

Primers for pyrosequencing promotor region FKBP5 (region, hg19 6:35,656,792-35,656,628)

FKBP5-prom-F BIOTIN-5'ATAGTTTYGGGGTTTTATGGAAGG3'

FKBP5-prom-R 5'TACTCCRCTAACCCTTCAACCC3'

Table S1. Allele frequency differences for rs1360780 in FKBP5 gene

Groups	Allele freq. differences (chi square, p-value)
ND vs. Nona+	chi2=0.03 p=0.85360 (P)
ND vs. Patients with AD	chi2=0.59 p=0.44236(P)
Nona+ vs. Patients with AD	chi2=0.46 p=0.49633 (P)

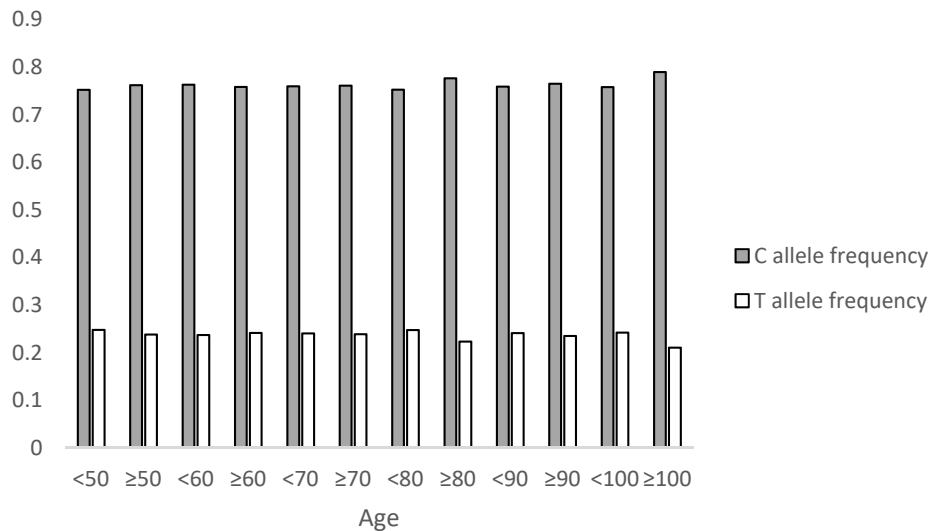


Figure S1. Allele frequency differences for rs1360780 in *FKBP5* gene in ND and Nona+ groups depending on the age

Table S2. Allele frequency differences for rs1360780 in FKBP5 gene in ND and Nona+ groups depending on the age

Groups	Allele freq. differences
19-39 vs. 40-59 years	chi2=0.46 p=0.49619 (P)
19-39 vs. 60-79 years	chi2=0.00 p=0.99463 (P)
19-39 vs. 80-107 years	chi2=0.63 p=0.42787 (P)
40-59 vs. 60-79 years	chi2=0.80 p=0.36979 (P)

40-59 vs. 80-107 years

chi2=0.01 p=0.92773 (P)

60-79 vs. 80-107 years

chi2=1.20 p=0.27417 (P)

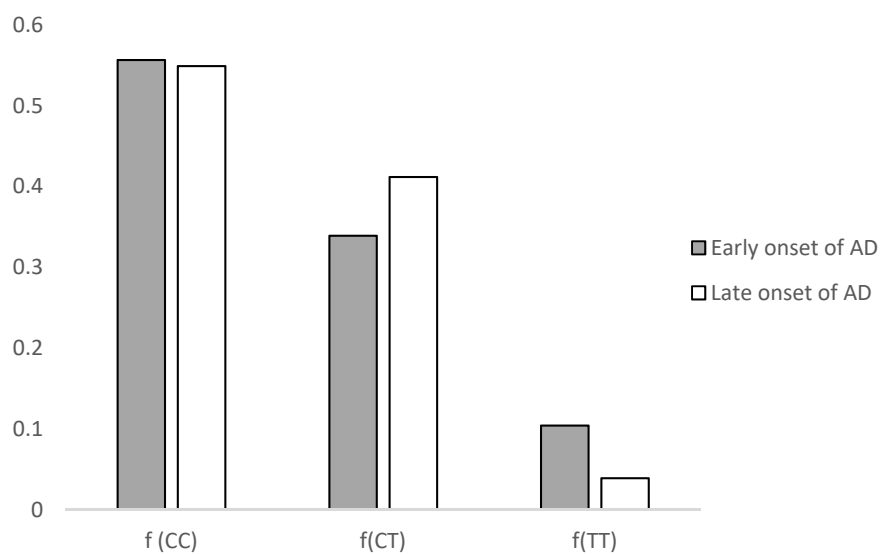


Figure S2. Frequencies of CC, CT, and TT genotypes in rs1360780 FKBP5 in patients with early (< 65) and late (≥ 65) forms of AD

