Supplementary information for:

# Altered Functional Dynamics Gradient in Schizophrenia with Cigarette Smoking

Running title: Altered Dynamics Gradient in Schizophrenia

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# Supplementary Figures

## Fig.S1

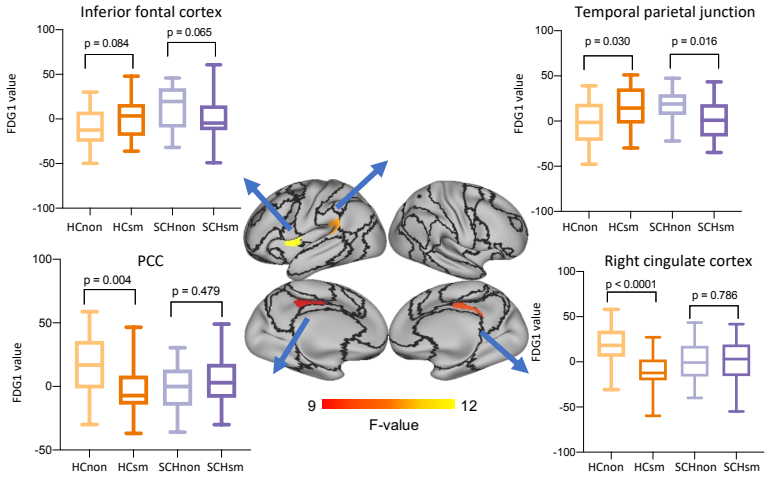


Fig.S1 Planned post-hoc analyses of the altered FDG1 in four groups. Abbreviations: HC non-smokers, HCnon; HC smokers, HCsm; schizophrenia non-smokers, SCHnon; schizophrenia smokers, SCHsm.

**Fig.S2**

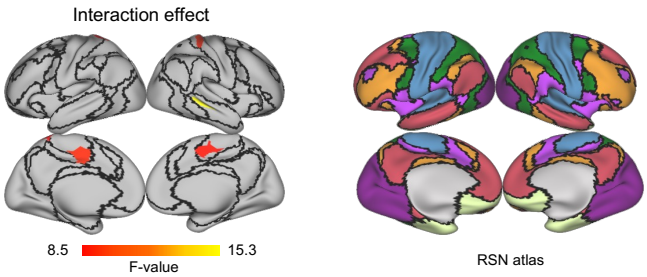


Fig.S2 The interaction of schizophrenia and smoking in FDG2 .

