**Supplementary Table S3.** Summary of scenario analyses results

| **Parameters** | ICER by QALY |
| --- | --- |
| **OS** |  |
| Applying hazard rate from RWE data for long-term OS | $154,764 |
| Both Pembrolizumab plus chemotherapy and Chemotherapy arms - OS - Exponential | $204,150 |
| **PFS** |  |
| Pembrolizumab plus chemotherapy - PFS-IRC - Two-piece - 9 - Log-Normal | $182,651 |
| Chemotherapy (control arm in trial) - PFS-IRC - Two-piece - 9 - Generalized Gamma | $183,040 |
| **Time on treatment** |  |
| Pembrolizumab plus chemotherapy - ToT - Weibull | $183,864 |
| Chemotherapy (control arm in trial) - ToT - Exponential | $187,915 |
| **Time horizon, discounting, and half-cycle correction** |  |
| Time horizon: 10 years | $204,065 |
| Annual discount rate for effectiveness: 0% | $154,832 |
| Annual discount rate for effectiveness: 6% | $211,704 |
| Annual discount rate for cost: 0% | $193,612 |
| Annual discount rate for cost: 6% | $173,991 |