control.

| Subject | Decoding of movement type | | Detection of movement onset | | | | |
|---------|---------------------------|----------------------|-----------------------------|---------|---------|---------|---------|
| | # of correct movements | # of total movements | # of TP | # of FP | # of FN | # of TN | p-value |
| 1 | 10 | 12 | 15 | 6 | 2 | 11 | 0.002 |
| 2 | 13 | 18 | 17 | 12 | 3 | 8 | 0.078 |
| 3 | 10 | 13 | 14 | 5 | 7 | 12 | 0.024 |
| 4 | 11 | 21 | 16 | 10 | 9 | 10 | 0.261 |
| 5 | 6 | 10 | 10 | 6 | 9 | 9 | 0.350 |
| 6 | 11 | 14 | 14 | 6 | 4 | 12 | 0.009 |

TP: true positive, TN: true negative, FP: false positive, FN: false negative for onset detection; *p*-value: *p*-value of one-sided Fisher's exact test.