

(Pharmaco)genetics in schizophrenia

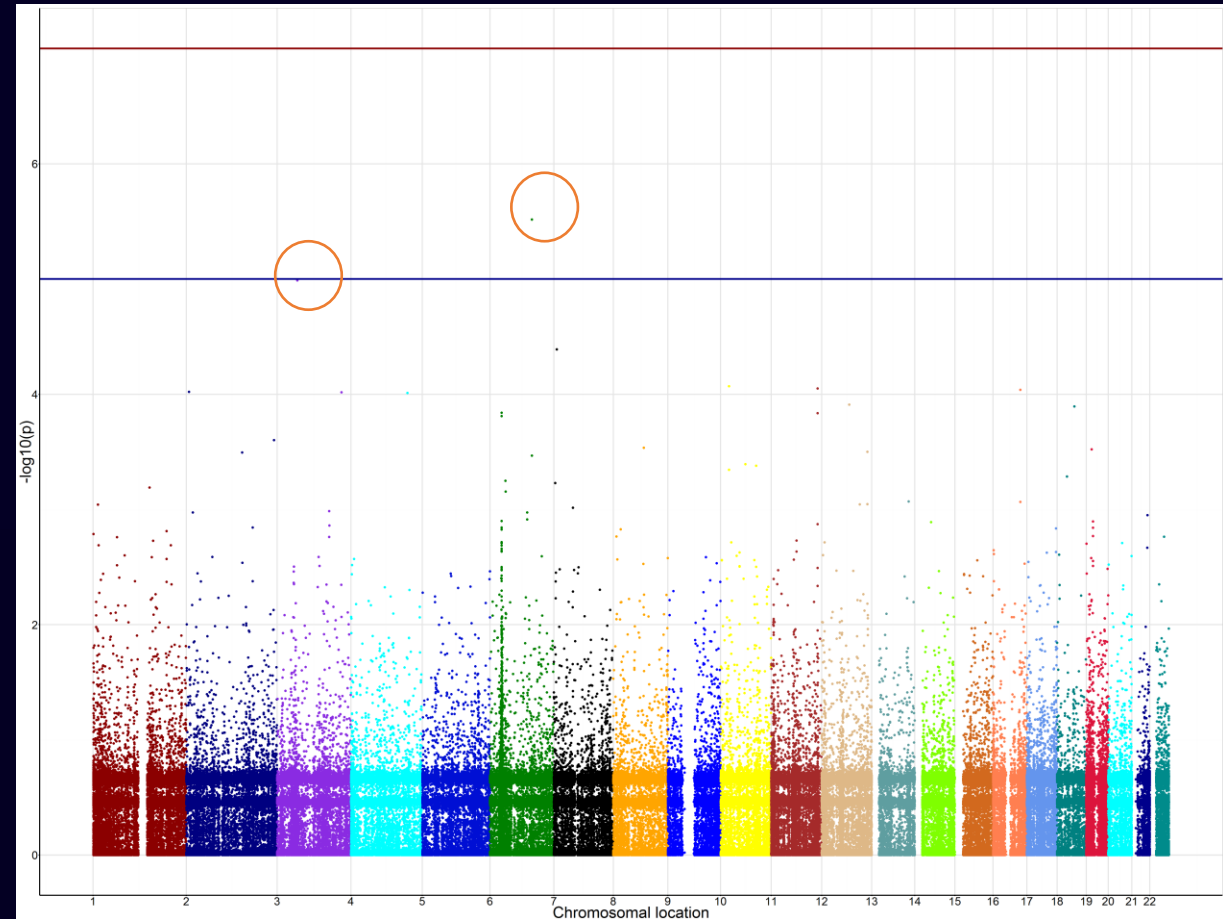
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Promotors: prof. dr. S. Claes and prof. dr. M. De Hert

Case-control study of exonic variation

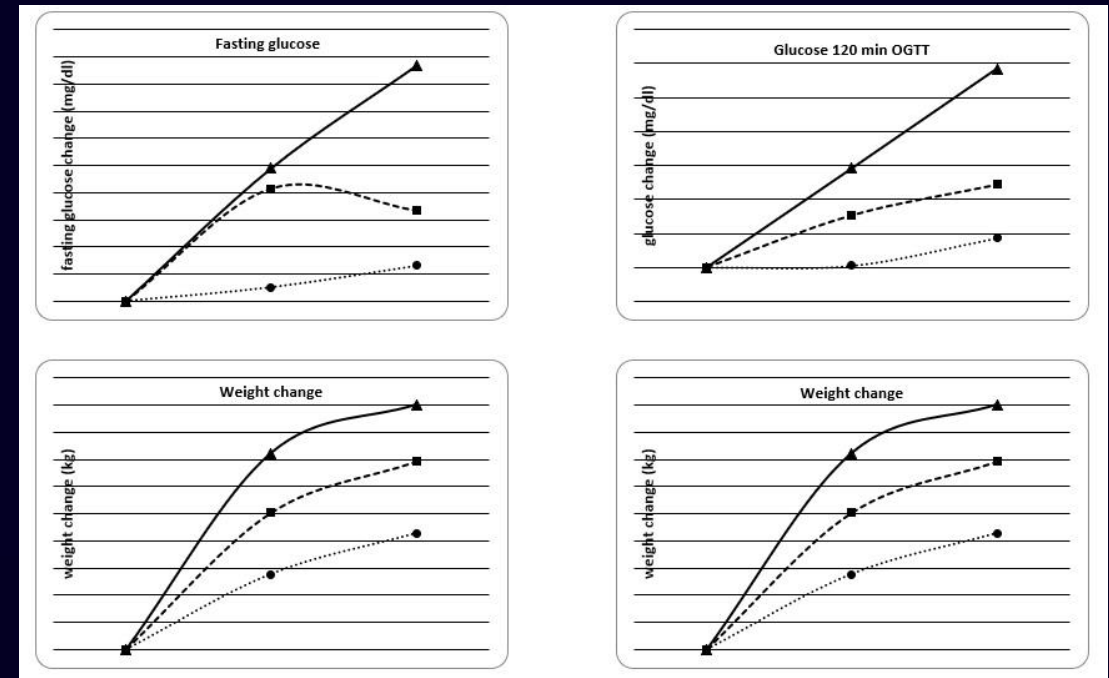
- 493 patients with schizophrenia or schizoaffective D
- 484 healthy controls

- No significant findings
 - Best 2 genes
 - WISP3 (6q21 region):
 - rs1230345 ($p=3.05 \times 10^{-6}$)
 - CACNA2D3
 - rs9311525 ($p=1.03 \times 10^{-6}$) and rs1558557 ($p=3.85 \times 10^{-5}$)



Genetic influence on metabolic syndrome

- Genetic association studies:
 - MTHFR
 - Prospective design
 - C allele of A1298C had the worst metabolic outcomes
- Circadian clock and involvement in metabolic syndrome
 - Cross-sectional study
 - NR3C1 rs6196 A allele carriers had worse metabolic parameters



IGF variation and DNA methylation

- Cross-sectional study of genetic and epigenetic variation
 - DNA variation:
 - 27 SNPs in Insulin Growth Factors
 - 7 differentially methylated regions (Methylation as epigenetic marker)
 - No significant findings related to metabolic outcomes
 - But: clear association between genetic variation and methylation
- Note: Current literature on (hypothesis driven) genetic association studies