**Supplementary Figure 1**

### A. Low-risk group (Original)

| Survival months | Breasts specific survival | No surgery | SLNB |
|------------------|---------------------------|------------|------|
| 0                | 1.0                       | 46         | 180  |
| 50               |                           | 4          | 29   |
| 100              |                           | 3          | 21   |
| 150              |                           | 0          | 1    |

**P = 0.028**

### B. Low-risk group (PSM)

| Survival months | Breasts specific survival | No surgery | SLNB |
|------------------|---------------------------|------------|------|
| 0                | 1.0                       | 45         | 45   |
| 50               |                           | 5          | 13   |
| 100              |                           | 3          | 13   |
| 150              |                           | 3          | 12   |
| 200              |                           | 2          | 11   |

**P = 0.107**

### C. High-risk group (Original)

| Survival months | Breasts specific survival | SLNB | ALND |
|------------------|---------------------------|------|------|
| 0                | 1.0                       | 68   | 169  |
| 50               |                           | 19   | 43   |
| 100              |                           | 9    | 34   |
| 150              |                           | 0    | 1    |

**P = 0.001**

### D. High-risk group (PSM)

| Survival months | Breasts specific survival | SLNB | ALND |
|------------------|---------------------------|------|------|
| 0                | 1.0                       | 50   | 50   |
| 50               |                           | 13   | 16   |
| 100              |                           | 7    | 14   |
| 200              |                           | 0    | 1    |