# ONLINE SUPPLEMENTARY DATA

# SUPPLEMENTARY TABLES AND FIGURES

Table SA1. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Patients Aged 65 Years or Older

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 31.4% | 15.4% | -16.0% |
| Second recurrence | 14.1% | 6.9% | -7.2% |
| Third recurrence | 6.4% | 3.1% | -3.2% |
| Total recurrence | 51.8% | 25.4% | -26.4% |
| NNT | 3.8 | | |
| 180-day mortality | 29.0% | 27.3% | -1.7% |
| Undiscounted life-years | 7.48 | 7.65 | 0.17 |
| Discounted costs | $4197 | $5859 | $1662 |
| Discounted QALYs | 4.69 | 4.80 | 0.11 |
| ICER | $15,298 | | |

Abbreviation: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA2. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Immunocompromised Patients

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 27.5% | 14.6% | -12.8% |
| Second recurrence | 12.4% | 6.6% | -5.8% |
| Third recurrence | 5.6% | 3.0% | -2.6% |
| Total recurrence | 45.4% | 24.1% | -21.2% |
| NNT | 4.7 | | |
| 180-day mortality | 28.6% | 27.3% | -1.4% |
| Undiscounted life-years | 15.55 | 15.84 | 0.29 |
| Discounted costs | $3674 | $5755 | $2081 |
| Discounted QALYs | 8.79 | 8.95 | 0.16 |
| ICER | $12,597 | | |

Abbreviation: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA3. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Patients with Severe CDI on Presentation

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 22.4% | 10.7% | -11.7% |
| Second recurrence | 10.1% | 4.8% | -5.3% |
| Third recurrence | 4.6% | 2.2% | -2.4% |
| Total recurrence | 37.1% | 17.7% | -19.5% |
| NNT | 5.1 | | |
| 180-day mortality | 28.1% | 26.9% | -1.2% |
| Undiscounted life-years | 10.35 | 10.52 | 0.17 |
| Discounted costs | $2998 | $5226 | $2228 |
| Discounted QALYs | 6.24 | 6.35 | 0.10 |
| ICER | $21,430 | | |

Abbreviation: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA4. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Patients Aged 65 Years or Older with 1 or More Episodes of CDI in the Previous Six months

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 43.4% | 19.4% | -24.0% |
| Second recurrence | 19.5% | 8.7% | -10.8% |
| Third recurrence | 8.8% | 3.9% | -4.9% |
| Total recurrence | 71.7% | 32.0% | -39.7% |
| NNT | 2.5 | | |
| 180-day mortality | 30.3% | 27.8% | -2.6% |
| Undiscounted life-years | 7.32 | 7.58 | 0.26 |
| Discounted costs | $5807 | $6394 | $587 |
| Discounted QALYs | 4.60 | 4.76 | 0.16 |
| ICER | $3591 | | |

Abbreviation: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA5. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Immunocompromised Patients with 1 or More Episodes of CDI in the Previous Six months

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 40.4% | 20.5% | -20.0% |
| Second recurrence | 18.2% | 9.2% | -9.0% |
| Third recurrence | 8.2% | 4.1% | -4.0% |
| Total recurrence | 66.8% | 33.8% | -33.0% |
| NNT | 3.0 | | |
| 180-day mortality | 30.0% | 27.9% | -2.1% |
| Undiscounted life-years | 12.98 | 13.36 | 0.39 |
| Discounted costs | $5411 | $6538 | $1127 |
| Discounted QALYs | 7.59 | 7.82 | 0.23 |
| ICER | $4979 | | |

Abbreviation: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA6. Cost-effectiveness of Bezlotoxumab + SoC Compared with Placebo + SoC in Patients with Severe CDI and 1 or More Episodes of CDI in the Previous Six Months

