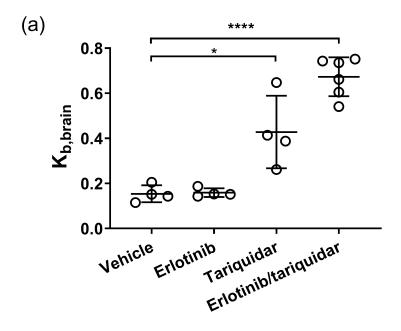
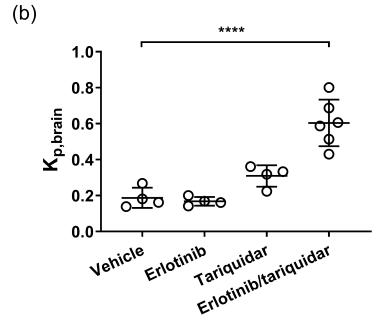
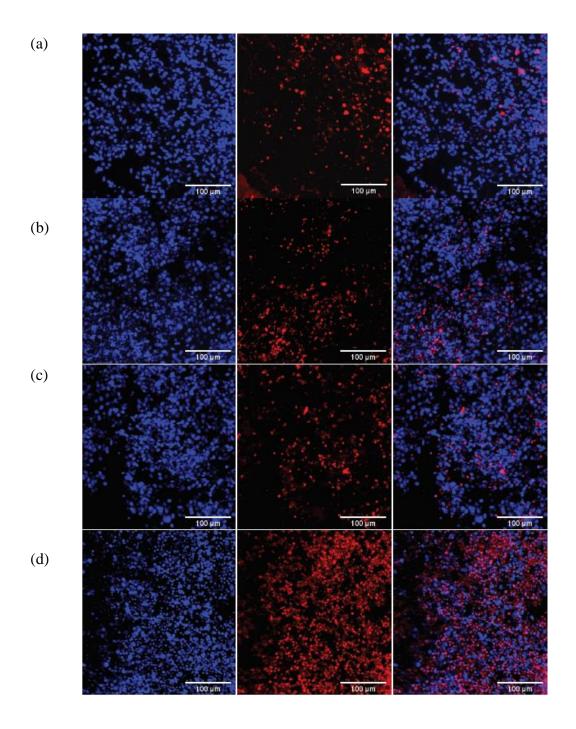


**Supplementary Figure 1.**  $k_{\text{uptake,brain}}$  values for all examined mouse groups. \*\*\*\*, p < 0.0001, 1-way ANOVA with Dunnett's multiple comparisons test.





**Supplementary Figure 2.**  $K_{b,brain}$  values (a) and  $K_{p,brain}$  values (b) for all examined mouse groups. \*, p < 0.05; \*\*\*\*, p < 0.0001, 1-way ANOVA with Dunnett's multiple comparisons test.



**Supplementary Figure 3.** Staining of sections prepared from hESC-derived cerebral organoids incubated for 24 hours with medium containing (a) 0.1% DMSO, (b) erlotinib hydrochloride (10  $\mu$ g/mL), (c) tariquidar dimesylate (5  $\mu$ g/mL) and (d) a combination of erlotinib hydrochloride (10  $\mu$ g/mL) and tariquidar dimesylate (5  $\mu$ g/mL). Left column shows nuclear staining with Hoechst 33342 dye, middle column staining with Caspase-3 antibody and right column colocalization of Hoechst 33342 and Caspase-3 staining (scale bar = 100  $\mu$ m).