



Supplementary Figure 1. Electrophysiological antiseizure activity (PSD analysis) of structural analogues in the PTZ/EKP zebrafish models. The power spectral density (PSD) ranging from 0-160 Hz is normalized against the vehicle (VHC) control, and the data are plotted as mean (\pm SEM) PSD per 10 Hz (A-F). Number of larvae per condition: $n = 16-19$ for the VHC/PTZ/EKP group, $n=12-17$ for the valproate/perampanel+PTZ/EKP group, $n=10$ for analogues+PTZ/EKP. Statistical analysis: two-way ANOVA with Bonferroni posttests, PTZ/EKP control in comparison to VHC group, valproate/perampanel/analogues+PTZ/EKP group in comparison to PTZ/EKP control. Outliers were identified and removed based on the Iterative Grubbs ($\alpha = 0.1$). Significance levels: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, **** $p \leq 0.0001$.