***Supplementary Material***

**Noisy galvanic vestibular stimulation sustainably improves posture in bilateral vestibulopathy**

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**1 Supplementary Figures**



**Supplementary Figure 1 Change in NR of the velocity for all the 13 patients. (A)** Changes in the NR of the velocity for all the 13 patients in Session 1 are shown. **(B)** Changes in the NR of the velocity for all the 13 patients in Session 2 are shown.

NR = normalized ratio, ST = stimulation period, PST = post-stimulation period.



**Supplementary Figure 2 Change in NR of the area for all the 13 patients. (A)** Changes in the NR of the area for all the 13 patients in Session 1 are shown. **(B)** Changes in the NR of the area for all the 13 patients in Session 2 are shown.

NR = normalized ratio, ST = stimulation period, PST = post-stimulation period.



**Supplementary Figure 3 Change in NR of the RMS for all the 13 patients. (A)** Changes in the NR of the RMS for all the 13 patients in Session 1 are shown. **(B)** Changes in the NR of the RMS for all the 13 patients in Session 2 are shown.

NR = normalized ratio, RMS = root mean square, ST = stimulation period, PST = post-stimulation period.

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**Supplementary Figure 4 NRs of the velocity, area, and RMS in Session 2.** Mean NRs of the velocity **(A)**, area **(B)**, and RMS **(C)** in Session 1 are shown. Dashed line indicates NR = 1.0.

NR = normalized ratio, RMS = root mean square, ST = stimulation period, PST = post-stimulation period. §§P < 0.01, §§§P < 0.001 (for contrast test). \*P < 0.05 (for Student’s t-test).



**Supplementary Figure 5 MF calculated by power spectral analysis in Session 2.** MF in the AP axis (**A**) and the ML axis (**B**) in Session 1 are shown. Dashed line indicates mean MF at baseline.

AP = anterior-posterior, ML = medial-lateral, MF = mean frequency, ST = stimulation period, PST = post-stimulation period. §P < 0.05 (for contrast test). \*P < 0.05 (for Student’s t-test).



**Supplementary Figure 6 Score of subjective improvement in Session 2.** Mean score of the subjective improvement in Session 2 are shown.

ST = stimulation period, PST = post-stimulation period. §P < 0.05 (for contrast test).\*P < 0.05 (for Student’s t-test).