

## Supplementary Materials

### **A. Extended psychiatric family histories in non-tic aggravation group**

In non-tic aggravation group, there were 17 subjects who had psychiatric family history, such as 3 parents' ADHD, 7 parents' depressive disorder, 1 parent's bipolar disorder, 1 parents' adjustment disorder, 1 grandparents' depressive disorder, 1 grandparents' bipolar disorder, 1 grandparents' dementia, 2 siblings' ADHD, 1 siblings' bipolar disorder and 1 siblings' autism.

### **B. Extended comorbidities in tic aggravation group and non-tic aggravation group**

In tic aggravation group, there were 6 subjects who had comorbidities, such as 5 anxiety disorder, 1 disruptive mood dysregulation disorder, 1 language disorder, 1 communication disorder and 1 learning disorder.

In non-tic aggravation group, there were 40 subjects who had comorbidities, such as 11 anxiety disorder, 10 oppositional defiant disorder, 8 depressive disorder, 8 bipolar disorder, 4 obsessive-compulsive disorder, 4 communication disorder, 2 stressor related disorder, 1 conduct disorder and 1 enuresis.