

Supplementary Material

Figure S1. Histopathological analysis of 5xFAD brain sections. Shown are the results compiled from six female mice: three controls and three treated with PMT-307. Panel **A** shows levels of intracellular A β in the cortex of control (C) and treated (T) 5x-FAD mice. Levels are shown for cells with and without association to the neuronal-specific marker NeuN. For ***; $p < 0.001$. Intensities were measured by immunofluorescence. Panel **B** shows the effect of drug treatment on the NeuN+/NeuN- ratio of cells in the cortex of study animals. For *; $p < 0.05$. Intensities were measured by immunofluorescence. Panel **C** shows the level of the inflammatory marker Iba1 in cortex (CX) and hippocampus (HC) of control (C) and treated (T) 5x-FAD mice. Staining was measured by IHC. For **; $p < 0.01$. Panel **D** shows the levels of oxidative stress marker 4-HNE in cortex (CX) and hippocampus (HC) of control (C) and treated (T) 5x-FAD mice. Staining was measured by IHC. For *; $p < 0.05$ and for **; $p < 0.01$.

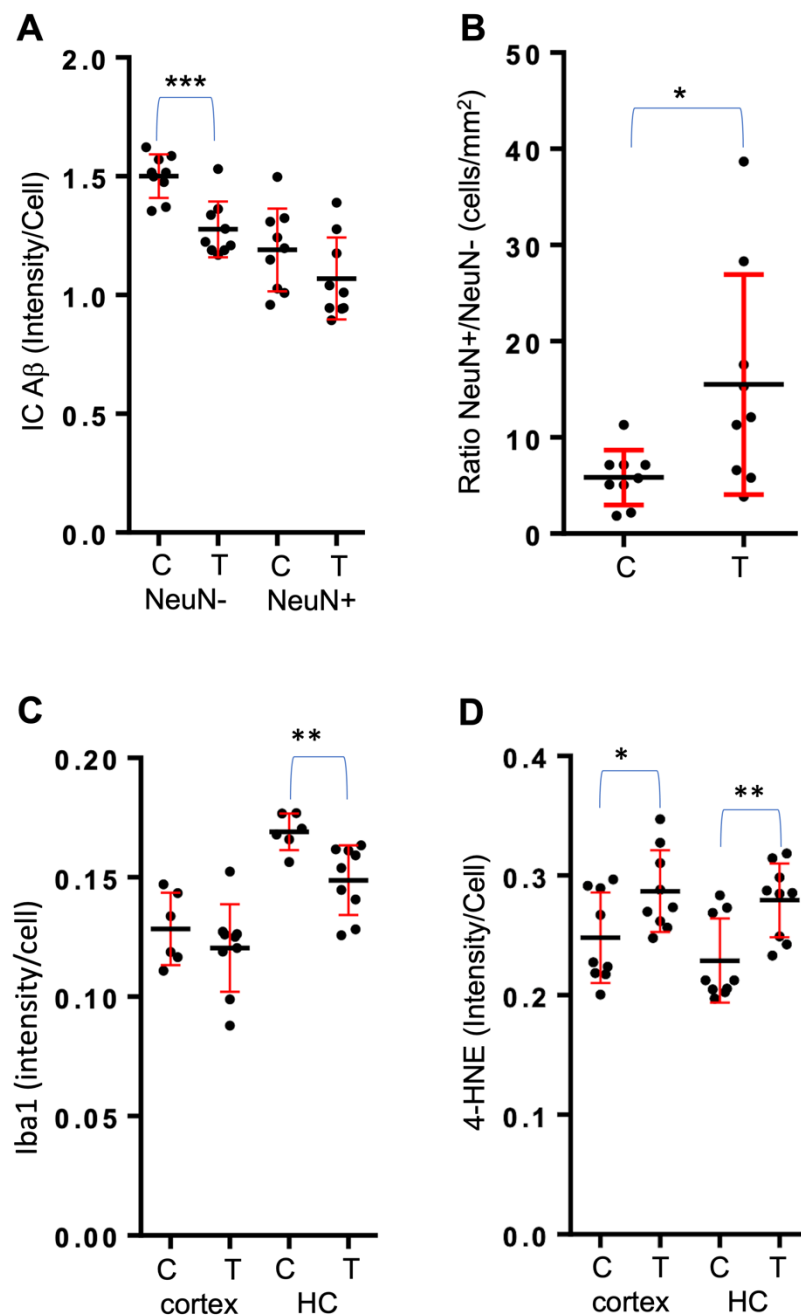


Figure S2. Biochemical analysis of 5xFAD brain hemispheres. Shown are the results compiled from six female mice: three controls and three treated. **(A)** qPCR quantification of pro-inflammatory (IL-1B and TNF- α) and anti-inflammatory cytokine (IL-10) RNA expression in brain. Plotted is the fold-change (qPCR) of cytokine levels in the treated compared the control mice. For **, $p < 0.01$. **(B)** The brains were fractionated into SDS-soluble fractions, which were used for ELISA quantification of A β 42. $n = 3$, unpaired t-test. **(C, D, E, F, G)** Representative images of Western blots for phospho-ERK p42/p44 and phosphor-CaMKII p50/p60 and quantification of band intensity expressed as fold change. $n = 3$, unpaired t-test.

