

Supplementary Information

Relative efficacy of checkpoint inhibitors for advanced NSCLC according to programmed death-ligand-1 expression: a systematic review and network meta-analysis.

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Supplementary Figure S1. Risk of bias of included studies

Supplementary Table S1. Relative effects in pooled hazard ratios and 95% credible intervals by PD-L1 expression level

Supplementary Table S2. Relative effects in pooled hazard ratios and 95% credible intervals by PD-L1 expression level in second-or later-line settings

Supplementary Table S3. Rank probability in second- or later-line settings

Supplementary Figure S1. Risk of bias of included studies

| | Random sequence generation (selection bias) | Allocation concealment (selection bias) | Blinding of participants and personnel (performance bias) | Blinding of outcome assessment (detection bias) | Incomplete outcome data (attrition bias) | Selective reporting (reporting bias) | Other bias |
|--------------|---|---|---|---|--|--------------------------------------|------------|
| CheckMate017 | ? | ? | - | ? | + | + | + |
| CheckMate026 | ? | ? | - | + | + | + | + |
| CheckMate057 | ? | ? | - | ? | + | + | + |
| Keynote010 | + | + | - | + | + | + | + |
| Keynote024 | ? | ? | - | + | + | + | + |
| OAK | + | + | - | ? | + | + | + |
| POPLAR | + | + | - | + | + | + | + |

Supplementary Table S1. Relative effects in pooled hazard ratios and 95% credible intervals by PD-L1 expression level

A. PD-L1 < 1%

| | | |
|--------------|------------------|------------------|
| Chemotherapy | 0.77 (0.63-0.96) | 0.79 (0.63-1.00) |
| | Atezolizumab | 1.02 (0.74-1.42) |
| | | Nivolumab |

B. PD-L1 1-49%

| | | | |
|--------------|------------------|------------------|------------------|
| Chemotherapy | 0.83 (0.67-1.05) | 0.95 (0.79-1.15) | 0.76 (0.64-0.90) |
| | Atezolizumab | 1.14 (0.84-1.54) | 0.91 (0.69-1.20) |
| | | Nivolumab | 0.80 (0.62-1.04) |
| | | | Pembrolizumab |

C. PD-L1 ≥ 50%

| | | | |
|--------------|------------------|------------------|------------------|
| Chemotherapy | 0.42 (0.29-0.61) | 0.63 (0.48-0.83) | 0.55 (0.46-0.66) |
| | Atezolizumab | 1.52 (0.95-2.40) | 1.31 (0.87-1.97) |
| | | Nivolumab | 0.87 (0.63-1.20) |
| | | | Pembrolizumab |

Each cell represents the effect of the column-defining intervention relative to the row-defining intervention.
Effect estimates are presented as hazard ratios and 95% credible intervals are in parentheses.

Supplementary Table S2. Relative effects in pooled hazard ratios and 95% credible intervals by PD-L1 expression level in second-or later-line settings

A. PD-L1 < 1%

| | | |
|--------------|------------------|------------------|
| Chemotherapy | 0.77 (0.63-0.96) | 0.79 (0.63-1.00) |
| | Atezolizumab | 1.02 (0.74-1.42) |
| | | Nivolumab |

B. PD-L1 1-49%

| | | | |
|--------------|------------------|------------------|------------------|
| Chemotherapy | 0.83 (0.67-1.05) | 0.76 (0.59-1.00) | 0.76 (0.64-0.90) |
| | Atezolizumab | 0.92 (0.64-1.30) | 0.91 (0.69-1.20) |
| | | Nivolumab | 1.00 (0.73-1.37) |
| | | | Pembrolizumab |

C. PD-L1 ≥ 50%

| | | | |
|--------------|------------------|------------------|-------------------|
| Chemotherapy | 0.42 (0.29-0.61) | 0.40 (0.27-0.61) | 0.51 (0.41-0.64) |
| | Atezolizumab | 0.96 (0.55-1.66) | 1.22 (0.79-1.87) |
| | | Nivolumab | 1.27 (0.80- 2.04) |
| | | | Pembrolizumab |

Each cell represents the effect of the column-defining intervention relative to the row-defining intervention.
Effect estimates are presented as hazard ratios and 95% credible intervals are in parentheses.

Supplementary Table S3. Rank probability in second- or later-line settings

A. PD-L1 < 1%

| | Rank 1 | Rank 2 | Rank 3 |
|--------------|--------|--------|--------|
| Atezolizumab | 0.55 | 0.44 | 0.01 |
| Nivolumab | 0.45 | 0.52 | 0.03 |
| Chemotherapy | 0 | 0.04 | 0.96 |

B. PD-L1 1-49%

| | Rank 1 | Rank 2 | Rank 3 | Rank 4 |
|---------------|--------|--------|--------|--------|
| Atezolizumab | 0.15 | 0.28 | 0.51 | 0.06 |
| Nivolumab | 0.43 | 0.31 | 0.24 | 0.02 |
| Pembrolizumab | 0.42 | 0.41 | 0.17 | 0 |
| Chemotherapy | 0 | 0 | 0.08 | 0.92 |

C. PD-L1 ≥ 50%

| | Rank 1 | Rank 2 | Rank 3 | Rank 4 |
|---------------|--------|--------|--------|--------|
| Atezolizumab | 0.42 | 0.42 | 0.16 | 0 |
| Nivolumab | 0.53 | 0.33 | 0.13 | 0 |
| Pembrolizumab | 0.05 | 0.25 | 0.71 | 0 |
| Chemotherapy | 0 | 0 | 0 | 1 |

Each cell represents the effect of the column-defining intervention relative to the row-defining intervention.
Effect estimates are presented as hazard ratios and 95% credible intervals are in parentheses.