1. **No.**

   FP01909150

2. **Title**

   Comprehensive Cognitive Assessment and Molecular Genetics in Eating Disorder and Schizophrenia

3. **Period**

   2018-2020

4. **Summary**

   In this study, we administered the Japanese version of the MATRICS Consensus Cognitive Battery to patients with anorexia, patients with schizophrenia, and healthy control subjects. We compared the differences in cognitive function between those groups. Next, we administered the Japanese version of the MATRICS Consensus Cognitive Battery and the Japanese version of Social Functioning Scale to patients with anorexia and healthy control subjects. We compared the differences in cognitive and social function among the subtypes of patients with anorexia. Subsequently, we genotyped five tag SNPs in the promoter region of the CDH13 gene and examined for their association with patients with anorexia and healthy control subjects. Finally, we analyzed the relationship between the SNPs of CDH13 and cognitive function in patients with anorexia.

   In cognitive function, compared to the healthy controls, the schizophrenia group had significantly lower all of the domain including overall composite scores, and the anorexia group had significantly lower processing speed, working memory, visual learning, reasoning/problem-solving, social cognition and overall composite scores. In cognitive and social function among the subtypes of patients with anorexia, neurocognitive impairments and social dysfunction are more severe in the AN-BP group than in the AN-R group. In the allele, the genotype and the haplotype analysis, we found no association between five tag SNPs in the CDH13 gene and anorexia. In the relationship between cognitive function and the SNPs of the anorexia group, the group with homozygous major allele of SNP rs6565051 tended to have lower reasoning/problem-solving score.