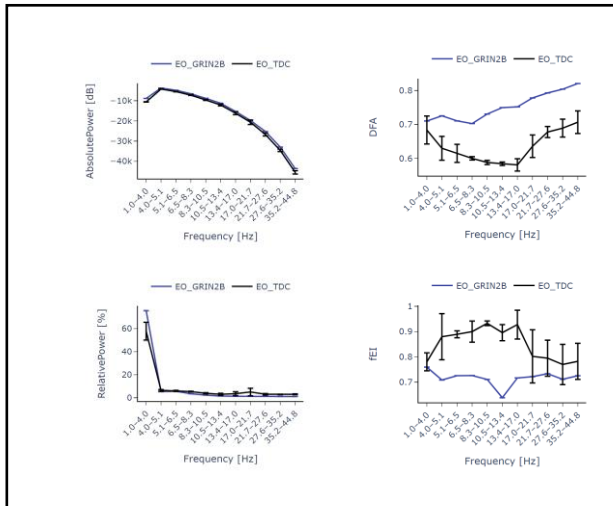


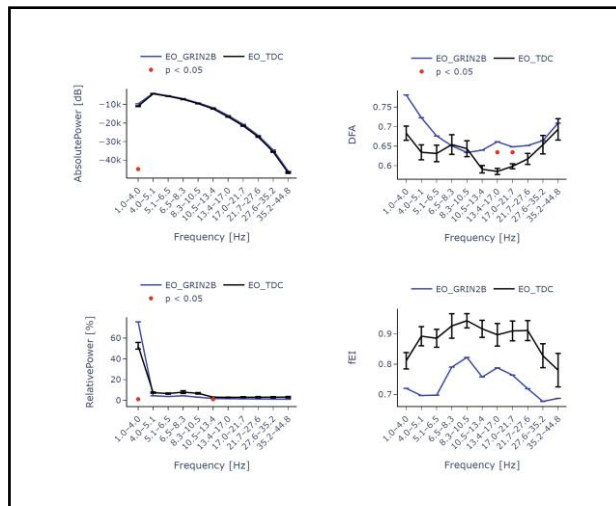
Supplementary Materials

Supplementary Figure 1: Overview of source space data of the eyes open resting state recording. Single patient compared to age- and gendermatched controls. Patient group vs all TDC are added. Non parametric Wilcoxon ranksum tests were performed with FDR 0.05 correction for 4 qEEG markers: Absolute power, relative power, DFA and fEI/1. Each box contains: top left panel: absolute power in dB, down left panel: relative power in %, top right panel: DFA and down left panel: fEI. Blue line indicate patient data while black lines indicate TDC data with standard error of the mean. Red dots indicate significant frequency bins.

