

Table 3: Linear regression models in which imaging signatures of white matter disease (WMHV), Alzheimer’s disease (SPARE-AD) and brain aging (SPARE-BA) are the outcomes and WBC, fibrinogen, hs-CRP and antiinflammatory medication are the predictors

Cohort	Outcome	WBC	hs-CRP ^a	Fibrinogen ^b	Anti-inflammatory medication	R ² range for the models per outcome
	WMHV	0.576 [0.320] (0.171)	-0.008 [0.107] (0.940)	-0.363 [0.412] (0.565)	-0.134 [0.227] (0.738)	[0.328 - 0.338]
SHIP-2 and SHIP-Trend (n=2204) §	SPARE-AD	0.148 [0.067] (0.108)	-0.004 [0.023] (0.940)	0.007 [0.087] (0.940)	0.058 [0.048] (0.386)	[0.171 - 0.173]
	SPARE-BA	-0.461 [0.086] (<0.001)*	-0.093 [0.029] (0.016)*	-0.205 [0.111] (0.170)	-0.104 [0.061] (0.180)	[0.672 - 0.693]

Coefficient [standard error] (fdr adjusted p-value). * and bold=significant at p<0.05.

§ Models are adjusted for age, age², sex, and study cohort effects.

a Measure available for n=1446 subjects

b Measure available for n=2198 subjects

SPARE-AD: Spatial Pattern of Atrophy for Recognition of Alzheimer’s disease; SPARE-BA: Spatial Pattern of Atrophy for Recognition of brain aging; WMHV: white matter hyperintensity volume; SHIP: Study of Health in Pomerania; WBC: white blood cell count; hs-CRP: high sensitive C-reactive protein