

## Correlations Between Single Nucleotide Polymorphisms, Cognitive Dysfunction, and Postmortem Brain Pathology in Alzheimer's Disease Among Han Chinese

Qian Yang<sup>1,2</sup>, Kang Chen<sup>2,3</sup>, Hanlin Zhang<sup>2,3</sup>, Wanying Zhang<sup>4</sup>, Changlin Gong<sup>2,3</sup>, Qing Zhang<sup>1,2</sup>, Pan Liu<sup>1,2</sup>, Tianyi Sun<sup>1,2</sup>, Yuanyuan Xu<sup>5</sup>, Xiaojing Qian<sup>1</sup>, Wenying Qiu<sup>1\*</sup>, Chao Ma<sup>1\*</sup>

**Table S1.** Demographic and clinical characteristics of participants classified by global ECog score.

Global ECog Score	Gender			Age at death (years)	Education (years)
	Male <i>n</i> (%)	Female <i>n</i> (%)	Total <i>n</i> (%)		
1	42 (63)	25 (37)	67 (61)	77 ± 14.7	11.3 (0.0, 16.0)
1-2	6 (35)	11 (65)	17 (15)	75 ± 12.7	12.1 (0.0, 18.0)
>2	17 (65)	9 (35)	26 (24)	84 ± 10	12.1 (5.0, 18.0)
Total	65 (59)	45 (41)	110 (100.0)	78 ± 13.7	11.6 (0.0, 18.0)

Age at death is expressed as mean ± SD while education and postmortem delay are expressed as median (minimum, maximum). Numbers in parentheses meant column percentage unless otherwise indicated.

**Table S2.** Demographic and clinical characteristics of subjects classified by ABC score.

ABC Score	Gender			Age at death (years)	Education (years)	Post-mortem delay (h)
	Male <i>n</i> (%)	Female <i>n</i> (%)	Total <i>n</i> (%)			
0	17 (53)	15 (47)	32(28)	74 ± 15.1	12.2 (0.0, 16.0)	17.7 (4.0, 41.0)
1	26 (68)	12 (32)	38(35)	75 ± 13.3	11.0 (0.0, 16.0)	14.1 (1.5, 41.0)
2	17 (65)	9 (35)	26(24)	85 ± 13.1	11.2 (5.0, 18.0)	18.4 (3.0, 57.0)
3	4 (29)	10 (71)	14(13)	82 ± 8.4	12.6 (0.0, 16.0)	8.5 (3.0, 94.0)
Total	64 (58)	46 (42)	110 (110.0)	78.1 ± 13.8	11.6 (0.0, 18.0)	16.2 (1.5, 94.0)

Age at death is expressed as mean ± SD while education and postmortem delay are expressed as median (minimum, maximum). Numbers in parentheses mean column percentage unless otherwise indicated.

**Table S3.** Spearman correlations between ECog scores, ABC scores, and demographic variables.

	Global ECog	Memory	Language	Spatial	Planning	Organiz ation	Divided Attention	General ABC score	A	B	C
Gender	-0.013 (0.896)	-0.072 (0.465)	-0.028 (0.777)	-0.030 (0.766)	-0.079 (0.423)	-0.046 (0.640)	-0.074 (0.456)	0.109 (0.269)	0.105 (0.288)	0.156 (0.113)	0.024 (0.812)
Age	0.295** (0.002)	0.319** (0.001)	0.267** (0.006)	0.274** (0.005)	0.301** (0.002)	0.280** (0.004)	0.281** (0.004)	0.478** (<0.001)	0.297** (0.002)	0.554*** (<0.001)	0.517*** (<0.001)
Education	0.089 (0.367)	0.081 (0.414)	0.137 (0.165)	0.123 (0.214)	0.174 (0.007)	0.116 (0.242)	-0.169 (0.086)	0.002 (0.981)	-0.030 (0.761)	0.001 (0.992)	0.019 (0.849)

The results are displayed as correlation coefficients (*P* value) in each cell. \**P* <0.05 (2-tailed). \*\**P* <0.01 (2-tailed). \*\*\**P* <0.001 (2-tailed).