

CORRECTION

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Correction to: Cerebrovascular and amyloid pathology in predementia stages: the relationship with neurodegeneration and cognitive decline

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Correction

Upon publication of this article [1], it was noticed that there were some inconsistencies in Tables 1, 2 and 3. Some of the superscript letters were incorrectly assigned. Please see below the correct tables:

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Table 1 Comparisons of baseline and follow-up characteristics by Aβ and WMH status

	Aβ- WMH- <i>n</i> = 140	Aβ- WMH+ <i>n</i> = 39	Aβ + WMH- <i>n</i> = 63	Aβ + WMH+ <i>n</i> = 29
Baseline characteristics				
Age	61.7 (8.3) ^{B,C,D}	71.3 (7.7) ^{A,C}	66.7 (7.8) ^{A,B,D}	74.1 (5.0) ^{A,C}
Female, <i>n</i>	94 (67) ^C	23 (59)	32 (51) ^A	16 (55)
Education in years	10.9 (3.1)	11.9 (3.3)	11.1 (3.1)	10.3 (2.9)
Hypertension, <i>n</i> *	43 (34)	9 (25)	15 (25)	9 (32)
Obesity, <i>n</i> *	15 (14)	3 (11)	4 (8)	4 (21)
Diabetes, <i>n</i> *	16 (21)	3 (15)	3 (7)	5 (28)
APOE-ε4 carrier, <i>n</i> *	33 (51) ^B	5 (24) ^{A,C,D}	29 (62) ^B	10 (56) ^B
Diagnosis MCI, <i>n</i>	70 (50) ^D	21 (54) ^D	40 (64)	22 (76) ^{A,B}
amnesic MCI (% within MCI group)	40 (57)	15 (71)	27 (68)	17 (77)
non-amnesic MCI (% within MCI group)	30 (43)	6 (29)	13 (33)	5 (23)
CSF Aβ 1–42, pg/ml	973.6 (312.0) ^{C,D}	885.0 (242.0) ^{C,D}	404.3 (102.6) ^{A,B}	419.3 (97.2) ^{A,B}
White matter hyperintensities [†]	0.7 (0.5) ^{B,D}	2.3 (0.4) ^{A,C}	0.8 (0.4) ^{B,D}	2.4 (0.5) ^{A,C}
Follow-up characteristics				
Follow-up time	2.1 (1.5)	2.2 (1.3)	2.1 (1.2)	2.4 (1.2)
Time to progression to dementia	1.3 (0.5) ^B	2.0 (0.7) ^A	1.7 (0.7)	2.1 (1.2)
Progression to dementia, <i>n</i>	8 (6) ^{B,C,D}	9 (23) ^A	18 (29) ^A	11 (38) ^A
- AD-type dementia, <i>n</i>	2 (1) ^{B,C,D}	7 (18) ^A	18 (29) ^A	10 (35) ^A
- Vascular dementia, <i>n</i>	0 (0)	2 (5)	0 (0)	1 (3)
- Frontotemporal dementia, <i>n</i>	4 (3)	0 (0)	0 (0)	0 (0)
- Lewy Body dementia, <i>n</i>	1 (1)	0 (0)	0 (0)	0 (0)
- Dementia with unknown etiology, <i>n</i>	1 (1)	0 (0)	0 (0)	0 (0)

Results are mean (SD) for continuous variables or frequency (%). Hypertension, obesity, diabetes and APOE ε4 genotype were only available in a subgroup of the sample

Abbreviations: Aβ amyloid-beta, AD Alzheimer's disease, APOE Apolipoprotein E, MCI mild cognitive impairment

[†]WMH measured by the Fazekas scale, range 0–3

^A*p* < 0.05 compared to Aβ- WMH-

^B*p* < 0.05 compared to Aβ- WMH+

^C*p* < 0.05 compared to Aβ + WMH-

^D*p* < 0.05 compared to Aβ + WMH+

Table 2 Values of neurodegenerative markers by Aβ/WMH groups

	Aβ- WMH- <i>n</i> = 140	Aβ- WMH+ <i>n</i> = 39	Aβ + WMH- <i>n</i> = 63	Aβ + WMH+ <i>n</i> = 29
Neurodegeneration markers				
MTA score	1.2 (1.2) ^{B,C,D}	2.6 (1.6) ^{A,D}	2.1 (1.6) ^{A,D}	3.4 (1.8) ^{A,B,C}
MTA abnormal, <i>n</i>	62 (45) ^{B,C,D}	32 (82) ^A	41 (67) ^{A,D}	26 (93) ^{A,C}
P-tau, pg/ml	54.5 (27.7) ^C	63.2 (29.3)	77.0 (56.3) ^A	65.2 (38.2)
P-tau abnormal, <i>n</i>	53 (38) ^C	22 (58)	45 (71) ^A	15 (52)
T-tau, pg/ml	314.7 (202.0) ^{B,C,D}	438.4 (248.0) ^A	499.3 (413.8) ^A	426.2 (275.2) ^A
T-tau abnormal, <i>n</i>	36 (26) ^{B,C,D}	20 (53) ^A	36 (57) ^A	14 (48) ^A

Results are mean (SD) and number (%). All analyses were adjusted for study, baseline diagnosis and demographics

Abbreviations: Aβ amyloid-beta, MTA medial temporal lobe atrophy, P-tau phosphorylated tau, T-tau Total tau, WMH white matter hyperintensities

^A*p* < 0.05 compared to Aβ- WMH-

^B*p* < 0.05 compared to Aβ- WMH+

^C*p* < 0.05 compared to Aβ + WMH-

^D*p* < 0.05 compared to Aβ + WMH+

Table 3 Cognitive performance and decline by A β /WMH groups

		A β - WMH-	A β - WMH+	A β + WMH-	A β + WMH+
MMSE ^a	n	140	39	62	27
	Baseline	27.79 (27.39, 28.19)	27.52 (26.83, 28.21)	27.20 (26.62, 27.78)	27.40 (26.54, 28.25)
	Slope	-0.01 (-0.15, 0.12)	-0.29 (-0.55, -0.02)	-0.22 (-0.44, -0.01)	-0.31 (-0.62, 0.00)
Memory delayed recall z-score	n	133	37	58	27
	Baseline	-0.48 (-0.72, -0.24) ^{B,C,D}	-1.04 (-1.48, -0.61) ^A	-1.04 (-1.41, -0.68) ^A	-1.33 (-1.86, -0.80) ^A
	Slope	0.05 (-0.03, 0.13)	0.02 (-0.12, 0.17)	0.02 (-0.11, 0.14)	-0.07 (-0.24, 0.09)
Executive functioning z-score	n	130	37	60	24
	Baseline	-0.48 (-0.76, -0.21)	-0.41 (-0.92, 0.09)	-0.78 (-1.18, -0.37)	-1.12 (-1.73, -0.50)
	Slope	0.06 (-0.02, 0.13)	-0.00 (-0.15, 0.15)	-0.03 (-0.16, 0.10)	-0.04 (-0.23, 0.15)

Results are mean (95% confidence interval). Bold slope estimates = $p < 0.05$. All analyses were adjusted for study. The analyses on MMSE scores were also corrected for demographics and baseline diagnosis

Abbreviations: A β amyloid-beta, MMSE mini mental state examination, WMH white matter Hyperintensities

^A $p < 0.05$ compared to A β - WMH-

^B $p < 0.05$ compared to A β - WMH+.

^C $p < 0.05$ compared to A β + WMH-.

^D $p < 0.05$ compared to A β + WMH+.