### Supplementary Table 1. The subclinical information in HSCR patients collected for the subjects.

| HSCR subphenotype                        | Cases (n=1470) | Controls (n=1473) |
|------------------------------------------|----------------|------------------|
|                                          | No. %          | No. %            |
| **Subjects**                             |                |                  |
| Age range (Months)                       | 8.37±20.50     | 18.61±19.75      |
| ≤2                                       | 725 49.32%     | 458 31.09%       |
| >2                                       | 745 50.68%     | 1015 68.91%      |
| **Gender**                               |                |                  |
| Females                                 | 240 16.33%     | 458 65.65%       |
| Males                                   | 1230 83.67%    | 1015 34.35%      |
| **Clinical manifestation**               |                |                  |
| SHCSR                                   | 1033 70.27%    | /                |
| LHCSR                                   | 294 20.00%     | /                |
| TCA                                     | 82 5.58%       | /                |
| Total intestine                         | 3 0.20%        | /                |
| Enteritis_before_operation              | 261 17.76%     | /                |
| Enteritis_after_operation               | 249 16.94%     | /                |

### Supplementary Table 2. The subclinical information in NB patients collected for the subjects.

| Variables                                  | Combined subjects | Shaanxi province |
|--------------------------------------------|-------------------|------------------|
|                                            | Cases (n=469)     | Controls (n=998) |
|                                            | No. %             | No. %            |
| Age range, month                           | 0.00-132.00       | 0.03-156.00      |
| Mean ± SD                                  | 34.07±27.60       | 32.89±27.43      |
| ≤18                                        | 169 36.03         | 390 39.08        |
| >18                                        | 300 63.97         | 608 60.92        |
| Gender                                     | 0.911             | 0.778            |
| Female                                     | 196 41.79         | 414 41.48        |
| Male                                       | 273 58.21         | 584 58.52        |
| INSS stages                                |                   |                  |
| I                                          | 133 28.42         | 64 84.21         |
| II                                         | 100 21.37         | 7 9.21           |
| III                                        | 69 14.74          | 1 1.32           |
| IV                                         | 147 31.41         | 4 5.26           |
| 4s                                         | 11 2.35           | /                |
| NA                                         | 8 1.71            | /                |
| Sites of origin                            |                   |                  |
| Adrenal gland                              | 162 34.54         | 9 11.84          |
| Retroperitoneal region                     | 138 29.42         | 51 67.11         |
| Mediastinum                                | 121 25.80         | 12 15.79         |
| Other region                               | 40 8.53           | 4 5.26           |
| NA                                         | 8 1.71            | /                |

SD, standard deviation; NA, not available.

* Two-sided χ² test for distributions between neuroblastoma cases and cancer-free controls.