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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-	Aβ- WMH+	Aβ + WMH-	Aβ + WMH+
	n = 140	*n* = 39	*n* = 63	*n* = 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, n	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, n*	43 (34)	9 (25)	15 (25)	9 (32)
Obesity, n*	15 (14)	3 (11)	4 (8)	4 (21)
Diabetes, n*	16 (21)	3 (15)	3 (7)	5 (28)
APOE-ε4 carrier, n*	33 (51)[B]	5 (24)[A,C,D]	29 (62)[B]	10 (56)[B]
Diagnosis MCI, n	70 (50)[D]	21 (54)[D]	40 (64)	22 (76)[A,B]
amnestic MCI (% within MCI group)	40 (57)	15 (71)	27 (68)	17 (77)
non-amnestic 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, n	8 (6)[B,C,D]	9 (23)[A]	18 (29)[A]	11 (38)[A]
- AD-type dementia, n	2 (1)[B,C,D]	7 (18)[A]	18 (29)[A]	10 (35)[A]
- Vascular dementia, n	0 (0)	2 (5)	0 (0)	1 (3)
- Frontotemporal dementia, n	4 (3)	0 (0)	0 (0)	0 (0)
- Lewy Body dementia, n	1 (1)	0 (0)	0 (0)	0 (0)
- Dementia with unknown etiology, n	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-	Aβ- WMH+	Aβ + WMH-	Aβ + WMH+
Neurodegeneration markers	n = 140	n = 39	n = 63	n = 29
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, n	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, n	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, n	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 Aβ/WMH groups

		Aβ- WMH-	Aβ- WMH+	Aβ + WMH-	Aβ + WMH+
MMSE*	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: *Aβ* amyloid-beta, *MMSE* mini mental state examination, *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+.