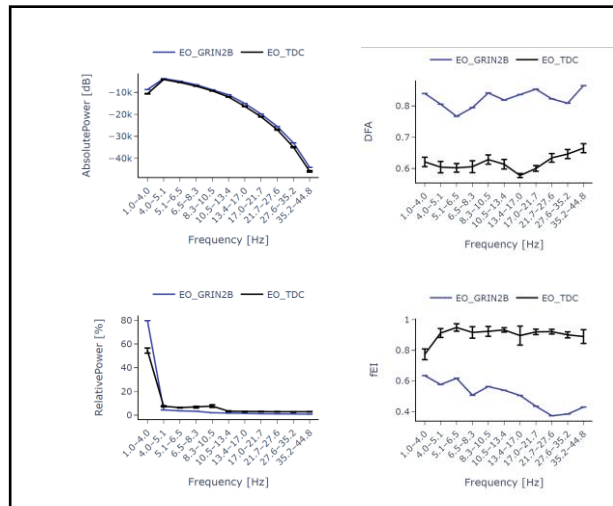
Patient 1



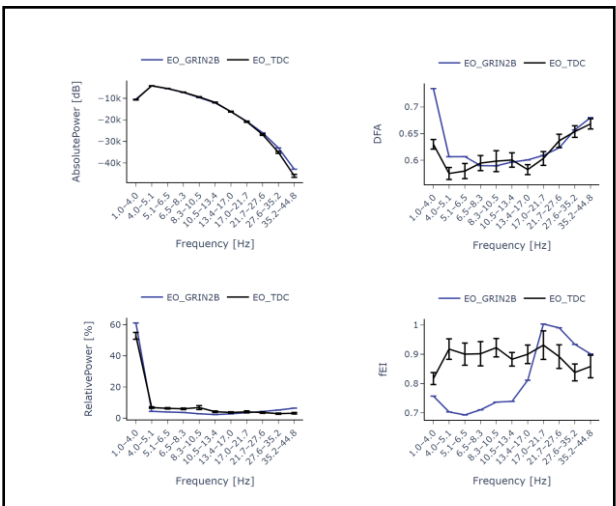
Patient 2



Patient 3

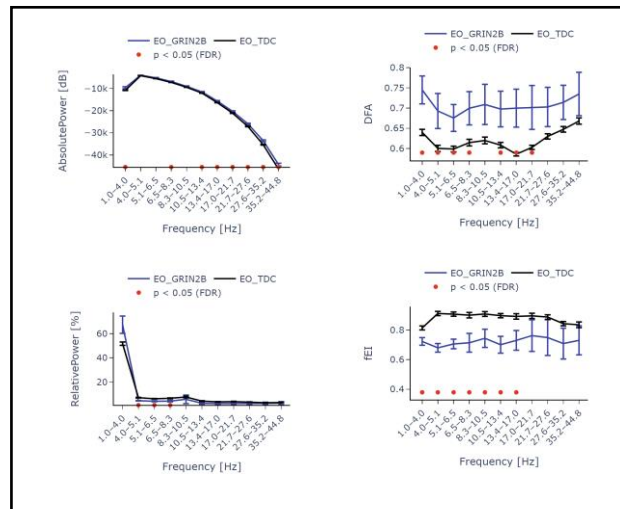
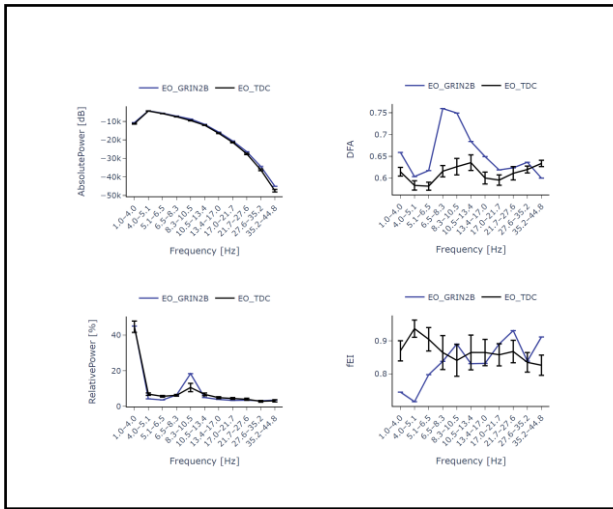


