

Supplementary Data

The *MTHFD1L* Gene rs11754661 Marker is Not Associated with Alzheimer's Disease in a Sample of the Spanish Population

Reposo Ramírez-Lorca^a, Mercé Boada^{b,c}, Carmen Antúnez^{d,e}, Jesús López-Arrieta^f, Concha Moreno-Rey^a, Isabel Hernández^b, Juan Marín^d, Javier Gayán^a, Antonio González-Pérez^a, Montserrat Alegret^b, Lluís Tárraga^b, Luis M. Real^a and Agustín Ruiz^{a,*}

^aDepartment of Structural Genomics, NeoCodex, Sevilla, Spain

^bMemory Clinic of Fundació ACE, Institut Català de Neurociències Aplicades, Barcelona, Spain

^cHospital Universitari Vall d'Hebron – Institut de Recerca, Universitat Autònoma de Barcelona (VHIR-UAB), Barcelona, Spain

^dDementia Unit, University Hospital Virgen de la Arrixaca, Murcia, Spain

^eAlzheimer Foundation, Murcia, Spain

^fMemory Unit, University Hospital La Paz-Cantoblanco, Madrid, Spain

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Supplementary Table 1

Primers and probes employed for Real-time detection of MTHFD1 rs11754661 marker

PCR primers	Forward	CAGGTAGGATGCTCCTTGAG
	Reverse	TATGTTTGCCAGGCTGGTC
FRET probes	Sensor	GGGAGATACAGATGAATACC[Fic]
	Anchor	[Cy5]GAAACTTTTTCTAGTAAGACCATCT[Phos]

[Fic], Fluorescein; [Cy5], Fluorochrome Cy5; [Phos], Phosphorothioate. All sequences are given in 5' to 3' direction. PCR: Polymerase chain reaction; FRET: fluorescence resonance energy transfer.

Supplementary Table 2

rs11754661 genotypes and minor allele frequencies (MAF) observed in the Spanish population

rs11754661	AD cases	Controls	NHEC	All controls	All Individuals
GG	984	1052	108	1160	2144
GA	151	143	11	154	305
AA	5	11	2	13	18
MAF	0.07	0.07	0.06	0.07	0.07

NHEC: Neurologically healthy elderly controls; AD: Alzheimer's disease.

*Correspondence to: Dr. Agustín Ruiz, Department of Structural Genomics, Neocodex SL, Avda. Charles Darwin 6, Acceso A. Parque Científico y Tecnológico Isla de la Cartuja, 41092-Seville, Spain. Tel.: +34 65781907; Fax: +34 955047325; E-mail: aruiz@neocodex.es.

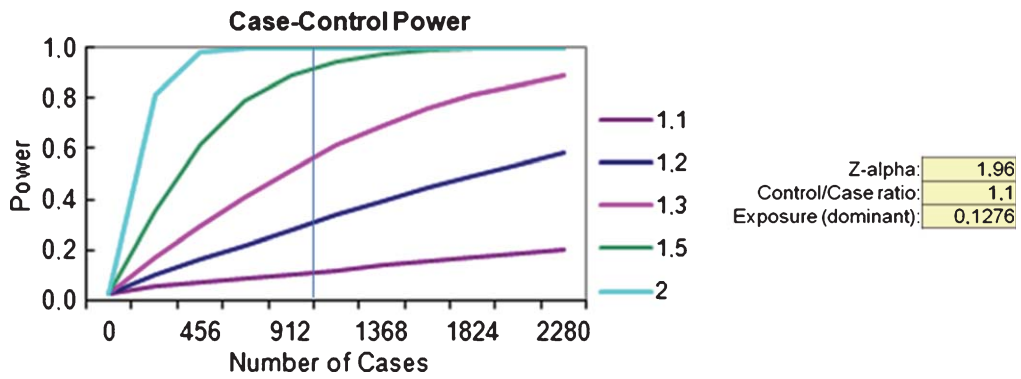
Supplementary Table 3

APOE ε4 genotype-(3a) and gender-(3b) stratified results for the rs11754661 marker in the Spanish population

(3a) APOE ε4 (dominant model)	Case/ all controls	MTHFD1L dominant model		Effect size estimation (OR)
		GG	GA+AA	
ε4-	Control	922	131	OR = 1.060 [0.790–1.421], p = 0.699
	Cases	558	84	
ε4+	Control	218	30	OR = 1.211 [0.765–1.916], p = 0.413
	Cases	414	69	

(3b) Gender	Case/ all controls	MTHFD1L dominant model		Effect size estimation (OR)
		GG	GA+AA	
Male	Control	552	72	OR = 1.379 [0.940–2.025], p = 0.1
	Cases	289	52	
Female	Control	603	94	OR = 0.965 [0.716–1.303], p = 0.818
	Cases	691	104	

Note: (3a) OR between groups is homogeneous (Breslow-Day test negative, p = 0.630). (3b) OR between groups is homogeneous (Breslow-Day test negative, p = 0.151).



Cases	1,1	1,2	1,3	OR 1,4	1,5	1,75	2
0	0,0249979	0,0249979	0,0249979	0,0249979	0,0249979	0,0249979	0,0249979
228	0,0542220	0,1014267	0,1684256	0,2537116	0,3525718	0,6129259	0,8163786
456	0,0723203	0,1614912	0,2935100	0,4526682	0,6131681	0,8927829	0,9832483
684	0,0891010	0,2207775	0,4117696	0,6173206	0,7877401	0,9758027	0,9989134
912	0,1053683	0,2792295	0,5187098	0,7422552	0,8905415	0,9952200	0,9999427
1140	0,1213934	0,3362793	0,6120675	0,8315506	0,9461877	0,9991417	0,9999974
1368	0,1372923	0,3913762	0,6913554	0,8926176	0,9745369	0,9998567	0,9999999
1596	0,1531182	0,4440768	0,7572220	0,9329716	0,9883248	0,9999774	1,0000000
1824	0,1688948	0,4940563	0,8109514	0,9589103	0,9947868	0,9999966	1,0000000
2052	0,1846303	0,5410978	0,8541127	0,9752049	0,9977245	0,9999995	1,0000000
2280	0,2003240	0,5850776	0,8883314	0,9852441	0,9990262	0,9999999	1,0000000

Supplementary Figure 1. Power calculations for rs11754661 in our series.