## **Supplementary Information**

## Title: Comparative study of a wearable intelligent sleep monitor and polysomnography monitor for the diagnosis of obstructive sleep apnea

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**Supplementary Fig. S1** (a) Wearable intelligent sleep monitor (b and c) show the wear location of the device on the palmar thenar major muscles



**Supplementary Fig. S2** Linear correlation analysis of the WISM and PSG ODIs ( $R^2 = 0.845$ , P < 0.001) ODI, oxygen desaturation index; WISM, wearable intelligent sleep monitor; PSG, polysomnography



Supplementary Fig. S3 Bland–Altman consistency test results for the ODI calculated from the WISM and the ODI calculated from the PSG. The mean difference between the ODI from the WISM and ODI from the PSG was 5.9 (consistency limit: -15.0–26.7 [N = 196)]

ODI, oxygen desaturation index; AHI, Apnea-Hypopnea Index; PSG, polysomnography; WISM, wearable intelligent sleep monitor