Patient 4

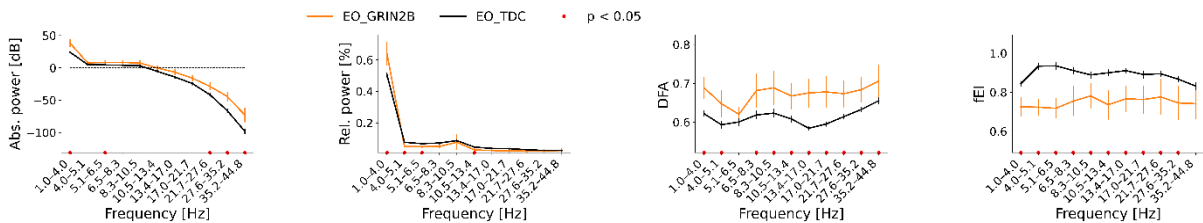


Patient 5

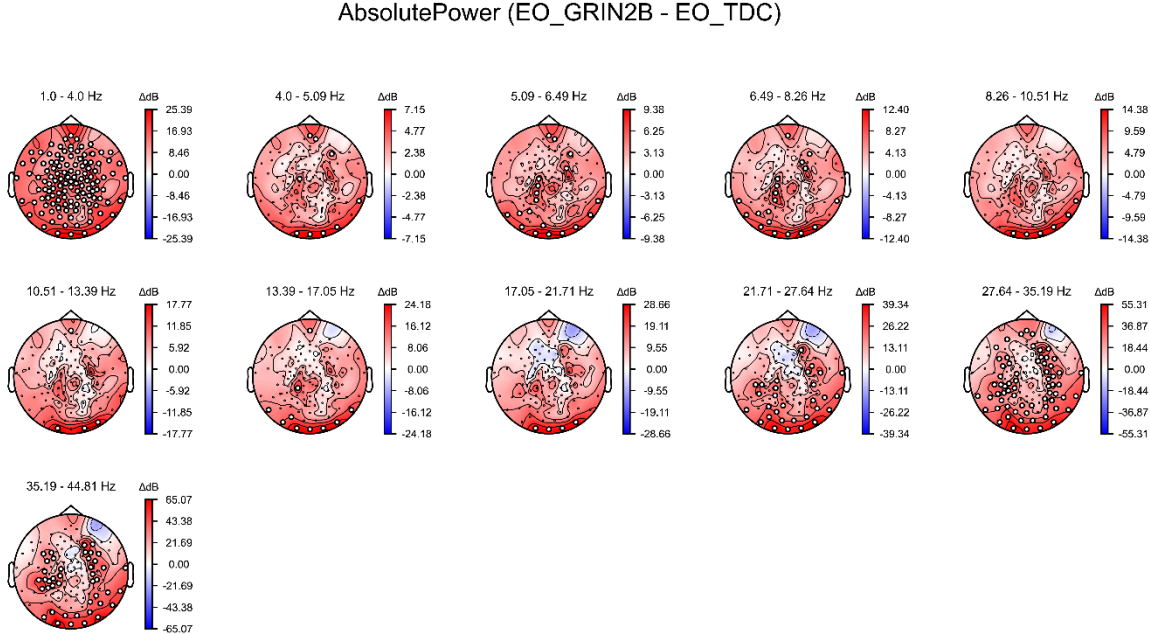
All patients vs all TDC



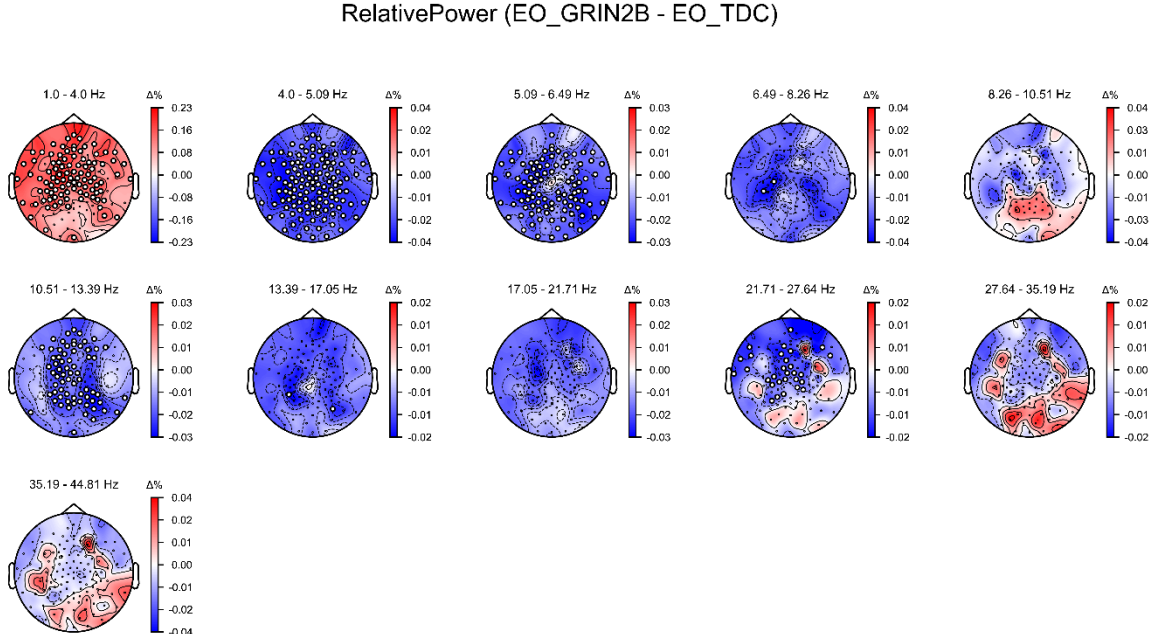
Supplementary Figure 2: Overview of the qEEG biomarkers of eyes open (EO) resting state in the range of 1-45 Hz in electrode space. GRIN2B group is plotted in orange while the TDC group is plotted in black. The averaged values with the standard error of the mean are plotted of 2A) absolute power in dB, 2B) relative power in proportion, 2C) DFA and 2D) fEI. Bootstrapping analyses were corrected with FDR of 0.05. Significant results are indicated by the red dots. Power effects are mostly found for the lowest and fastest oscillations, see 2A+2B while DFA and fEI values between groups showed effects across all bins, see 2C+2D



