

Supplementary Figure 1: Evaluation of motor function, death rates, spatial memory and Thioflavin S deposits following CAI treatment. A) Grip strength forelimbs (only) showed an impairment in the untreated Tg animals (p=0.009, one-way ANOVA and Tukey). For each group, roughly equivalent numbers of females and males were employed. Females were lighter that males (body weight plotted in grams; p<0.0001), but no significant differences within the same-sex group were observed; moreover, no change in death rates occurred due to ATZ and MTZ treatment, demonstrating that CAIs are not toxic. Animal numbers (after accounting for loss): TgSwDI: N=19, ATZ: N=13 and MTZ: N=14. B) Plots show the covered distance (cm) and the number of mistakes to find the escape hole in 16-month-old mice, after 8 months (top graphs; WT and MTZ: N=10, TgSwDI: N=19, ATZ: N=7) or 4 months (bottom graphs; WT: N=10, TgSwDI: N=19, ATZ: N=6 and MTZ N=4). C) Representative images of Aβ deposits stained with Thioflavin S in the hypothalamus of 16-month-old mice, treated for 8 months with CAIs. The severe hypothalamic Aβ deposition in TgSwDI was significantly decreased by CAI-treatment. Original magnification, 20x. Scale bar, 150µm. Relative quantification of Thioflavin S+ deposits shown on the right, WT, TgSwDI, ATZ and MTZ N=5, n≥10 measurements acquired/group. **D**) Representative images of  $A\beta$  deposits stained with Thioflavin S in the hippocampus, cortex and hypothalamus of 16-month-old mice, treated 4 months with CAIs. Original magnification, 20x. Scale bar, 150µm. Relative quantification of Thioflavin S+ deposits shown on the right, WT, TgSwDI, ATZ and MTZ: N=4, n≥8 measurements acquired/group. \* and + p<0.05, \*\* and ++ p<0.01, \*\*\* and +++ p<0.001, and \*\*\*\* and ++++ p<0.0001, One-way Anova and Tukey's posthoc test. Data are expressed as mean  $\pm$  SEM.