### Supplemental Table S2. Clinical Characteristics of Patients According to the Response for the 2nd RAI Therapy

| Characteristic                                      | Total (n=230) | Remission (n=152) | Persistent (n=78) | P value |
|----------------------------------------------------|---------------|-------------------|-------------------|---------|
| Age at second RAI therapy, yr                       | 41±13         | 41±12             | 42±15             | 0.420   |
| Female sex                                          | 131 (57)      | 88 (58)           | 43 (55)           | 0.779   |
| Time from diagnosis to 2nd RAI therapy, yr          | 6±5           | 6±5               | 6±5               | 0.466   |
| Time interval between 1st and 2nd RAI therapies, mo | 10±11         | 12±12             | 8±7               | 0.002   |
| Goiter size, g (n=217)                              |               |                   |                   |         |
| <60                                                 | 79 (36)       | 56 (38)           | 23 (33)           | 0.001   |
| 60–90                                               | 67 (34)       | 58 (40)           | 15 (21)           |         |
| ≥90                                                 | 63 (30)       | 33 (22)           | 32 (46)           |         |
| ATD discontinuation for ≥2 monthsb                  | 70 (30)       | 54 (36)           | 16 (21)           | 0.023   |
| Mean dosage of ATDb, mg                             | 13±7          | 12±7              | 14±7              | 0.023   |
| Pre-RAI TSH, μIU/mL (n=222)                         | 1.07±6.85     | 1.58±8.43         | 0.10±0.25         | 0.036   |
| Pre-RAI free T4, ng/dL (n=222)                       | 2.47±1.64     | 2.25±1.25         | 2.89±2.14         | 0.016   |
| Pre-RAI TSHR antibody, % (n=184)b                    | 71±42         | 66±23             | 78±61             | 0.059   |
| 48-hr RAIU, %                                       | 52±19         | 51±20             | 52±18             | 0.643   |

Values are expressed as mean±standard deviation or number (%). P values were calculated from Student t test or chi-square test between the remission and the persistent group.

RAI, radioactive iodine; ATD, antithyroid drug; TSH, thyrotropin; T4, thyroxine; TSHR, TSH receptor; RAIU, radioactive iodine uptake.

*The analysis was performed only in patients with the available data; †During 6 months after first RAI therapy.