Kandu® | Published Study Summary

Real World Evidence

Clinically Meaningful and Continued Functional Improvement for Chronic Stroke Survivors Using IpsiHand for up to 55 weeks of Upper Extremity Therapy

A Retrospective Analysis of Post-Stroke Rehabilitation with Real World Use of Brain-Computer Interface, **Journal of NeuroEngineering and Rehabilitation, 2026**

Prasad NK, Perry NJ, Goldring AL, Fleisher LA, Petrossian L, Leuthardt EC, Souders L, Wilk SJ.

Introduction

Motor recovery after stroke often plateaus after three months, leaving chronic stroke survivors with limited therapeutic options, particularly those with severe impairment. Brain–computer interface (BCI) therapy is FDA cleared[1] for motor recovery with a growing body of clinical evidence to support use in chronic stroke survivors. BCI therapy links has emerged as a promising approach to improving motor recovery by linking motor intent to sensory feedback to stimulate Hebbian learning. This retrospective analysis evaluated real-world data from chronic stroke survivors to assess the impact of the IpsiHand device.[1]

Methods

- Seventy-eight (78) stroke survivors (≥6 months post-stroke) with chronic upper extremity impairment prescribed IpsiHand as part of routine care
- Upper Extremity Fugl-Meyer (UEFM) scores were collected at baseline and approximately every six weeks for up to 55 weeks
- Measure of response was achievement of minimal clinically important difference (MCID ≥5.25 points)
- Fifty-six (56) patients with follow up timing allowing for assessment were categorized as early responders, intermediate responders and early non-responders based on response to the initial 12 weeks of therapy

Key Results

70% achieved clinically meaningful improvement over the observation period

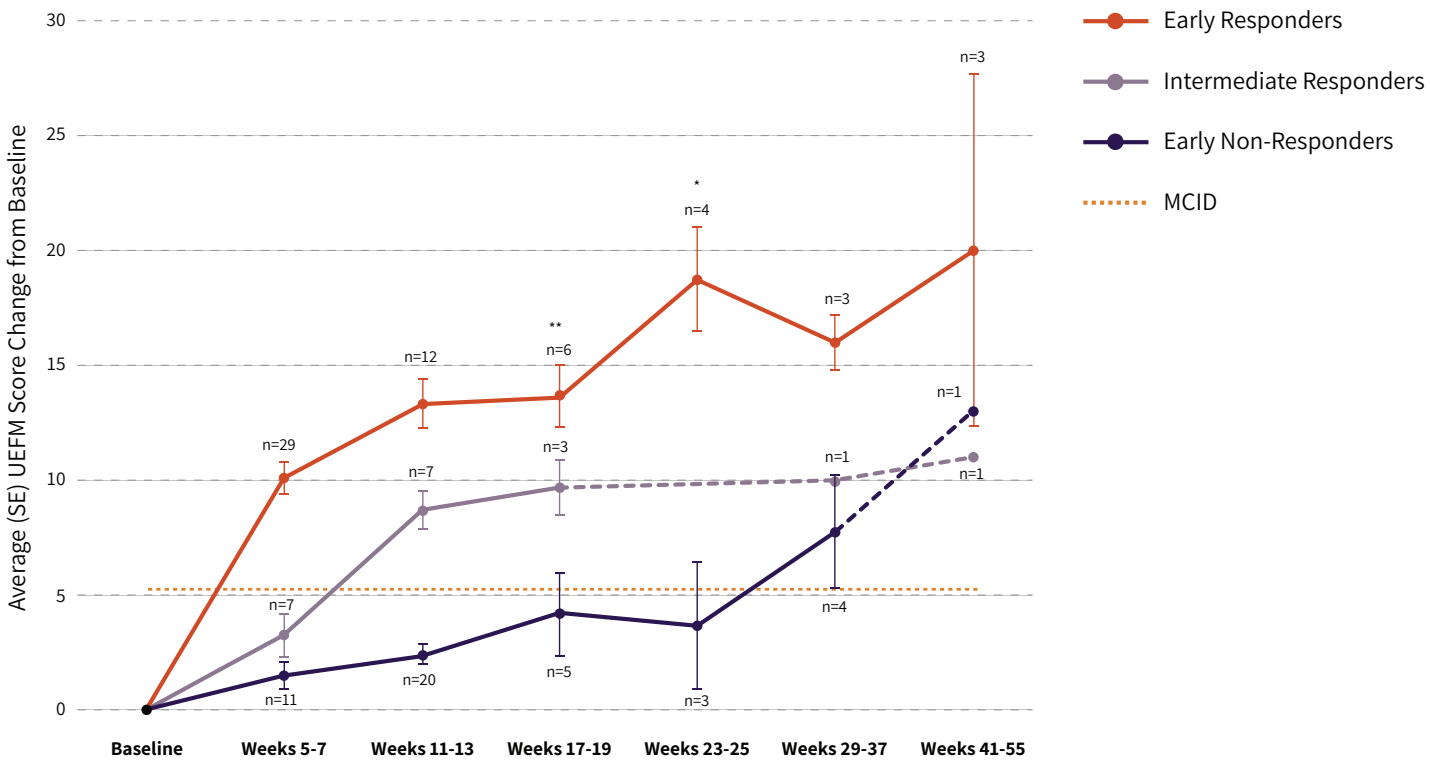
33% of patients with severe baseline impairment transitioned to lower severity categories (including moderate and mild impairment)

64% surpassed MCID within 12 weeks

50% of patients who began below the functional eligibility threshold for other advanced neurorehabilitation interventions crossed clinically relevant motor benchmarks

43% of early non-responders achieved MCID between weeks 29 and 55

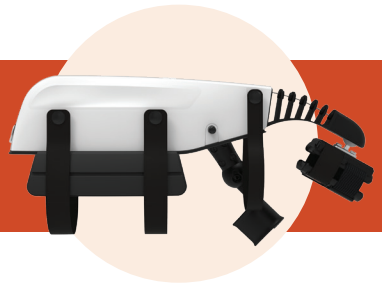
Chronic Stroke Survivors Who Used IpsiHand Over 55 Weeks



Conclusion

These findings highlight the potential of long-term BCI therapy with IpsiHand to result in clinically meaningful upper extremity recovery in chronic stroke survivors—including those with severe impairment. The findings also support continued BCI therapy with IpsiHand beyond 12 weeks as an effective rehabilitation strategy in chronic stroke.

Read the findings:



To learn more about prescribing IpsiHand contact us at:
providerinfo@kandu.com

1. **U.S. Food and Drug Administration (FDA)**. *Device Classification Under Section 513(f)(2) (De Novo): Neurolutions Upper Extremity Rehabilitation System; De Novo No. DEN200046.* Available at: https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/denovo.cfm?id=DEN200046

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