**Supplementary Table 1.** Clinicopathological characteristics according to the status of PD-L1 expression on TC and IC by 22C3 and SP263 assay

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | 22C3 | |  | SP263 | |  | 22C3 | |  | SP263 | |
| **PD-L1 TPS**  **≥ 50%** | **PD-L1 TPS**  **< 50%** |  | **PD-L1 TPS**  **≥ 50%** | **PD-L1 TPS**  **< 50%** |  | **IC PD-L1**  **≥ 1%** | **IC PD-L1**  **< 1%** |  | **IC PD-L1**  **≥ 1%** | **IC PD-L1**  **< 1%** |
| **No. of patients** | 63 | 242 |  | 62 | 243 |  | 192 | 113 |  | 174 | 131 |
| **Sex** |  |  |  |  |  |  |  |  |  |  |  |
| Male | 43 (68.3%) | 132 (54.5 %) |  | 43 (69.4%) | 83 (34.2%) |  | 86 (44.8%) | 40(35.4%) |  | 79 (45.4%) | 47 (35.9%) |
| Female | 20 (31.7%) | 110 (45.5%) |  | 19 (30.6%) | 160 (65.8%) |  | 106 (55.2%) | 73 (64.6%) |  | 95 (54.6%) | 84 (64.1%) |
| **Age** (years) |  |  |  |  |  |  |  |  |  |  |  |
| ≤ 60 | 31 (49.2%) | 128 (52.9%) |  | 30 (48.4%) | 129 (53.1%) |  | 103 (53.6%) | 56 (49.6%) |  | 93 (53.4%) | 66 (50.4%) |
| >60 | 32 (50.8%) | 114 (47.1%) |  | 32 (51.6%) | 114 (46.9%) |  | 89 (46.4%) | 57 (50.4%) |  | 81 (46.6%) | 65 (49.6%) |
| **Smoking history** |  |  |  |  |  |  |  |  |  |  |  |
| Never | 7 (11.1%) | 202 (83.5%) |  | 8 (12.9%) | 201 (82.7%) |  | 113 (58.9%) | 96 (85.0%) |  | 99 (56.9%) | 110 (84.0%) |
| Current/Former | 56 (88.9%) | 40 (16.5%) |  | 54 (87.1%) | 42 (17.3%) |  | 79 (41.1%) | 17 (15.0%) |  | 75 (43.1%) | 21 (16.0%) |
| **Histology** |  |  |  |  |  |  |  |  |  |  |  |
| Adenocarcinoma | 62 (98.4%) | 239 (98.8%) |  | 60 (96.8%) | 241 (99.2%) |  | 189 (98.4%) | 112 (99.1%) |  | 171 (98.3%) | 130 (99.2%) |
| Non-Adenocarcinoma | 1 (1.6%) | 3 (1.2%) |  | 2 (3.2%) | 2 (0.8%) |  | 3 (1.6%) | 1 (0.9%) |  | 3 (1.7%) | 1(0.8%) |
| **p Stage** |  |  |  |  |  |  |  |  |  |  |  |
| I | 16 (25.4%) | 151 (62.4%) |  | 15 (24.2%) | 152 (62.6%) |  | 98 (51.0%) | 69 (61.1%) |  | 85 (48.9%) | 82 (62.6%) |
| II | 13 (20.6%) | 38 (15.7%) |  | 13 (21.0%) | 38 (15.6%) |  | 28 (14.6%) | 23 (20.3%) |  | 26 (14.9%) | 25 (19.1%) |
| III | 30 (47.6%) | 50 (20.7%) |  | 30 (48.4%) | 50 (20.6%) |  | 59 (30.7%) | 21 (18.6%) |  | 56 (32.2%) | 24 (18.3%) |
| IV | 4 (6.4%) | 3 (1.2%) |  | 4 (6.4%) | 3 (1.2%) |  | 7 (3.7%) | 0 (0%) |  | 7 (4.0%) | 0 (0%) |
| ***EGFR* status** |  |  |  |  |  |  |  |  |  |  |  |
| Wild-type | 54 (85.7%) | 113 (46.7%) |  | 54 (87.1%) | 113 (46.5%) |  | 111 (57.8%) | 56 (49.6%) |  | 102 (58.6%) | 65 (49.6%) |
| Mutated | 9 (14.3%) | 129 (53.3%) |  | 8 (12.9%) | 130 (53.5%) |  | 81 (42.2%) | 57 (50.4%) |  | 72 (41.4%) | 66 (50.4%) |
| ***KRAS* status** |  |  |  |  |  |  |  |  |  |  |  |
| Wild-type | 30 (47.6%) | 236 (97.5%) |  | 29 (46.8%) | 237 (97.5%) |  | 157 (81.8%) | 109 (96.5%) |  | 139 (79.9%) | 127 (96.9%) |
| Mutated | 33 (52.4%) | 6 (2.5%) |  | 33 (53.2%) | 6 (2.5%) |  | 35 (18.2%) | 4 (3.5%) |  | 35 (20.1%) | 4 (3.1%) |
| ***ALK* status** |  |  |  |  |  |  |  |  |  |  |  |
| Wild-type | 62 (98.4%) | 224 (92.6%) |  | 61 (98.4%) | 225 (92.6%) |  | 178 (92.7%) | 108 (95.6%) |  | 164 (94.3%) | 122 (93.1%) |
| Translocated | 1 (1.6%) | 18 (7.4%) |  | 1 (1.6%) | 18 (7.4%) |  | 14 (7.3%) | 5 (4.4%) |  | 10 (5.7%) | 9 (6.9%) |
| ***ROS1* status** |  |  |  |  |  |  |  |  |  |  |  |
| Wild-type | 63 (100%) | 230 (95.0%) |  | 62 (100%) | 231 (95.1%) |  | 183 (95.3%) | 110 (97.3%) |  | 166 (95.4%) | 127 (96.9%) |
| Translocated | 0 (0%) | 12 (5.0%) |  | 0 (0%) | 12 (4.9%) |  | 9 (4.7%) | 3 (2.7%) |  | 8 (4.6%) | 4 (3.1%) |

Abbreviations: *ALK*, anaplastic lymphoma kinase; *EGFR*, epidermal growth factor receptor; *KRAS*, kirsten rat sarcoma viral oncogene homolog; *ROS1*, c-ros oncogene 1;PD-L1, programmed death-ligand 1; TPS: tumor proportion score; IC: tumor-infiltrating immune cells.