

Supplementary table 4. USF1 SNPs and haplotypes and their association with SP type and NFT prevalence (APOE4 carriership as a covariate) in under 65 year old.

|              | rs10908821           |      |           |    | rs2073658            |      |           |    | rs2774276            |      |           |       | rs2516839            |      |           |    | rs1556259            |      |           |    | rs2774279         |      |           |    |
|--------------|----------------------|------|-----------|----|----------------------|------|-----------|----|----------------------|------|-----------|-------|----------------------|------|-----------|----|----------------------|------|-----------|----|-------------------|------|-----------|----|
|              | Aff. (%) CC*/G+      | OR   | CI        | p  | Aff. (%) CC*/T+      | OR   | CI        | p  | Aff. (%) CC*/G+      | OR   | CI        | p     | Aff. (%) TT*/C+      | OR   | CI        | p  | Aff. (%) AA*/G+      | OR   | CI        | p  | Aff. (%) CC*/T+   | OR   | CI        | p  |
| SP           | 26(13.3)/4(6.7)      | 0.46 | 0.15-1.41 | NS | 14(12.6)/17(11.6)    | 0.99 | 0.46-2.16 | NS | 17(11.6)/14(12.4)    | 1.02 | 0.47-2.22 | NS    | 12(12.8)/18(11.0)    | 0.86 | 0.39-1.91 | NS | 23(12.4)/8(11.0)     | 0.96 | 0.40-2.30 | NS | 16(11.0)/14(12.7) | 1.10 | 0.50-2.42 | NS |
| Non neuritic | 17(8.7)/2(3.3)       | 0.34 | 0.08-1.55 | NS | 10(9.0)/10(6.8)      | 0.82 | 0.32-2.07 | NS | 8(5.4)/12(10.6)      | 1.87 | 0.73-4.78 | NS    | 6(6.4)/13(8.0)       | 1.19 | 0.43-3.27 | NS | 15(8.1)/5(6.8)       | 0.86 | 0.30-2.49 | NS | 10(6.9)/9(8.2)    | 1.13 | 0.44-2.91 | NS |
| Neuritic     | 10(5.1)/1(1.7)       | 0.29 | 0.04-2.54 | NS | 3(2.7)/8(5.4)        | 2.44 | 0.61-9.79 | NS | 9(6.1)/2(1.8)        | 0.26 | 0.05-1.24 | NS    | 7(7.4)/4(2.5)        | 0.31 | 0.08-1.12 | NS | 9(4.8)/2(2.7)        | 0.62 | 0.13-3.04 | NS | 7(4.8)/4(3.6)     | 0.66 | 0.18-2.40 | NS |
| Diffuse      | 8(4.1)/1(1.7)        | 0.36 | 0.04-3.00 | NS | 6(5.4)/4(2.7)        | 0.56 | 0.15-2.07 | NS | 1(0.7)/9(8.0)        | 11.1 | 1.37-89.7 | 0.024 | 1(1.1)/8(4.9)        | 4.40 | 0.54-36.0 | NS | 8(4.3)/2(2.7)        | 0.66 | 0.13-3.22 | NS | 5(3.4)/4(3.6)     | 0.98 | 0.25-3.80 | NS |
| Primitive    | 9(4.6)/1(1.7)        | 0.33 | 0.04-2.64 | NS | 4(3.6)/6(4.1)        | 1.19 | 0.32-4.35 | NS | 7(4.8)/3(2.7)        | 0.55 | 0.14-2.18 | NS    | 5(5.3)/5(3.1)        | 0.55 | 0.16-1.97 | NS | 7(3.8)/3(4.1)        | 1.08 | 0.27-4.32 | NS | 5(3.4)/5(4.5)     | 1.28 | 0.36-4.56 | NS |
