Supplementary Table 2. Participant and Study Characteristics of Included Studies

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source | Included sample size | Location | Median age, years | Median follow-up, years | Tumor size | Lymph node | Tumor grade | Stage | Data extraction tool |
| Carsten Denkert et al,17 2021 | Total 2310  HR+1162  TNBC1148 | Europe | 48.5 | 3.9 | T1 36.5% T2 51.3% T3 7.6% T4a-c 2.5% T4d 1.7% Missing 0.4% | N0 62.1% N1 31.2% N2 3.9% N3 1.4% Missing 1.4% | G1 1.7% G2 32.0% G3 66.3% | NA | Didn’t use |
| Camille Domergue et al,18 2022 | Total 437  HR+ 0  TNBC 437 | Europe | 51.0 | 6.1 | T0-T1 6.9% T2 55.8% T3 24.5% T4 12.8% | N0 39.4% N+ 60.6% | G2 24.0% G3 76.0% | NA | Used for partial data |
| Ryan Shea Ying Cong Tan et al,19 2022 | Total 28280  HR+ 23503  TNBC 4634 | Asia | NA | 6.6 | T1 55.3% T2 37.6% T3 4.5% T4 1.7% Others 0.6% Unknown 0.3% | N0 64.0% N1 24.6% N2 7.1% N3 4.2% Unknown 0.1% | G1 22.4% G2 42.9% G3 28.6% Unknown 6.0% | Stage 1 42.4% Stage 2 42.6% Stage 3 15.0% | Didn’t use |
| George Douganiotis et al,20 2022 | Total 949  HR+ 949  TNBC 0 | Europe | 51.0 | 2.8 | NA | NA | (For IDC only)  G1 26.9%  G2 44.6%  G3 27.9%  Unknown 0.6% | NA | Didn’t use |

Table 1. Participant and Study Characteristics of Included Studies (continued)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source | Included sample size | Location | Median age, years | Median follow-up, years | Tumor size | Lymph node | Tumor grade | Stage | Data extraction tool |
| Christopher Rosso et al,21 2022 | Total 391  HoR+ 351  TNBC 38 | North America | 66.1 | 3.1 | NA | NA | G1 19.3% G2 48.2% G3 32.5% | Stage 1 50.4% Stage 2 35.8% Stage 3 7.2% Stage 4 6.6% | Didn’t use |
| Nanae Horisawa et al,22 2022 | Total 4007  HoR+ 3541  TNBC 466 | Asia | NA | 5.0 | Tis 16.6% T<2cm 61.0% T: 2-5cm 18.7% T>5cm 2.6% Unknown 1.1% | N0 62.3% N1 17.8% N2-3 7.9% Unknown 12.0% | G1 30.9% G2 41.2% G3 18.1% Unknown 9.7% | NA | Didn’t use |
| Luciana de Moura Leite et al,23 2021 | Total 855  HoR+ 542  TNBC 313 | South America | 45.3 | 4.9 | T1 3.3% T2 37.2% T3 29.6% T4 29.9% | N0 31.7% N1 45.6% N2 15.9% N3 6.8% | G1 5.8% G2 47.1% G3 43.0% Missing 4.0% | Stage 1 1.5% Stage 2 39.9%  Stage 3 58.6% | Used for partial data |
| Raz Mutai et al,24 2021 | Total 608  HoR+ 608  TNBC 0 | Asia | 60.5 | 10.3 | T≤2cm 77.0% T>2cm 22.9%  Missing 0.1% | N0 82.6% | Low 14.0% Intermediate 53.9% High14.6%  Missing 17.5% | NA | Used for partial data |
| William Jacot et al,25 2021 | Total 296  HoR+ 106  TNBC 187 | Europe | 57.7 | 9.7 | T1 45.6% T2 47.0% T3-T4 7.1% Missing 0.3% | N0 63.5% N+ 36.5% | G1-2 20.6% G3 77.4%  Missing 2.0% | NA | Didn’t use |

Table 1. Participant and Study Characteristics of Included Studies (continued)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source | Included sample size | Location | Median age, years | Median follow-up, years | Tumor size | Lymph node | Tumor grade | Stage | Data extraction tool |
| Paolo Tarantino et al,26 2022 | Totala 5235  HoR+ 4538  TNBC 697 | Multi-  continents | 59 | 0.8 | NA | N0 64.2% N+ 35.8% Unknown 0.0% | G1 28.7% G2 44.2% G3 25.9% Unknown 1.2% | Stage 1 58.7% Stage 2 17.9% Stage 3 2.9% Stage 4 20.5% | Didn’t use |
| Mengdi Chen et al,27 2022 | Total 2099  HoR+ 2099  TNBC 0 | Asia | NA | 4.2 | T1 70.4% T2-4 29.6% | N0 83.9% N1-2 16.1% | G1 8.7% G2 57.2% G3 18.5% Unknown 15.6% | NA | Didn’t use |
| Han  gcheng Xu et al,28 2022 | Total 777  HoR+ 678  TNBC 99 | Asia | 50 | 6.5 | T0/is/1 62.7% T2 34.4% T3 1.9% T4 0.5% Unknown 0.5% | N0 55.7% N1 27.0% N2 10.2% N3 6.6% Unknown 0.5% | G1 12.0% G2 59.1% G3 22.3% Unknown 6.7% | Stage 1 41.2% Stage 2 40.7% Stage 3 17.2% Unknown 0.9% | Didn’t use |
| Min Hwan Kim et al,29 2020 | Total 2657  HoR+ 2657  TNBC 0 | Asia | 50 | 5.9 | T1 72.3% T2 26.2% T3 1.3% T4 0.1% | N0 67.7% N1 24.5% N2 6.1% N3 1.7% | G1 33.1% G2 56.9% G3 10.0% | Stage 1 55.7% Stage 2 36.0% Stage 3 8.3% | Didn’t use |
| Louis Fehrenbacher et al,30 2019 | Total 3205b | Multi-  continents | NA | 3.8 | NA | N0 21.5% N1 52.4% N2 18.0% N3 8.1% | Low 7.9% Intermediate 43.3% High 48.6% Unknown 0.2% | NA | Didn’t use |

Abbreviations: HoR+, hormone receptor-positive BC; NA, not available; N+, Lymph node positive.

a. Total population includes hormone receptor-positive BC and TNBC.

b. The number of patients included for the OS analysis in the study was 3205, though the overall population in the study was more than 3205.