

Table S1 Patients characteristics of the institutional data by lymph node status

| Characteristics | Lymph node status | | Total (N=1,222), N (%) |
|------------------------------------|-------------------------|-------------------------|------------------------|
| | Positive (N=333), N (%) | Negative (N=889), N (%) | |
| Age, years | | | |
| <40 | 47 (14.1) | 97 (10.9) | 144 (11.8) |
| 40–49 | 116 (34.8) | 283 (31.8) | 399 (32.7) |
| 50–59 | 88 (26.4) | 260 (29.2) | 348 (28.5) |
| 60–69 | 62 (18.6) | 180 (20.2) | 242 (19.8) |
| ≥70 | 20 (6.0) | 69 (7.8) | 89 (7.3) |
| Race | | | |
| Asian | 333 (27.3) | 889 (72.7) | 1,222 (100.0) |
| Primary site | | | |
| Outer quadrant | 157 (47.1) | 366 (41.2) | 523 (42.8) |
| Inner quadrant | 76 (22.8) | 252 (28.3) | 328 (26.8) |
| Central portion | 39 (11.7) | 75 (8.4) | 114 (9.3) |
| Overlapping lesion | 61 (18.3) | 194 (21.8) | 255 (20.9) |
| Axillary tail | 0 (0.0) | 2 (0.2) | 2 (0.2) |
| Laterality | | | |
| Left | 174 (52.3) | 449 (50.5) | 623 (51.0) |
| Right | 159 (47.7) | 440 (49.5) | 599 (49.0) |
| Histologic type | | | |
| IDC | 326 (97.9) | 863 (97.1) | 1,189 (97.3) |
| ILC | 0 (0) | 3 (0.3) | 3 (0.2) |
| Others | 7 (2.1) | 23 (2.6) | 30 (2.5) |
| Grade | | | |
| 1 | 0 (0.0) | 17 (1.9) | 17 (1.4) |
| 2 | 159 (47.7) | 453 (51.0) | 612 (50.1) |
| 3 | 174 (52.3) | 419 (47.1) | 593 (48.5) |
| Tumor size | | | |
| T1 (≤2 cm) | 306 (91.9) | 853 (96.0) | 1,159 (94.8) |
| T2 (2–5 cm) | 27 (8.1) | 36 (4.0) | 63 (5.2) |
| ER | | | |
| Positive | 274 (82.3) | 673 (75.7) | 947 (77.5) |
| Negative | 59 (17.7) | 216 (24.3) | 275 (22.5) |
| PR | | | |
| Positive | 234 (70.3) | 574 (64.6) | 808 (66.1) |
| Negative | 99 (29.7) | 315 (35.4) | 414 (33.9) |
| HER2 | | | |
| Positive | 73 (21.9) | 178 (20.0) | 251 (20.5) |
| Negative | 260 (78.1) | 711 (80.0) | 971 (79.5) |
| Subtype | | | |
| HR ⁺ /HER2 ⁻ | 226 (67.9) | 575 (64.7) | 801 (65.5) |
| HR ⁺ /HER2 ⁺ | 49 (14.7) | 102 (11.5) | 151 (12.4) |
| HER2 ⁺ | 24 (7.2) | 76 (8.5) | 100 (8.2) |
| TNBC | 34 (10.2) | 136 (15.3) | 170 (13.9) |

IDC, infiltrating duct carcinoma; ILC, infiltrating lobular carcinoma; ER, estrogen receptor; PR, progesterone receptor; HR, hormonal receptor; HER2, human epidermal growth factor receptor 2; TNBC, triple-negative breast cancer.