| Classic      | 10(5.1)/1(1.7)       | 0.29 | 0.04-2.35 | NS | 3(2.7)/8(5.4)        | 2.42 | 0.60-9.72 | NS | 9(6.1)/2(1.8)        | 0.26 | 0.05-1.27 | NS    | 7(7.4)/4(2.5)        | 0.31 | 0.09-1.14 | NS | 9(4.8)/2(2.7)        | 0.62 | 0.13-3.03 | NS | 7(4.8)/4(3.6)     | 0.66 | 0.18-2.39 | NS |
| Burnt out    | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .     | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)     | .    | .         | .  |
| Cerad ≤1.5%  | 20(10.2)/3(5.0)      | 0.45 | 0.13-1.60 | NS | 11(9.9)/13(8.8)      | 0.95 | 0.40-2.24 | NS | 11(7.5)/13(11.5)     | 1.46 | 0.62-3.45 | NS    | 8(8.5)/15(9.2)       | 1.06 | 0.43-2.64 | NS | 18(9.7)/6(8.2)       | 0.90 | 0.34-2.40 | NS | 14(9.7)/9(8.2)    | 0.83 | 0.34-2.02 | NS |
| Cerad >1.5%  | 6(3.1)/1(1.7)        | 0.50 | 0.06-4.38 | NS | 3(2.7)/4(2.7)        | 1.17 | 0.25-5.52 | NS | 6(4.1)/1(0.9)        | 0.19 | 0.02-1.66 | NS    | 4(4.3)/3(1.8)        | 0.42 | 0.09-2.01 | NS | 5(2.7)/2(2.7)        | 1.18 | 0.22-6.53 | NS | 2(1.4)/5(4.5)     | 3.06 | 0.56-16.6 | NS |
| NFT          | 39(23.1)/5(10.4)     | 0.39 | 0.15-1.06 | NS | 17(17.9)/27(21.6)    | 1.30 | 0.66-2.56 | NS | 28(22.6)/17(17.3)    | 0.70 | 0.36-1.39 | NS    | 16(21.3)/28(19.6)    | 0.91 | 0.46-1.82 | NS | 31(19.9)/13(20.0)    | 1.04 | 0.50-2.15 | NS | 25(20.2)/19(20.7) | 1.03 | 0.53-2.01 | NS |
|              | Haplotype 2 (CCCTAT) |      |           |    | Haplotype 3 (CCCGCG) |      |           |    | Haplotype 4 (CCGCAC) |      |           |       | Haplotype 5 (CTCTAC) |      |           |    | Haplotype 7 (GCGCAC) |      |           |    |                   |      |           |    |
|              | Aff. (%) H2*/H2+     | OR   | CI        | p  | Aff. (%) H3*/H3+     | OR   | CI        | p  | Aff. (%) H4*/H4+     | OR   | CI        | p     | Aff. (%) H5*/H5+     | OR   | CI        | p  | Aff. (%) H7*/H7+     | OR   | CI        | p  |                   |      |           |    |
| SP           | 18(11.7)/14(12.4)    | 0.99 | 0.46-2.15 | NS | 24(12.4)/8(10.8)     | 0.94 | 0.39-2.25 | NS | 23(11.0)/9(15.8)     | 1.44 | 0.60-3.41 | NS    | 14(12.5)/18(11.6)    | 1.03 | 0.47-2.22 | NS | 27(13.2)/5(7.9)      | 0.54 | 0.19-1.50 | NS |                   |      |           |    |
| Non neuritic | 12(7.2)/9(8.0)       | 1.01 | 0.40-2.51 | NS | 16(7.8)/5(6.8)       | 0.87 | 0.30-2.49 | NS | 12(5.4)/9(15.8)      | 2.98 | 1.17-7.59 | 0.022 | 10(8.9)/11(6.6)      | 0.83 | 0.33-2.06 | NS | 18(8.3)/3(4.8)       | 0.50 | 0.14-1.76 | NS |                   |      |           |    |
