**Table S1. General clinical characteristics of ADC and LELC before and after PSM.**

|  |  |  |
| --- | --- | --- |
| Characteristic | Before PSM | After PSM |
| ADC (N=2,757) | LELC (N=159) | *P* | ADC (N=133) | LELC (N=133) | *P* |
| No. of patients (%) | No. of patients (%) | No. of patients (%) | No. of patients (%) |
| Sex |  |  | 0.001 |  |  | 0.539 |
| Male | 1,604 (58.2) | 72 (45.3) |  | 72 (54.1) | 67 (50.4) |  |
| Female | 1,153 (41.8) | 87 (54.7) |  | 61 (45.9) | 66 (49.6) |  |
| Age |  |  | <0.001 |  |  | 0.245 |
| ≤60 | 1,335 (48.4) | 115 (72.3) |  | 83 (62.4) | 92 (69.2) |  |
| >60 | 1,422 (51.6) | 44 (27.7) |  | 50 (37.6) | 41 (30.8) |  |
| Smoking |  |  | <0.001 |  |  | 0.366 |
| Smoker | 1,194 (43.3) | 42 (26.4) |  | 84 (63.2) | 91 (68.4) |  |
| Non-smoker | 1,563 (56.7) | 117 (73.6) |  | 49 (36.8) | 42 (31.6) |  |
| Surgical type |  |  | <0.001 |  |  | 0.746 |
| Lobectomy | 2,486 (90.2) | 125 (78.6) |  | 109 (82.0) | 111 (83.5) |  |
| Non-lobectomy | 271 (9.8) | 34 (21.4) |  | 24 (18.0) | 22 (16.5) |  |
| Examined lymph nodes |  |  | <0.001 |  |  | 0.764 |
| ≤34 | 2,544 (92.3) | 132 (83.0) |  | 29 (21.8) | 27 (20.3) |  |
| >34 | 213 (7.7) | 27 (17.0) |  | 104 (78.2) | 106 (79.7) |  |
| T stage |  |  | 0.004 |  |  | 0.647 |
| 1 | 1,039 (37.7) | 45 (28.3) |  | 45 (33.8) | 43 (32.3) |  |
| 2 | 1,295 (47.0) | 75 (47.2) |  | 64 (48.1) | 58 (43.6) |  |
| 3 | 267 (9.7) | 28 (17.6) |  | 16 (12.0) | 23 (17.3) |  |
| 4 | 156 (5.7) | 11 (6.9) |  | 8 (6.0) | 9 (6.8) |  |
| N stage |  |  | 0.002 |  |  | 0.222 |
| 0 | 1,665 (60.4) | 75 (47.2) |  | 69 (51.9) | 70 (52.6) |  |
| 1 | 343 (12.4) | 31 (19.5) |  | 31 (23.3) | 21 (15.8) |  |
| 2 | 749 (27.2) | 53 (33.3) |  | 33 (24.8) | 42 (31.6) |  |
| TMN stage |  |  | 0.003 |  |  | 0.468 |
| IA | 715 (25.9) | 27 (17.0) |  | 26 (19.5) | 27 (20.3) |  |
| IB | 639 (23.2) | 25 (15.7) |  | 31 (23.3) | 25 (18.8) |  |
| IIA | 105 (3.8) | 9 (5.7) |  | 4 (3.0) | 6 (4.5) |  |
| IIB | 417 (15.1) | 32 (20.1) |  | 30 (22.6) | 22 (16.5) |  |
| IIIA | 881 (32.0) | 66 (41.5) |  | 42 (31.6) | 53 (39.8) |  |
| Adjuvant therapy |  |  | 0.180 |  |  | 0.902 |
| No | 1,520 (55.1) | 79 (49.7) |  | 70 (52.6) | 69 (51.9) |  |
| Yes | 1,237 (44.9) | 80 (50.3) |  | 63 (47.4) | 64 (48.1) |  |

ADC, adenocarcinoma; LELC, lymphoepithelioma-like carcinoma; PSM, propensity score matching