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Placebo | Bezlotoxumab | Difference |
| First recurrence | 33.3% | 9.1% | -24.2% |
| Second recurrence | 15.1% | 4.1% | -11.0% |
| Third recurrence | 6.8% | 1.9% | -5.0% |
| Total recurrence | 55.3% | 15.1% | -40.2% |
| NNT | 2.5 | | |
| 180-day mortality | 29.2% | 26.7% | -2.5% |
| Undiscounted life-years | 8.70 | 9.01 | 0.30 |
| Discounted costs | $4461 | $5016 | $555 |
| Discounted QALYs | 5.39 | 5.58 | 0.19 |
| ICER | $2938 | | |

Abbreviations: NNT, number needed to treat; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life year

Table SA7. Deterministic Sensitivity Analysis of the Cost-effectiveness of Bezlotoxumab Compared with Placebo in Patients with Severe CDI and One or More Episodes of CDI in the Previous Six Months

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters and tested ranges | Lower bound of ICER | Upper bound of ICER | Absolute difference |
| 180-day mortality - with recurrences (95% CI) | $13,681.68 | $34,826.61 | $21,144.93 |
| Recurrence rate - placebo (95% CI) | $12,303.49 | $33,348.88 | $21,045.39 |
| Recurrence rate -bezlotoxumab (95% CI) | $13,655.65 | $31,541.70 | $17,886.05 |
| Quality of life multipliers - post-CDI (lower limit; base case) | $19,823.98 | $29,593.66 | $9,769.68 |
| Discount rates (0.0%, 5.0% for both) | $14,325.30 | $23,827.39 | $9,502.09 |
| 180-day mortality - without recurrences (95% CI) | $17,487.85 | $22,980.17 | $5,492.32 |
| Cost of recurrences (95% CI) | $17,151.29 | $22,496.67 | $5,345.38 |
| Quality of life multipliers - post-clinical failure (lower limit; base case) | $16,188.34 | $19,823.98 | $3,635.64 |
| Age at model entry (95% CI) | $19,223.22 | $20,473.16 | $1,249.94 |
| Baseline utility values (95% CI) | $19,458.69 | $20,219.62 | $760.94 |
| Quality of life multipliers - mild/moderate CDI (95% CI) | $19,727.70 | $19,883.85 | $156.14 |
| Proportion of females at model entry (95% CI) | $19,797.57 | $19,850.62 | $53.05 |
| Quality of life multipliers - clinical failure (95% CI) | $19,803.16 | $19,836.85 | $33.68 |
| Quality of life multipliers - severe CDI (95% CI) | $19,815.30 | $19,830.67 | $15.37 |
| Quality of life multipliers - post-colectomy (lower limit; base case) | $19,809.27 | $19,823.98 | $14.71 |
| Proportion entering with severe CDI (95% CI) | $19,817.81 | $19,830.60 | $12.79 |
| 30-day recurrence rate - second (95% CI) | $19,818.63 | $19,829.27 | $10.64 |
| Mortality after colectomy (95% CI) | $19,818.75 | $19,829.26 | $10.52 |
| SoC efficacy - first recurrence (95% CI) | $19,820.65 | $19,826.92 | $6.27 |
| SoC efficacy - index case (95% CI) | $19,821.42 | $19,826.17 | $4.75 |
| SoC efficacy - subsequent recurrences (95% CI) | $19,821.62 | $19,825.99 | $4.37 |
| Prop. of subsequent recurrences that are severe (95% CI; subgroup specific) | $19,821.57 | $19,825.89 | $4.32 |
| 30-day recurrence rate - third (95% CI) | $19,822.32 | $19,825.62 | $3.29 |
| Colectomy rate (95% CI) | $19,823.21 | $19,824.76 | $1.54 |
| Quality of life multipliers - colectomy (95% CI) | $19,823.92 | $19,824.03 | $0.11 |

Abbreviations: CDI, *Clostridium difficile* infection; CI, confidence interval; ICER, incremental cost-effectiveness ratio; NNT, number needed to treat; QALY, quality-adjusted life years; SoC, standard of care.