**Supplementary Table S1.** Comparison of the included interventions: risk ratio (95% CrI). Each cell gives the effect of the column-defining intervention relative to the row-defining intervention. Risk ratio > 1 means better pCR rates for treatments in the columns compared to treatments in the rows, and < 1 means worst pCR rates for ~~treaments~~treatments in the columns compared to treatments in the rows. Grey ~~colour~~color represent the direct comparisons. Bold character highlights the significant differences.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AT-CAPE-based | 1.46 (0.83, 2.60) | **1.41 (1.04, 2.02)** | 1.80 (1.29, 2.61) | 3.23 (2.20, 4.89) | 2.18 (1.51, 3.28) | **2.39 (1.63, 3.66)** | **2.60 (1.79, 3.96)** | **2.44 (1.54, 3.93)** |
| | AT-GEM-based | 0.97 (0.61, 1.54) | 1.23 (0.75, 2.00) | **2.22 (1.30, 3.70)** | 1.49 (0.90, 2.47) | 1.63 (0.97, 2.74) | 1.78 (1.06, 2.99) | 1.66 (0.94, 2.94) |
| | | AT-based | **1.26 (1.10, 1.46)** | **2.27 (1.81, 2.86)** | **1.53 (1.25, 1.88)** | **1.67 (1.33, 2.13)** | **1.83 (1.47, 2.30)** | **1.71 (1.22, 2.39)** |
| | | | Bev-AT-based | **1.79 (1.37, 2.34)** | 1.20 (0.94, 1.54) | **1.32 (1.01, 1.74)** | **1.44 (1.11, 1.88)** | 1.35 (0.94, 1.93) |
| | | | | Immuno-AT-based | **0.67 (0.55, 0.81)** | **0.73 (0.59, 0.92)** | **0.80 (0.69, 0.92)** | 0.75 (0.57, 1.00) |
| | | | | | NabP-AT-based | 1.09 (0.85, 1.41) | 1.19 (0.96, 1.49) | 1.11 (0.80, 1.54) |
| | | | | | | PARPi-Platinum-AT-based | 1.09 (0.90, 1.30) | 1.02 (0.74, 1.38) |
| | | | | | | | Platinum-AT-based | 0.93 (0.73, 1.19) |
| | | | | | | | | ddAT-based |

AT-based, anthracyclines/taxanes chemotherapy; ddAT, dose dense-anthracyclines/taxanes chemotherapy; AT-CAPE, anthracyclines/taxanes + capecitabine chemotherapy; AT-GEM, anthracyclines/taxanes + gemcitabine chemotherapy; Bev-AT, anthracyclines/taxanes + bevacizumab chemotherapy; Immuno-AT, anthracyclines/taxanes + immunotherapy-based chemotherapy; Nab-P-AT, anthracyclines + nab-Paclitaxel chemotherapy; PARPi-Platinum-AT, anthracyclines/taxanes + platinum agents + PARP inhibitors-based chemotherapy; Platinum-AT, anthracyclines/taxanes + platinum agents chemotherapy.

**Supplementary Table S2.** Rank probabilities table (the rank probability of the 9 regimens for pCR. Rank 1 represents the best treatment and rank 9 represents the worst.

| | Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 | Rank 6 | Rank 7 | Rank 8 | Rank 9 |
|---|---|---|---|---|---|---|---|---|---|
| **AT-CAPE-based** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.09 | 0.90 |
| **AT-GEM-based** | 0 | 0.01 | 0 | 0.01 | 0.03 | 0.13 | 0.33 | 0.36 | 0.09 |
| **AT-based** | 0 | 0 | 0 | 0 | 0 | 0 | 0.45 | 0.54 | 0 |
| **Bev-AT-based** | 0 | 0 | 0 | 0.01 | 0.08 | 0.71 | 0.18 | 0 | 0 |
| **Immuno-AT-based** | 0.97 | 0.02 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **NabP-AT-based** | 0 | 0.03 | 0.08 | 0.24 | 0.54 | 0.08 | 0 | 0 | 0 |
| **PARPi-Platinum-AT-based** | 0 | 0.13 | 0.26 | 0.40 | 0.16 | 0.02 | 0 | 0 | 0 |
| **Platinum-AT-based** | 0 | 0.54 | 0.38 | 0.06 | 0 | 0 | 0 | 0 | 0 |
| **ddAT-based** | 0.02 | 0.24 | 0.25 | 0.25 | 0.16 | 0.04 | 0 | 0 | 0 |

AT-based, anthracyclines/taxanes chemotherapy; ddAT, dose dense-anthracyclines/taxanes chemotherapy; AT-CAPE, anthracyclines/taxanes + capecitabine chemotherapy; AT-GEM, anthracyclines/taxanes + gemcitabine chemotherapy; Bev-AT, anthracyclines/taxanes + bevacizumab chemotherapy; Immuno-AT, anthracyclines/taxanes + immunotherapy-based chemotherapy; Nab-P-AT, anthracyclines + nab-Paclitaxel chemotherapy; PARPi-Platinum-AT,

anthracyclines/taxanes + platinum agents + PARP inhibitors-based chemotherapy; Platinum-AT, anthracyclines/taxanes + platinum agents chemotherapy.