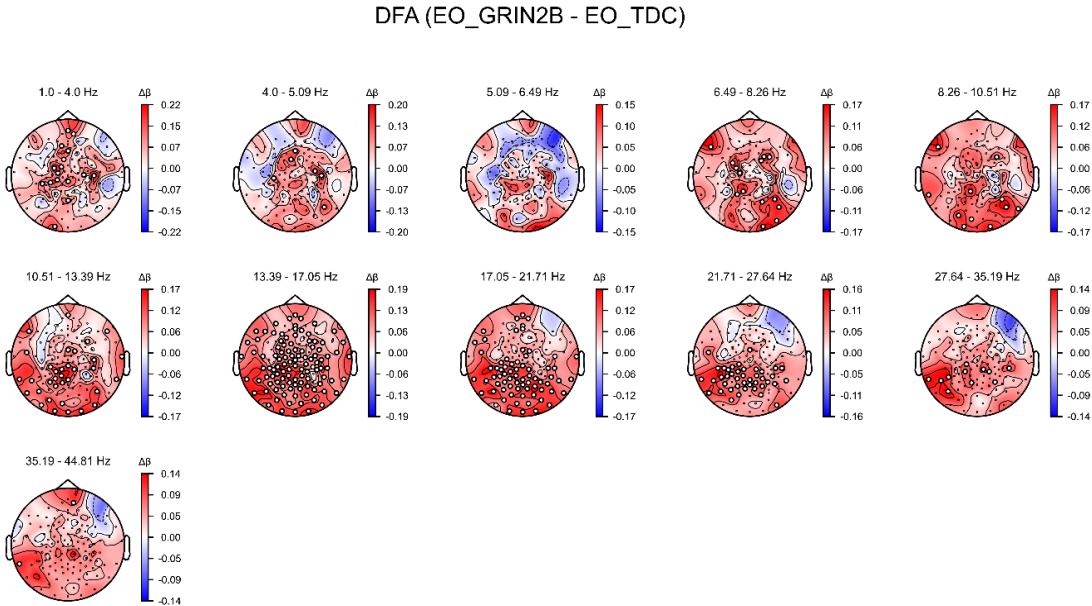
Supplementary Figure 3. Absolute power in electrode space in the range of 1-45 Hz. The plot shows absolute power across electrodes per 11 bins. Red color shows higher activity for the GRIN2B patients while blue for the TDC group. Bootstrapping analyses were FDR corrected with 0.05. Significant electrodes are indicated by the white closed dots.



Supplementary Figure 4. Relative power as expressed by proportion in electrode space in the range of 1-45 Hz. The plot shows relative power across electrodes per 11 bins. Red color shows higher activity for the GRIN2B patients while blue for the TDC group. Bootstrapping analyses were FDR corrected with 0.05. Significant electrodes are indicated by the white closed dots.



Supplementary Figure 5. DFA in electrode space in the range of 1-45 Hz. The plot shows relative power across electrodes per 11 bins. Red color shows higher activity for the GRIN2B patients while blue for the TDC group. Bootstrapping analyses were FDR corrected with 0.05. Significant electrodes are indicated by the white closed dots.



Supplementary Figure 6. fEI in electrode space in the range of 1-45 Hz. The plot shows fEI values across electrodes per 11 bins. Red color shows higher activity for the GRIN2B patients while blue for the TDC group. Bootstrapping analyses were FDR corrected with 0.05. Significant electrodes are indicated by the white closed dots.

