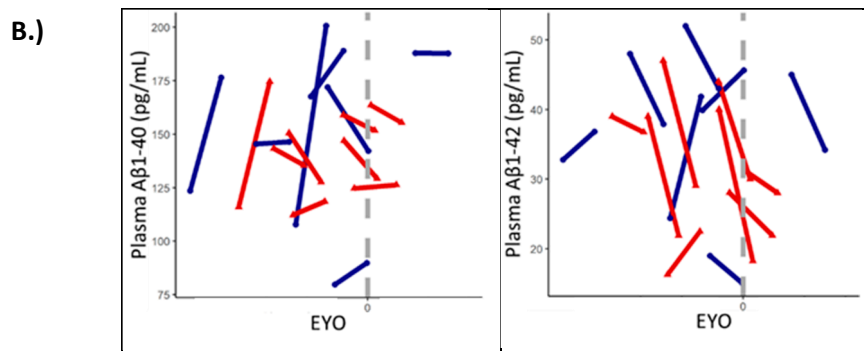
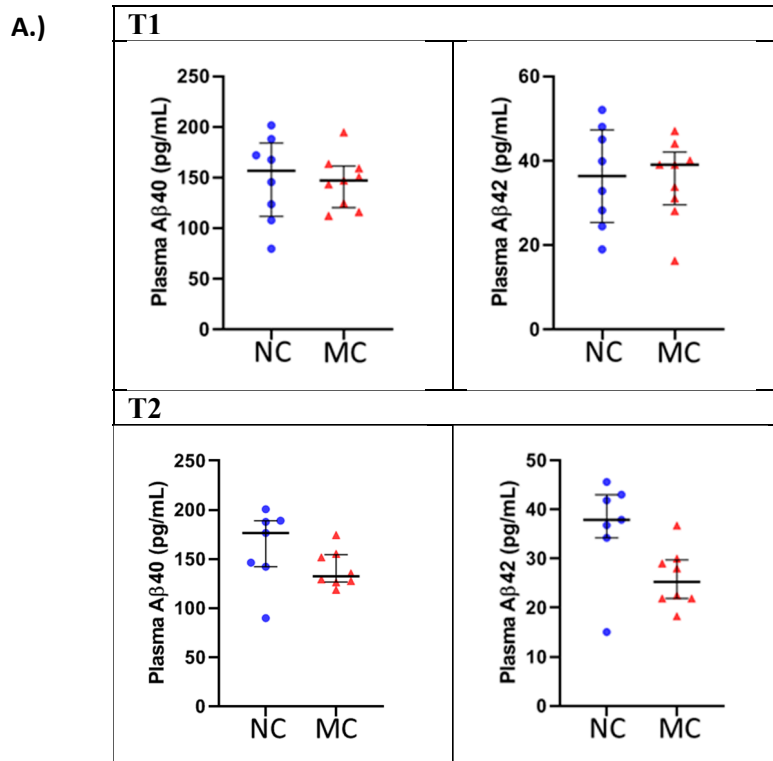


**Supplementary Figure 1. Comparison of plasma A $\beta$ 1-40 and A $\beta$ 1-42 levels A.) cross-sectionally between D-CAA mutation non-carriers and carriers at T1 and T2 utilising the xMAP INNO-BIA Plasma A $\beta$  Forms Multiplex Assay (Innogenetics, Ghent, Belgium) and B.) longitudinally between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



**Supplementary Table 1. Cross-sectional comparison of plasma A $\beta$  levels between pre-symptomatic D-CAA mutation carriers and non-carriers.** Plasma A $\beta$  levels were measured utilising the xMAP INNO-BIA Plasma A $\beta$  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<sup>a</sup> represents p-values adjusted for age, sex and *APOE*  $\epsilon$ 4 carrier status. p<.05 was considered significant and is presented in bold font.

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

**Supplementary Table 2. Longitudinal comparison of plasma A $\beta$ 1-40 and A $\beta$ 1-42 measured by xMAP INNO-BIA Plasma A $\beta$  Forms Multiplex Assay (Innogenetics, Ghent, Belgium) between pre-symptomatic D-CAA mutation carriers and non-carriers.** Plasma A $\beta$ 1-40 and A $\beta$ 1-42 concentrations measured using the xMAP INNO-BIA Plasma A $\beta$  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*  $\epsilon$ 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	$p$	<i>Pairwise</i>		$p$	<i>Pairwise</i>		$p$	$p$
						$p^{NC}$	$p^{MC}$		$p^{NC}$	$p^{MC}$		
A $\beta$ 1-40	140.61 $\pm$ 38.85	161.78 $\pm$ 38.59	139.52 $\pm$ 19.52	139.88 $\pm$ 18.91	.231	.114	.976	.225	.115	.976	.246	.248
A $\beta$ 1-42	37.30 $\pm$ 12.37	36.35 $\pm$ 10.18	35.55 $\pm$ 9.95	26.05 $\pm$ 5.98	.066	.807	<b>.019</b>	.084	.687	<b>.041</b>	.124	.229