Table S1: 2 x 2 ANCOVA with intron SNP rs219927 (Group x Genotype) and regression analyses matched for age, gender, group and protocol (with total matter volume, age, gender and total CTQ as covariates of no interest).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MNI Coordinates** |  |  |
| **Brain region** | ***x*** | **y** | **z** | **Brodmann Area** | **Cluster Size (Voxels)** | **Z-statistic** | **P-value** **(FWE uncorrected)** |
| **ANCOVA ANALYSES:** |
| *Main effect of GROUP* |
| Right posterior cingulate/parietal lobe | 19 | -57 | 49 | 23 | 379 | 4.64 | 0.08 |
| *Main effect of GENOTYPE* |
| Left orbitofrontal cortex | -21 | 37 | -16 | 11 | 891 | 5.12 | 0.01 |
| *Genotype x Alcohol Group interaction* |
| Right posterior cingulate/parietal lobe | 19 | -57 | 49 | 23 | 415 | 4.04 | 0.05 |
| **POST-HOC t-tests**: |
| BETWEEN-GROUP GENOTYPE t-test (GG): HC >AUD |
| Right posterior cingulate/parietal lobe | 21 | -51 | 50 | 7 | 572 | 4.37 | 0.05 |
| Left orbitofrontal cortex | -38 | 37 | -1 | 47 | 402 | 4.20 | 0.05 |
| BETWEEN GENOTYPE (GG>AA) |
| Left orbitofrontal cortex | -21 | 37 | -16 | 11 | 1461 | 5.51 | 0.001 |
| Right posterior cingulate/parietal lobe | 8 | -54 | 26 | 23 | 6036 | 4.33 | <0.001 |
| BETWEEN GENOTYPE (AG>AA) |
| Left orbitofrontal cortex | -21 | 36 | -16 | 11 | 1618 | 5.10 | 0.01 |

MNI=Montreal Neurological Institute Coordinates, FWE=Family Wise Error corrected for multiple comparison (at the peak voxel level), CTQ=Childhood Trauma Questionnaire

Table S2: 2 x 2 ANCOVA with SNP rs890 (Group x Genotype) and matched for age, gender, group and protocol (with total matter volume, age, gender and total CTQ as covariates of no interest).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MNI Coordinates** |  |  |
| **Brain region** | ***x*** | **y** | **z** | **Brodmann Area** | **Cluster Size (Voxels)** | **Z-statistic** | **P-value** **(FWE uncorrected)** |
| **ANCOVA ANALYSES:** |
| *Main effect of GENOTYPE* |
| Left parahippocampal gyrus  | -24 | -30 | -21 | 36 | 1073 | 3.91 | <0.001 |
| Left orbitofrontal cortex | -24 | 24 | -19 | 47 | 728 | 4.43 | <0.001 |
| *Genotype x Alcohol Group interaction* |
| Left orbitofrontal cortex | -24 | 24 | -19 | 47 | 845 | 4.33 | <0.001 |
| **POST-HOC t-tests:** |
| BETWEEN-GROUP GENOTYPE t-test (AA): HC > AUD |
| Left orbitofrontal cortex | -34 | 32 | 5 | 47 | 184 | 3.44 | <0.001 |
| BETWEEN GENOTYPE (AA > GG) |
| Left superior frontal gyrus | -12 | 53 | 28 | 9 | 235 | 4.42 | <0.001 |

MNI=Montreal Neurological Institute Coordinates, FWE=Family Wise Error corrected for multiple comparison (at the peak voxel level); CTQ=Childhood Trauma Questionnaire



**Figure S1: Smaller volume in left OFC for AUD individuals with GRIN2B rs890 AA genotype**