Table S3. Allele frequencies of $\epsilon 2/\epsilon 3/\epsilon 4$ polymorphism in APOE gene

Group	Number	Genotypes frequency						Allele frequency			HWE, p-value (Pearson)
		$\epsilon 2/\epsilon 2$	$\epsilon 2/\epsilon 3$	$\epsilon 2/\epsilon 4$	$\epsilon 3/\epsilon 3$	$\epsilon 3/\epsilon 4$	$\epsilon 4/\epsilon 4$	$\epsilon 2$	$\epsilon 3$	$\epsilon 4$	
ND	479	0	0,150	0,013	0,660	0,165	0,012	0,081	0,817	0,101	0,584441
Nona+	100	0	0,180	0,020	0,630	0,150	0,020	0,100	0,795	0,105	0,339557
Patients with Alzheimer's disease	221	0	0,063	0,009	0,394	0,407	0,127	0,036	0,629	0,335	0,330537

Table S4 Allele frequency differences for $\epsilon 2/\epsilon 3/\epsilon 4$ polymorphism in *APOE* gene

Groups	Allele freq. differences (chi square, p-value)
ND vs . Long-livers	chi2=0.03 p=0.87340 (P)
ND vs. Patients with AD	chi2=114.31 p=1.116e-26 (P)
Long-livers vs. Patients with AD	chi2=37.51 p=9.115e-10 (P)

Table S5. Demographic characteristics of participants with EEG

	All participants		Men		Women	
	<i>FKBP CC</i>	<i>FKBP CT&TT</i>	<i>FKBP CC</i>	<i>FKBP CT&TT</i>	<i>FKBP CC</i>	<i>FKBP CT&TT</i>
N	94	67	31	29	63	38
Age, years	49.8 \pm 1.8	47.4 \pm 2.0	47.2 \pm 3.4	45.8 \pm 3.3	51.1 \pm 2.0	48.6 \pm 2.4

The data are presented as the means and standard errors

Table S6. Log-transformed relative power (mean and SE) of EEG bands in the non-demented men and women with the *FKBP5* CC and *FKBP5* CT&TT genotypes.

Effect	Level of Factor	Level of Factor	N	Delta Mean	Delta SE	Theta Mean	Theta SE	Alpha Mean	Alpha SE	Beta1 Mean	Beta1 SE	Beta2 Mean	Beta2 SE
Total			161	-2,18	0,05	-1,41	0,03	-0,23	0,05	-1,90	0,03	-2,49	0,05
Sex	Men		60	-2,05	0,08	-1,36	0,05	-0,34	0,08	-1,89	0,05	-2,44	0,08
Sex	Women		101	-2,26	0,05	-1,44	0,04	-0,17	0,06	-1,90	0,05	-2,52	0,06
<i>FKBP5</i>	CC		94	-2,21	0,06	-1,44	0,04	-0,20	0,06	-1,91	0,05	-2,53	0,06
<i>FKBP5</i>	CT&TT		67	-2,14	0,07	-1,36	0,05	-0,28	0,08	-1,89	0,05	-2,43	0,08
Sex * <i>FKBP5</i>	Men	CC	31	-2,18	0,10	-1,40	0,08	-0,22	0,09	-1,95	0,08	-2,60	0,12
Sex * <i>FKBP5</i>	Men	CT&TT	29	-1,90	0,12	-1,32	0,07	-0,48	0,12	-1,83	0,07	-2,27	0,11
Sex * <i>FKBP5</i>	Women	CC	63	-2,22	0,08	-1,46	0,05	-0,19	0,08	-1,88	0,06	-2,49	0,08
Sex * <i>FKBP5</i>	Women	CT&TT	38	-2,32	0,07	-1,39	0,08	-0,12	0,11	-1,94	0,07	-2,55	0,11