

## Publishable Summary

**Background.** Individuals with subjective cognitive decline and clinical features increasing the likelihood of preclinical AD (SCD+) are at higher risk of developing dementia, and this risk is even more increased in amyloid-positive individuals. Some SCD+ individuals undergo amyloid-PET as part of research studies and frequently wish to know their amyloid status. However, the disclosure of a positive amyloid-PET result might have a negative impact on these individuals.

**Aim.** To assess the psychological impact of the amyloid-PET result disclosure in SCD+, and explore which variables are associated with a safer disclosure in amyloid-positive individuals. **Methods.** Participants were memory clinic patients with SCD+, recruited from 5 European memory clinics, and who underwent amyloid-PET as part of AMYPAD-DPMS. To investigate the psychological impact of the amyloid-PET result disclosure, we assessed disclosure related-distress using the Impact of Event Scale–Revised (IES-R, scores  $\geq 33$  indicate probable presence of a post-traumatic stress disorder (PTSD)), and anxiety and depression using the Hospital Anxiety and Depression scale (HADS, scores  $\geq 15$  indicate probable presence of severe mood disorder symptoms).

**Results.** Amyloid-positive SCD+ participants ( $n=27$ , age  $70\pm 8$  years, 52% males, education  $15\pm 4$  years, MMSE =  $29\pm 2$ ) had higher IES-R total scores (median $\pm$ IQR,  $10\pm 12$  vs  $0\pm 2$ ,  $p<0.001$ ) and sub-scores ( $p<0.001$ ) than amyloid-negative individuals ( $n=79$ , age  $67\pm 10$  years, 58% males, education  $15\pm 5$  years, MMSE =  $29\pm 2$ ). We observed no differences between amyloid-positive and amyloid-negative patients in the HADS Anxiety ( $-1.0\pm 4.8$  vs  $-2.0\pm 3.5$ ,  $p=0.058$ ) and Depression  $-1.0\pm 2.0$  vs  $-1.0\pm 3.0$ ,  $p=0.461$ ) deltas (score after disclosure – scores at baseline). In amyloid-positive SCD+, despite the small sample size, we observed that higher education was associated with lower disclosure-related distress ( $p=0.024$ ) while the presence of study partner was associated with higher disclosure-related distress ( $p=0.030$ ). No amyloid-positive SCD+ participants showed probable presence of PTSD or severe anxiety or depression symptoms at follow-up.

**Conclusion.** The disclosure of a positive amyloid-PET result to SCD+ was associated with a greater psychological impact, yet such impact did not reach the threshold for clinical concern.

# AMYPAD Deliverable 6.14 Report on the Amyloid PET result disclosure study on SCD+ patients (M72)

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**Acknowledgement:** This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 115952. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA.

