Table S1. Baseline Characteristics of patients with cHL as the first primary malignancy with SPMs or without SPMs

| Characteristics          | SPMs  | Overall | P-value* |
|-------------------------|-------|---------|----------|
|                         | Yes   | No      | (N=25706) |          |
|                         | (N=3283) | (N=22423) |          |          |
| Sex                     |       |         |          |          |
| Male                    | 1690 (51.5%) | 12392 (55.3%) | 14082 (54.8%) | <0.001 |
| Female                  | 1593 (48.5%) | 10031 (44.7%) | 11624 (45.2%) |          |
| Age                     |       |         |          |          |
| <20                     | 337 (10.3%) | 3342 (14.9%) | 3679 (14.3%) | <0.001 |
| 20-59                   | 2370 (72.2%) | 15909 (70.9%) | 18279 (71.1%) |          |
| 60+                     | 576 (17.5%) | 3172 (14.1%) | 3748 (14.6%) |          |
| Race                    |       |         |          |          |
| White                   | 2910 (88.6%) | 19171 (85.5%) | 22081 (85.9%) | <0.001 |
| African American        | 274 (8.3%) | 2246 (10.0%) | 2520 (9.8%) |          |
| Other                   | 99 (3.0%) | 1006 (4.5%) | 1105 (4.3%) |          |
| Stages*                 |       |         |          |          |
| Early                   | 1427 (43.5%) | 11044 (49.3%) | 12471 (48.5%) | 0.0484 |
| Advanced                | 794 (24.2%) | 6606 (29.5%) | 7400 (28.8%) |          |
| Unknown                 | 106 (3.2%) | 632 (2.8%) | 738 (2.9%) |          |
| Missing                 | 956 (29.1%) | 4141 (18.5%) | 5097 (19.8%) |          |
| Subtype                 |       |         |          |          |
| Lymphocyte-rich         | 162 (4.9%) | 793 (3.5%) | 955 (3.7%) | <0.001 |
| Mixed cellularity       | 690 (21.0%) | 3523 (15.7%) | 4213 (16.4%) |          |
| Lymphocyte-depleted     | 65 (2.0%) | 376 (1.7%) | 441 (1.7%) |          |
| Nodular sclerosis       | 1962 (59.8%) | 14124 (63.0%) | 16086 (62.6%) |          |
| NOS                     | 404 (12.3%) | 3607 (16.1%) | 4011 (15.6%) |          |
| Chemotherapy            |       |         |          |          |
| Yes                     | 1796 (54.7%) | 16364 (73.0%) | 18160 (70.6%) | <0.001 |
| No                      | 1487 (45.3%) | 6059 (27.0%) | 7546 (29.4%) |          |
| RT                      |       |         |          |          |
| Yes                     | 1815 (55.3%) | 9832 (43.8%) | 11647 (45.3%) | <0.001 |
| No                      | 1468 (44.7%) | 12591 (56.2%) | 14059 (54.7%) |          |
| Status                  |       |         |          |          |
| Alive                   | 1268 (38.6%) | 14939 (66.6%) | 16207 (63.0%) | <0.001 |
| Dead                    | 2015 (61.4%) | 7484 (33.4%) | 9499 (37.0%) |          |
* Ann Arbor Stage I and II were combined as Stage Early, while Ann Arbor Stage III and Stage IV were combined as Stage Advanced.

# chi-square test

cHL, classical Hodgkin Lymphoma; SPMs, second primary malignancies.