**Working memory deficits in schizophrenia are associated with the rs34884856 variant and expression levels of the *NR4A2* gene in a sample Mexican population: a case control study**

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| **Supplementary 1** Allele frequencies and risk calculated using inheritance models | | | | | | | | |
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| **Promoter**  **variant**  **rs34884856** | **Allele n(%)**  **2C** | | **3C** | **Models** | | **OR 95%CI *p*** | | |
| Schizophrenia group  (n=187) | | 211 (56) | 163  (44) |  | | |  |  |
| Dominant “3C/3C+2C/3C” vs 2C/2C | | | 0.770 (0.470-1.265) | 0.302 |
| Control group  (n=227) | 261 (57) | | 193  (43) | Recessive 3C/3C vs “2C/3C+2C/2C” | | | 0.955 (0.620-1.472) | 0.835 |
| Over-dominant 2C/3C vs “3C/3C+2C/2C” | | | 1.220 (0.827-1.800) | 0.315 |
| Additive | | | 1.069 (0.805-1.421) | 0.644 |
| **Intron 6**  **rs35479735** | **Allele n(%)**  **2G 3G** | | | **Models** | | | **OR 95%CI** | ***p*** |
| Schizophrenia group  (n=187) | 168 (45) | | 206  (55) |  | | |  |  |
| Dominant “3G/3G+2G/3G” vs 2G/2G | | | 0.874 (0.573-1.333) | 0.532 |
| Recessive 3G/3G vs “2G/3G+2G/2G” | | | 0.950 (0.563-1.603) | 0.849 |
| Control group  (n=227) | 211 (46) | | 243  (54) | Over-dominant 2CG/3G vs “3G/3G+2G/2G” | | | 1.153 (0.782-1.700) | 0.473 |
| Additive | | | 1.049 (0.786-1.400) | 0.746 |
| Underlined allele denotes the minor allele. n, total participants; 3C, insertion C; 2C, deletion C; 3G, insertion G; 2G deletion; OR, odd ration; CI, confidence interval; aChi-squared test. | | | | | | | | |

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| **Supplementary 2** *NR4A2* gene expression levels in cases and controls according to rs34884856 and rs35479735 variants | | | | | | | | |
|  | Schizophrenia group  (n=105) | |  | | Control group  (n= 114) | *p\** | | |
| *NR4A2* mRNA levels | | 1.2 (0.53-1.89) |  | | 1.06 (0.64-2.32) | 0.766b | | |
| Schizophrenia group Control group  (n=105) (n=114) | | | | | | | | |
| **rs34884856 promoter variant**  Genotype | NR4A2 mRNA levels | | | *p* Ɨ | NR4A2 mRNA levels | *p* Ɨ | | |
| 2C/2C | 1.23 (0.98-1.64) (n=29) | | |  | 1.00 (0.55-2.5) (n=35) | | |  |
| 3C/2C | 1.21 (0.53-0.96) (n=58) | | | 0.211a | 1.25 (0.81-2.33) (n=53) | | | 0.589 a |
| 3C/3C | 0.52 (0.42-2.5) (n=18) | | |  | 0.99 (0.71-1.82) (n=26) | | |  |
| Recessive model |  | | |  |  | | |  |
| 3C/3C | 0.52 (0.41-2.52) (n=87) | | | 0.086b | 0.99 (0.70-1.82) (n=26) | | | 0.678 b |
| 3C/2C+2C/2C | 1.23 (0.61-1.87) (n=18) | | | 1.09 (0.60-2.34) (n=88) | | |
| **rs35479735**  **intron 6 variant** | | | | | | | | |
| Genotype |  | | |  |  | | |  |
| 2G/2G | 0.77 (0.46-2.50) (n=19) | | |  | 1.10 (0.69-1.84) (n=25) | | |  |
| 3G/2G | 1.20 (0.53-2.02) (n=57) | | | 0.797 a | 1.19 (0.75-2.34) (n=55) | | | 0.748 a |
| 3G/3G | 1.23 (0.61-1.64) (n=29) | | |  | 0.99 (0.56-2.55) (n=34) | | |  |
| Recessive model |  | | |  |  | | |  |
| 3G/3G | 1.23 (0.61-1.64) (n=29) | | | 0.841 b | 0.99 (0.55-2.55) (n=34) | | 0.538 b | |
| 3G/2G+2G/2G | 1.05 (0.52-2.09) (n=76) | | | 1.14 (0.72-2.23) (n=80) | |
| Data are presents as medians (25 -75 percentile) of mRNA *NR4A2* expression levels; cases and controls were stratified according to a recessive model; n, total participants; 3C, insertion C; 2C, deletion C; 3G, insertion G; 2G deletion; aKruskal-Wallis test, bMann-Whitney *U* test. **\***Comparison between patients and control group. **Ɨ** Comparison between genotype in patients or controls. | | | | | | | | |

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| **Supplementary 3** Socio-demographic and clinical characteristics of cases and controls with respect to the intron 6 variant | | | | | | |
|  | **Patients** | | | **Control** | | |
|  | 3G/3G  n=15 | 3G/2G+2G/G n=39 | *p* | 3G/3G  n=22 | 3G/2G+2G/G n=65 | *p* |
| Age, year (±SD) | 32.93 (9.3) | 33.49 (9.91) | 0.977a | 39.20 (10.85) | 36.38 (12.41) | 0.509a |
| Gender, n (%) |  |  |  |  |  |  |
| Male  Female | 8 (53.3)  7 (46.7) | 27 (69.2)  12 (30.8) | 0.273c | 10 (45.5)  12 (54.4) | 33 (50.8)  32 (49.2) | 0.666c |
| Education,  year (±SD) | 11.4 (2.97) | 11.87 (2.95) | 0.595a | 14.09 (4.13) | 13.32 (4.18) | 0.487a |
| Family history of schizophrenia (%) | 2 (13.3) | 15 (38.5) | 0.075b |  |  |  |
| Age of onset,  year (±SD) | 25.5 (8.88) | 21.40 (6.62) | 0.109a |  |  |  |
| Disease duration,  year (±DS) | 8.33 (10.16) | 11.86 (9.08) | 0.139a |  |  |  |
| **PANSS** |  |  |  |  |  |  |
| Positive symptoms | 21.30 | 20.28 (7.98) | 0.577 |  |  |  |
| Negative symptoms | 22.80 (6.90) | 24.22 (9.28) | 0.877 |  |  |  |
| General symptoms | 37.80 (11.57) | 39.21 (11.73) | 0.715 |  |  |  |
| PANSS total | 81.90 (22.39) | 83.72 (25.17) | 0.990 |  |  |  |
| Data are presented as mean ±SD; SD, standard deviation; n, total participants; a Mann-Whitney *U*, bFisher test, cChi-squared test. | | | | | | |