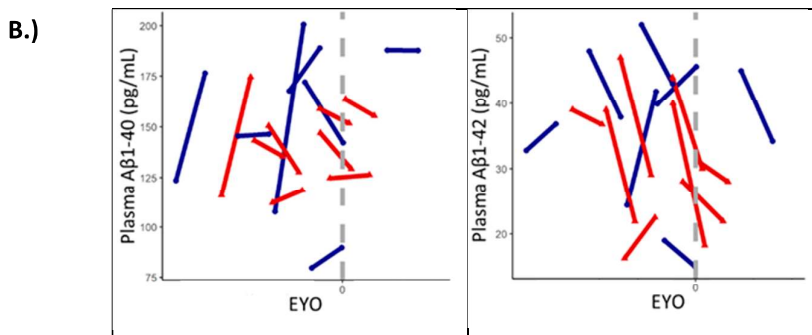
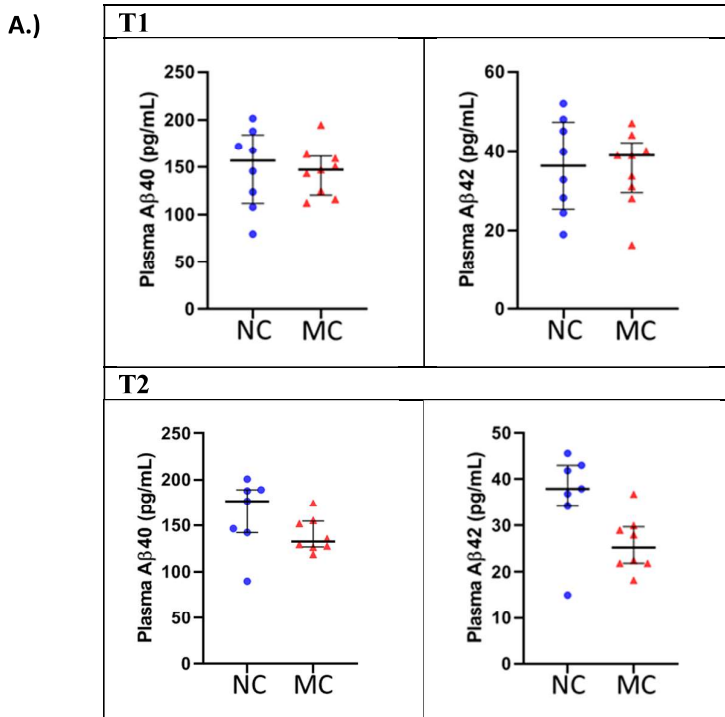


Supplementary Figure 1. Comparison of plasma A β 1-40 and A β 1-42 levels A.) cross-sectionally between D-CAA mutation non-carriers and carriers at T1 and T2 utilising the xMAP INNO-BIA Plasma A β Forms Multiplex Assay (Innogenetics, Ghent, Belgium) and B.) longitudinally between D-CAA mutation non-carriers and carriers.



Supplementary Table 1. Cross-sectional comparison of plasma A β levels between pre-symptomatic D-CAA mutation carriers and non-carriers. Plasma A β levels were measured utilising the xMAP INNO-BIA Plasma A β Forms Multiplex Assay (Innogenetics, Ghent, Belgium) and were compared between D-CAA mutation carriers and non-carriers using general linear models separately at T1 and T2. Data are presented as Mean \pm SD in pg/mL. p^a represents p-values adjusted for age, sex and *APOE* ϵ 4 carrier status. p<.05 was considered significant and is presented in bold font.

| | D-CAA NC | D-CAA MC | p | p ^a |
|----------------|--------------------|--------------------|-------------|----------------|
| T1 | n=8 | n=9 | | |
| A β 1-40 | 148.23 \pm 41.93 | 145.66 \pm 25.93 | .880 | .784 |
| A β 1-42 | 36.16 \pm 11.90 | 35.35 \pm 9.33 | .877 | .780 |
| T2 | n=7 | n=8 | | |
| A β 1-40 | 161.79 \pm 38.59 | 139.89 \pm 18.91 | .177 | .180 |
| A β 1-42 | 36.35 \pm 10.18 | 26.05 \pm 5.98 | .030 | .064 |

Supplementary Table 2. Longitudinal comparison of plasma A β 1-40 and A β 1-42 measured by xMAP INNO-BIA Plasma A β Forms Multiplex Assay (Innogenetics, Ghent, Belgium) between pre-symptomatic D-CAA mutation carriers and non-carriers. Plasma A β 1-40 and A β 1-42 concentrations measured using the xMAP INNO-BIA Plasma A β Forms Multiplex Assay platform were compared between D-CAA mutation carriers (MC) and non-carriers (NC) using repeated measures analyses at T1 and T2, before and after adjustment for covariates age, sex and *APOE* ϵ 4 carrier status, using a factorial design (all two-way interactions with time included). Data are presented as Mean \pm SD in pg/mL. $p < .05$ was considered significant and is presented in bold font.

| | D-CAA NC (n=7) | | D-CAA MC (n=8) | | Time | | Time (adjusted for covariates) | | Time*Mutation | | Time*Mutation (adjusted for covariates) | |
|----------------|--------------------|--------------------|--------------------|--------------------|----------|------------------------------------|--------------------------------|------------------------------------|---------------|------------------------------------|---|----------|
| | T1 | T2 | T1 | T2 | <i>p</i> | Pairwise <i>p</i> ^{NC} | <i>p</i> | Pairwise <i>p</i> ^{MC} | <i>p</i> | Pairwise <i>p</i> ^{NC} | <i>p</i> | <i>p</i> |
| A β 1-40 | 140.61 \pm 38.85 | 161.78 \pm 38.59 | 139.52 \pm 19.52 | 139.88 \pm 18.91 | .231 | .114 | .225 | .115 | .976 | .976 | .246 | .248 |
| A β 1-42 | 37.30 \pm 12.37 | 36.35 \pm 10.18 | 35.55 \pm 9.95 | 26.05 \pm 5.98 | .066 | .807 | .084 | .687 | .019 | .041 | .124 | .229 |