| Neuritic     | 8(4.8)/4(3.5)        | 0.62 | 0.18-2.19 | NS | 10(4.9)/2(2.7)       | 0.57 | 0.12-2.77 | NS | 11(5.0)/1(1.8)       | 0.34 | 0.04-2.76 | NS    | 3(2.7)/9(5.4)        | 2.52 | 0.64-9.84 | NS | 11(5.1)/1(1.6)       | 0.26 | 0.03-2.07 | NS |                   |      |           |    |
| Diffuse      | 6(3.6)/4(3.5)        | 0.87 | 0.24-3.22 | NS | 8(3.9)/2(2.7)        | 0.70 | 0.14-3.43 | NS | 3(1.4)/7(12.3)       | 9.21 | 2.26-37.5 | 0.002 | 6(5.4)/4(2.4)        | 0.52 | 0.14-1.91 | NS | 8(3.7)/2(3.2)        | 0.73 | 0.15-3.60 | NS |                   |      |           |    |
| Primitive    | 6(3.6)/5(4.4)        | 1.14 | 0.34-3.88 | NS | 8(3.9)/3(4.1)        | 1.03 | 0.26-4.02 | NS | 9(4.1)/2(3.5)        | 0.90 | 0.19-4.34 | NS    | 4(3.6)/7(4.2)        | 1.28 | 0.36-4.55 | NS | 10(4.6)/1(1.6)       | 0.30 | 0.04-2.42 | NS |                   |      |           |    |
| Classic      | 8(4.8)/4(3.5)        | 0.62 | 0.18-2.19 | NS | 10(4.9)/2(2.7)       | 0.57 | 0.12-2.76 | NS | 11(5.0)/1(1.8)       | 0.35 | 0.04-2.81 | NS    | 3(2.7)/9(5.4)        | 2.50 | 0.64-9.78 | NS | 11(5.1)/1(1.6)       | 0.26 | 0.03-2.08 | NS |                   |      |           |    |
| Burnt out    | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .     | 0(0.0)/0(0.0)        | .    | .         | .  | 0(0.0)/0(0.0)        | .    | .         | .  |                   |      |           |    |
| Cerad ≤1.5%  | 16(10.4)/9(8.0)      | 0.74 | 0.31-1.76 | NS | 19(9.8)/6(8.1)       | 0.87 | 0.33-2.32 | NS | 16(7.6)/9(15.8)      | 2.05 | 0.84-5.03 | NS    | 11(9.8)/14(9.0)      | 1.00 | 0.43-2.33 | NS | 21(10.3)/4(6.3)      | 0.56 | 0.18-1.72 | NS |                   |      |           |    |
| Cerad >1.5%  | 2(1.3)/5(4.4)        | 3.12 | 0.58-16.9 | NS | 5(2.6)/2(2.7)        | 1.20 | 0.22-6.62 | NS | 7(3.3)/0(0.0)        | .    | .         | .     | 3(2.7)/4(2.6)        | 1.14 | 0.24-5.41 | NS | 6(2.9)/1(1.6)        | 0.47 | 0.05-4.10 | NS |                   |      |           |    |
| NFT          | 29(20.9)/20(21.1)    | 1.00 | 0.53-1.91 | NS | 35(20.8)/14(21.2)    | 1.05 | 0.52-2.11 | NS | 36(19.9)/13(24.5)    | 1.27 | 0.61-2.63 | NS    | 18(18.8)/31(22.5)    | 1.30 | 0.67-2.50 | NS | 43(23.5)/6(11.8)     | 0.43 | 0.17-1.09 | NS |                   |      |           |    |

.denotes the values were unable to be computed. \*denotes the most common haplotype/homozygous genotype acting as the reference group in the analyses. Aff.(%) refers to number of individuals affected with SP/NFT.

USF1 – upstream transcription factor 1 gene, SNPs – single nucleotide polymorphisms, SP – senile plaques, NFT – neurofibrillary tangles, APOE4 – Apolipoprotein E ε4, OR – odds ratio, CI – confidence interval, p – p-value, NS – non significant p-value