**Table S2. General clinical characteristics of SCC and LELC before and after PSM.**

|  |  |  |
| --- | --- | --- |
| Characteristic | Before PSM | After PSM |
| SCC (N=1,331) | LELC (N=159) | *P* | SCC (N=91) | LELC (N=91) | *P* |
| No. of patients (%) | No. of patients (%) | No. of patients (%) | No. of patients (%) |
| Sex |  |  | <0.001 |  |  | 0.150 |
| Male | 1,220 (91.7) | 72 (45.3) |  | 58 (63.7) | 67 (73.6) |  |
| Female | 111 (8.3) | 87 (54.7) |  | 33 (36.3) | 24 (26.4) |  |
| Age |  |  | <0.001 |  |  | 0.875 |
| ≤60 | 564 (42.4) | 115 (72.3) |  | 61 (67.0) | 60 (65.9) |  |
| >60 | 767 (57.6) | 44 (27.7) |  | 30 (33.0) | 31 (34.1) |  |
| Smoking |  |  | <0.001 |  |  | 0.236 |
| Smoker | 1,103 (82.9) | 42 (26.4) |  | 49 (53.8) | 41 (45.1) |  |
| Non-smoker | 228 (17.1) | 117 (73.6) |  | 42 (46.2) | 50 (54.9) |  |
| Surgical type |  |  | 0.011 |  |  | 0.222 |
| Lobectomy | 916 (68.8) | 125 (78.6) |  | 73 (80.2) | 66 (72.5) |  |
| Non-lobectomy | 415 (31.2) | 34 (21.4) |  | 18 (19.8) | 25 (27.5) |  |
| Examined lymph nodes |  |  | <0.001 |  |  | 0.089 |
| ≤34 | 1,190 (89.4) | 132 (83.0) |  | 64 (70.3) | 53 (58.2) |  |
| >34 | 141 (10.6) | 27 (17.0) |  | 27 (29.7) | 38 (41.8) |  |
| T stage |  |  | 0.006 |  |  | 0.532 |
| 1 | 272 (20.4) | 45 (28.3) |  | 28 (30.8) | 20 (22.0) |  |
| 2 | 559 (42.0) | 75 (47.2) |  | 36 (39.6) | 37 (40.7) |  |
| 3 | 318 (23.9) | 28 (17.6) |  | 19 (20.9) | 23 (25.3) |  |
| 4 | 182 (13.7) | 11 (6.9) |  | 8 (8.8) | 11 (12.1) |  |
| N stage |  |  | <0.001 |  |  | 0.238 |
| 0 | 825 (62.0) | 75 (47.2) |  | 38 (41.8) | 49 (53.8) |  |
| 1 | 229 (17.2) | 31 (19.5) |  | 19 (20.9) | 17 (18.7) |  |
| 2 | 277 (20.8) | 53 (33.3) |  | 34 (37.4) | 25 (27.5) |  |
| TMN stage |  |  | 0.146 |  |  | 0.370 |
| IA | 184 (13.8) | 27 (17.0) |  | 15 (16.5) | 13 (14.3) |  |
| IB | 222 (16.7) | 25 (15.7) |  | 10 (11.0) | 16 (17.6) |  |
| IIA | 119 (8.9) | 9 (5.7) |  | 4 (4.4) | 4 (4.4) |  |
| IIB | 347 (26.1) | 32 (20.1) |  | 16 (17.6) | 23 (25.3) |  |
| IIIA | 459 (34.5) | 66 (41.5) |  | 46 (50.5) | 35 (38.5) |  |
| Adjuvant therapy |  |  | 0.038 |  |  | 0.458 |
| No | 776 (58.3) | 79 (49.7) |  | 40 (44.0) | 45 (49.5) |  |
| Yes | 555 (41.7) | 80 (50.3) |  | 51 (56.0) | 46 (50.5) |  |

SSC, squamous cell carcinoma; LELC, lymphoepithelioma-like carcinoma; PSM, propensity score matching