Table
Change in diagnosis, diagnosis confidence and in treatment and entirety of work-up.

			Clinical work-ups				
			Incomplete	Intermediate	Complete	tot	
Change in diagnosis		N	39	20	3	62	p = .627
		%	31.4%	28.6%	18.8%	29.5%	
Change in confidence		mean ± DS	+10.47 ±14.47	+11.9 ±15.03	+14.00 ±11.14	+11.38 ±14.41	p = .652
Treatment changes	Cognition specific drugs	N	43	26	4	73	p =.671
		%	34.7%	37.1%	25.0%	34.7%	
	Non cognition specific drugs	N	13	8	2	23	p = .888
		%	10.4%	11.4%	12.5%	10.9%	

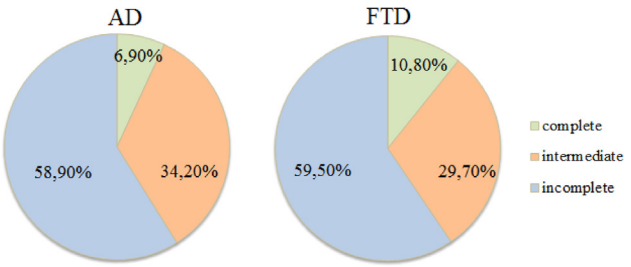

Figure. Routine clinical work-up in AD and FTD patients (% of patients in different work-ups).

seem to affect the incremental value of amyloid-PET in naturalistic clinical setting. The clinicians combinations and use of instrumental examination needs to be better understood and elucidated in view of the definition of an evidence-based diagnostic algorithm.

IC-P-017 CONCORDANCE OF [18F]FLUTEMETAMOL AMYLOID DEPOSITION IN COGNITIVELY HEALTHY ELDERLY MONOZYGOTIC TWIN PAIRS

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Background: Amyloid (Aβ) pathology precedes clinical dementia by decades. So far it remains unclear to what extent genetic and environmental influences play a role in Aβ deposition. Studies in monozygotic twins are useful to estimate the upper-limit of genetic contribution to a disease. Earlier studies in twins have focused on concordance of clinical Alzheimer's Disease (AD)-type dementia, but no twin studies have not been performed on the presence of Aβ pathology. The aim of this study is to estimate the concordance of regional Aβ load between cognitively healthy elderly monozygotic twin pairs. **Methods:** We selected the first 46 monozygotic twin pairs from the NTR-EMIF-AD PreclinAD study, which aims to enroll 100 twin pairs. Inclusion criteria were age ≥60 years and delayed recall score above -1.5 SD of normative data. Dynamic $^{[18F]}$flutemetamol (FMM) scans were performed with combined data from two scans (30 minutes starting directly after FMM injection and 90-110 minutes post injection). With cerebellar grey matter as reference region non-displaceable binding potential (BP_{ND}) in the anterior and posterior cingulate cortex (ACC and PCC) was calculated using the basis function implementation of the simplified reference tissue model (RPM1). Amyloid load was compared using correlation matrices with Pearson's correlation. **Results:** Subjects were on average 65.1 (IQR 62-73) years old and (67%) were female. They had 15 (SD 4.3) years of education and a MMSE score of 29 (IQR 29-30). Median FMM binding in ACC was 0.24 (IQR 0.19-0.33) BP_{ND} and in the PCC 0.25 (IQR 0.20-0.33) BP_{ND}. For the BP_{ND} in the ACC we found a correlation of 0.5 and for the PCC 0.6, see figure 1, both p <0.01. After correction for age and gender the correlation was 0.44 for ACC and 0.51 for PCC (both $p <$ 0.01). **Conclusions:** We found a significant correlation between monozygotic twins for regional Aβ BP_{ND} with an upper limit for genetic influences on total variance of 50-60%, which is larger than in reports on clinical AD-type dementia (20-59%) in twins. Our data suggests a strong genetic background for Aβ pathology in cognitively healthy elderly although non-genetic factors also influence Aβ aggregation. *S*upported by EU/EFPIA IMI EMIF n°115372.

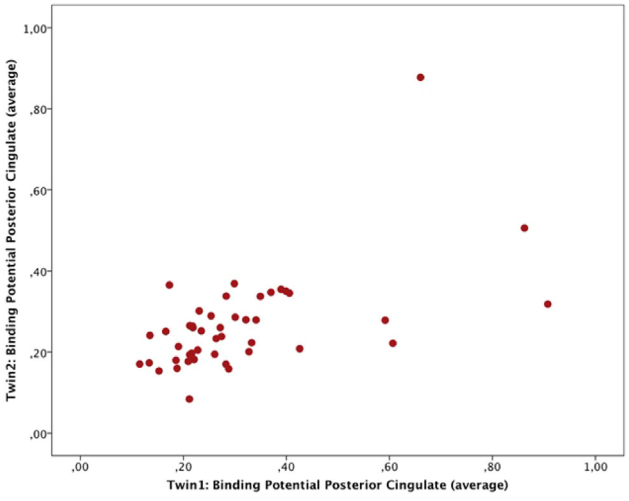

Figure 1. Correlation between Flutemetamol BPND in Posterior Cingulate Cortex in Twin 1 (x-axis) and Twin 2 (y-axis)