## Fig.S3

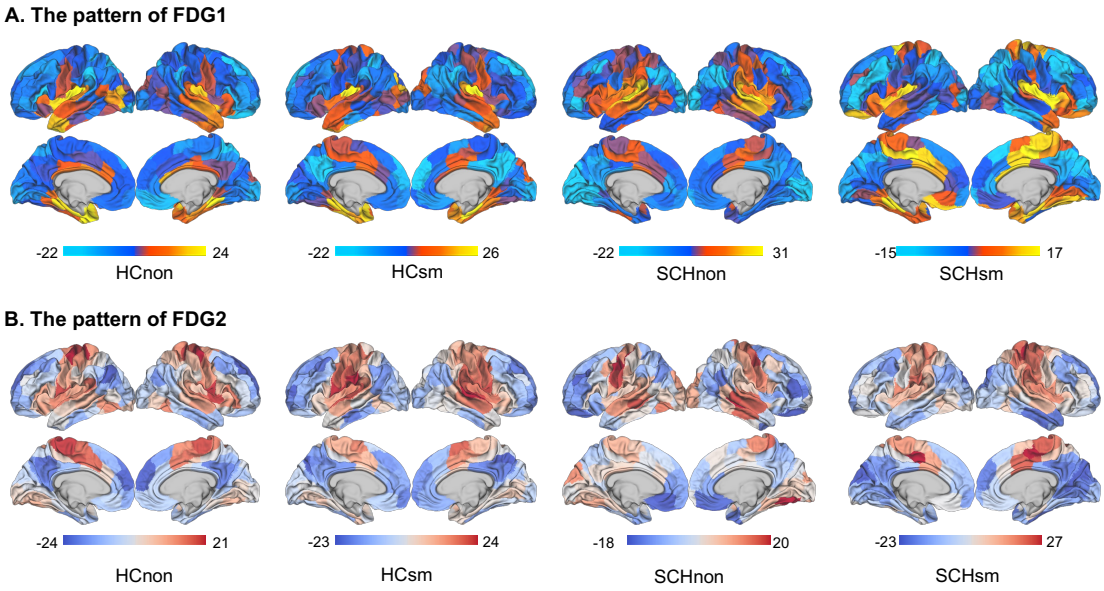


**Fig.S3** The spatial patterns of FDG1 and FDG2 in the male healthy smokers/non-smokers and male schizophrenia smokers/non-smokers. The colorbar represented the strength (component scores) of the functional dynamics gradient (FDG). Abbreviations: HC non-smokers, HCnon; HC smokers, HCsm; schizophrenia non-smokers, SCHnon; schizophrenia smokers, SCHsm.

**Fig.S4**

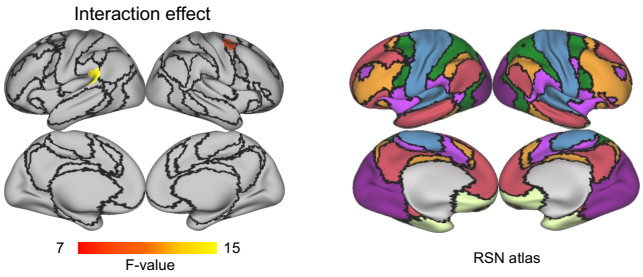


**Fig.S4** Only using the male subjects, the interaction of schizophrenia and smoking in FDG1.

## Fig.S5

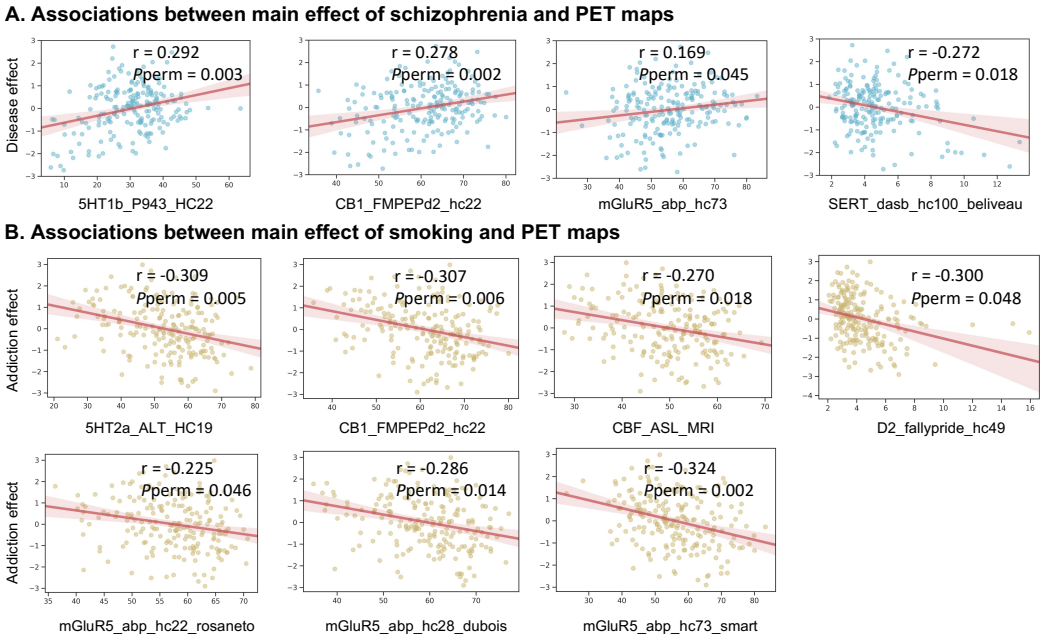


**Fig.S5** Only using the male subjects, the associations between the disease- (**A**) and smoking-related (**B**) effect patterns of FDG1 with the PET-derived neurotransmission distributions. The r represented the Pearson correlation coefficient, and the *P*perm represented the *P* value after 5,000 spin test permutations.

