

**Supplementary Table S1.** Characteristics of children with ADHD and with atopic disease (ADHD+ Allergy+ group, n=41), children with ADHD and without allergy (ADHD+ Allergy- group, n=74), children without ADHD and with allergy (ADHD- Allergy+ group, n=23), and children without ADHD and without allergy (ADHD- Allergy- group, n=49).

|                        | ADHD+ Allergy+<br>N=41 | ADHD+ Allergy-<br>N=74 | ADHD- Allergy+<br>N=23 | ADHD- Allergy-<br>N=49 | Statistics        | p-value |
|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------|---------|
| Age (years), mean (SD) | 9.0 (2.3)              | 8.9 (2.3)              | 9.3 (2.6)              | 10.1 (2.6)             | $F = 2.756$       | 0.044*  |
| Sex, N (%)             |                        |                        |                        |                        | $\chi^2 = 18.008$ | 0.003*  |
| Female                 | 9 (22.0)               | 14 (18.9)              | 4 (17.4)               | 25 (51.0)              |                   |         |
| Male                   | 32 (78.0)              | 60 (81.1)              | 19 (82.6)              | 24 (49.0)              |                   |         |

Note: Data are expressed as mean  $\pm$  SD or n (%), The F-value and p-value were calculated using one-way analysis of variance (ANOVA), The  $\chi^2$  and p-value were calculated using chi-square test. \*p<0.05