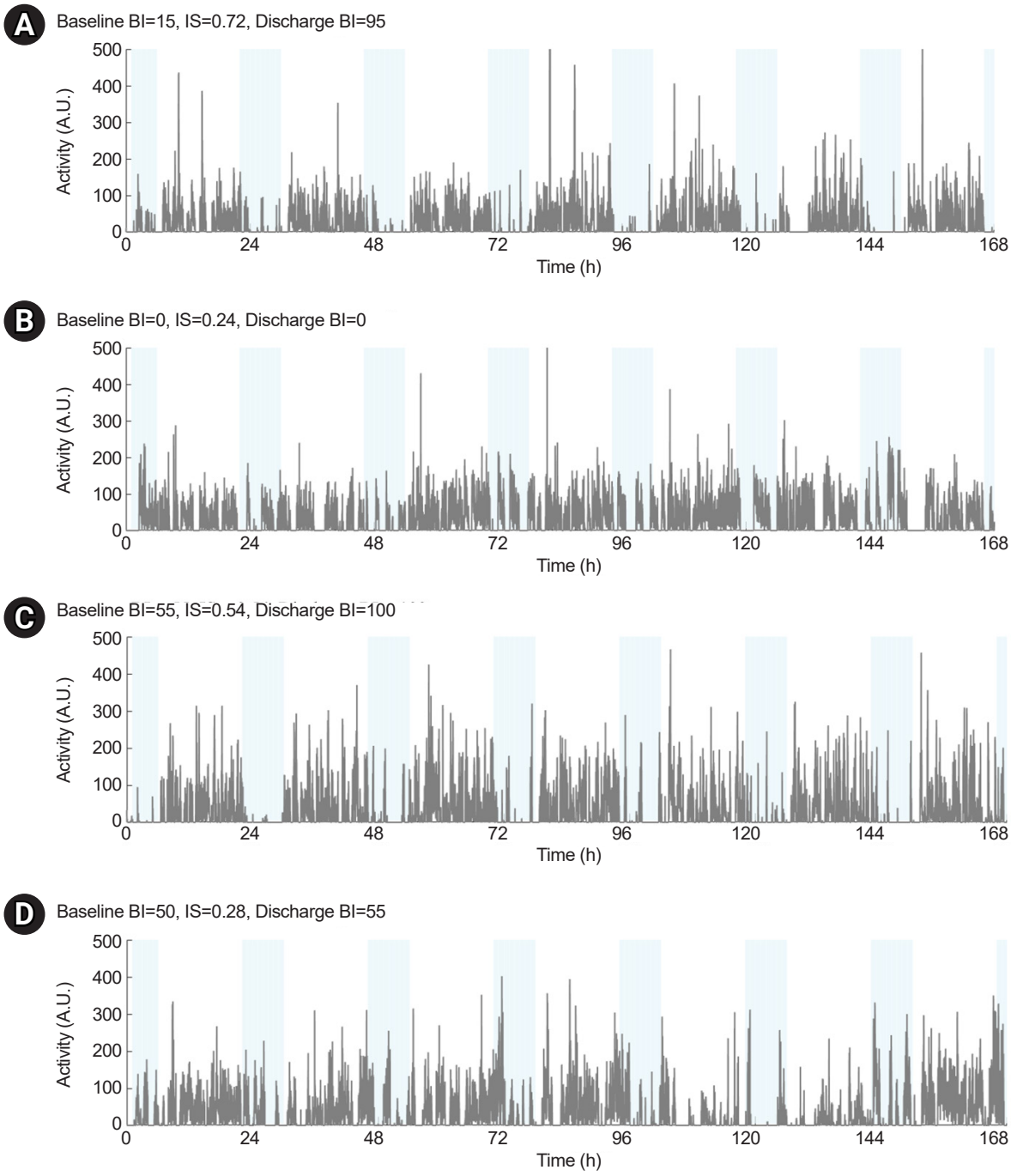

Supplementary Fig. S1. This figure illustrates the statistical findings from Table 2 by presenting seven-day actigraphy data from four representative participants. Panels (A) and (B) show two participants with poor activities of daily living (ADL) function at the start of rehabilitation, with baseline Barthel Index (BI) scores of 15 and 0, respectively. Despite having similar physical activity levels (M10=34.7 and 35.8), the participant in panel (A) had a higher IS of 0.72, while the participant in panel (B) had a lower IS of 0.24. At discharge, the participant in panel (A) demonstrated substantial ADL recovery (BI=95), whereas the participant in panel (B) remained functionally dependent (BI=0). Panels (C) and (D) depict two participants with better initial ADL function, with baseline BI scores of 55 and 50, respectively. Again, their M10 values were comparable (40.9 and 43.3), but IS values differed (0.54 vs. 0.28). At discharge, the participant in panel (C) achieved full ADL independence (BI=100), while the participant in panel (D) had a BI of 55. These examples support the regression findings, highlighting the positive association between the stability of physical activity and functional recovery, regardless of total activity levels.