## Fig.S6

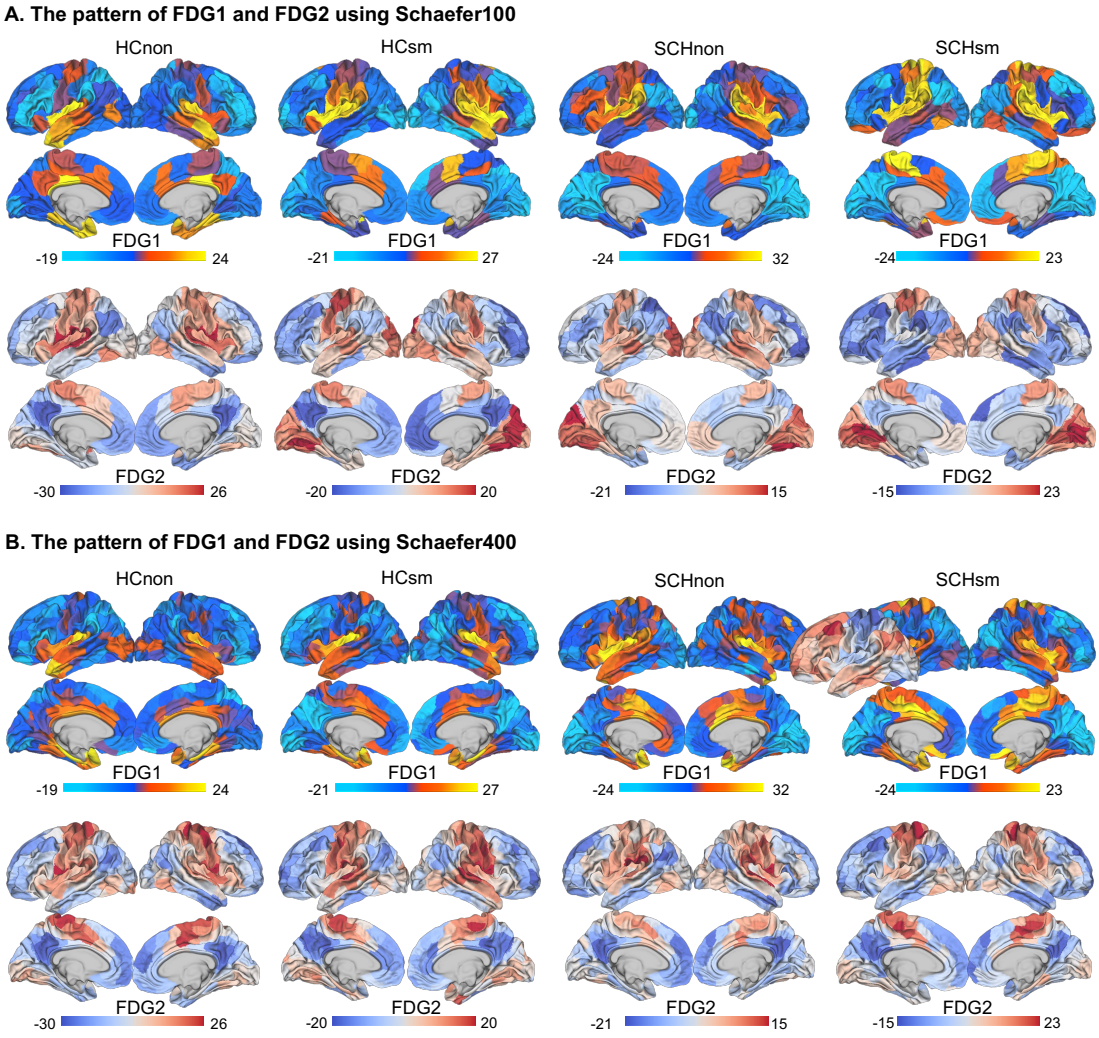


**Fig.S6** The spatial pattern of the FDG1 and FDG2 using Schaefer100 parcellation (**A**) and Schaefer400 parcellation (**B**).