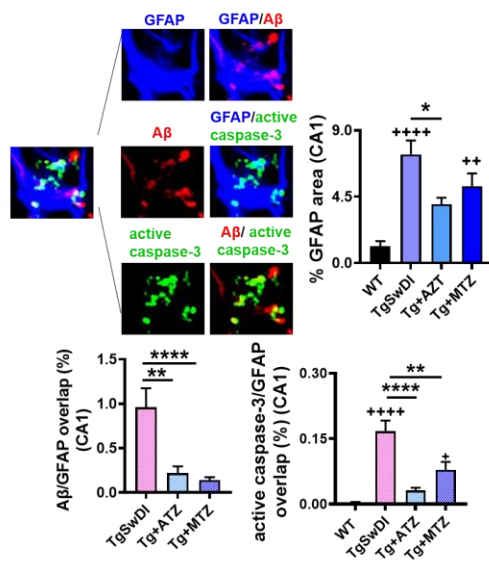
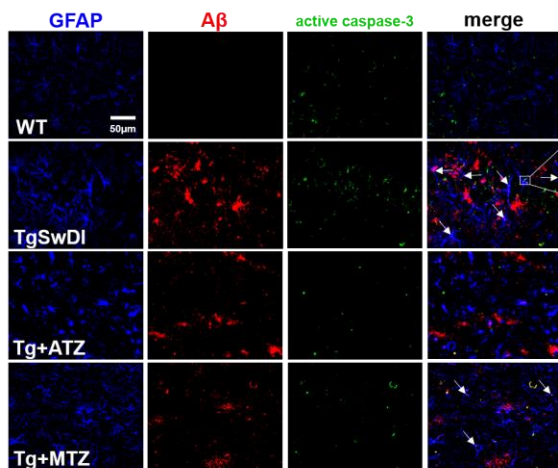
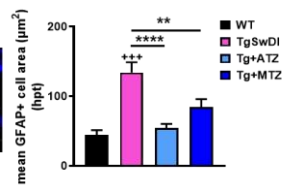
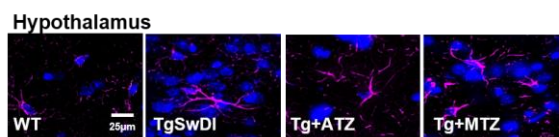


A**B**

Supplementary Figure 3: CAIs hamper A β deposition and caspase-3 activation in astrocytes, rescuing A β -initiated astrogliosis in CA1 area. **A)** Representative immunofluorescence images of CA1 hippocampal area in 16-month-old mice illustrate significant increase of astrocytic marker (GFAP, blue) in TgSwDI animals, compared to WT mice, attenuated by 8-month-CAI-diet. Original magnification, 60x. Scale bar, 50 μ m. On the right, astrogliosis is plotted as %GFAP area per acquisition field. WT, TgSwDI and MTZ: N=5, ATZ: N=3, n \geq 9 measurements acquired /group. * p<0.05, ++ p<0.01, ++++ p<0.0001, One-way ANOVA and Tukey's post-hoc test. The white arrows point to A β in astrocytes colocalizing with active caspase-3. The magnified images confirm A β (red) content within astrocytes (GFAP) (overlap, magenta), and astrocytic caspase-3 activation (green) (overlap, cyan). A β colocalizing with caspase-3, yellow. The graphs below represent the percentage of A β and active caspase-3 signals overlapping with GFAP, indicating that both ATZ and MTZ significantly reduce astrocytic A β accumulation and caspase-3 activation in astrocytes, in CA1. For A β /GFAP overlap, TgSwDI and MTZ: N=5, ATZ: N=3, n \geq 9 measurements acquired/group. **p<0.01 and **** p<0.0001, One-way ANOVA and Tukey's post-hoc test. For active caspase-3/GFAP overlap, WT, TgSwDI and MTZ N=5, ATZ N=3, n \geq 9 measurements acquired/group. + p<0.05, **p<0.01, **** and ++++ p<0.0001, One-way ANOVA and Tukey's post-hoc test. **B)** Immunofluorescence images represent astrogliosis in the hypothalamus of 16-month-old mice. TgSwDI brains are characterized by increased GFAP+ cell area (μ m²) (GFAP, magenta), in contrast to age-matched WT, and CAIs attenuate this phenotype. Nuclei stained with DAPI (blue). Original magnification, 60x. Scale bar, 25 μ m. On the right, the relative quantification, WT, TgSwDI and MTZ: N=5, ATZ: N=4. ** p<0.01, +++ p<0.001, ****p<0.0001, One-way ANOVA and Tukey's post-hoc test. Data are expressed as mean \pm SEM.