

A Description of the IVI-NSCLC Model v1.0

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6 Simulation and uncertainty analysis

6.1 Parameter uncertainty

[Baio and Dawid \(2015\)](#)

6.2 Structural uncertainty

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7 Source data and parameter estimation

Key parameters for the model relate to: (i) transition probabilities; (ii) adverse events; (iii) utilities; (iv) healthcare resource use; and (v) productivity. Parameter estimates are based on currently available published evidence identified by means of a systematic literature review (SLR) and synthesized with meta-analysis techniques where appropriate. Details of our SLR ([Appendix A](#)) and NMA ([Appendix B](#)) techniques are provided in the Appendix.

7.1 Transition probabilities

Protocol Section 7.4.2.5.1 to go here.

7.2 Adverse events

Since adverse events in nearly all clinical trials were reported as the number of patients experiencing the event, the NMA was performed on the proportion of patients experiencing the event of interest with a binomial likelihood and logit link ([Dias et al. 2018](#), Chapter 2).

7.3 Utilities

To be added.

7.4 Resource use, productivity, and cost

To be added.

Appendices

A Systematic Literature Review

A.1 Transition probabilities

Protocol 7.4.1.1

A.2 Adverse events

To be added.

A.3 Utilities

Protocol 7.4.1.2

A.4 Resource use, productivity, and costs

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B Network meta-analysis

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Protocol 7.4.2.1

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B.4 Estimation of relative treatment effects under the assumption of consistency

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B.5 Models, likelihood, priors

Protocol 7.4.2.5 (but not Protocol 7.4.2.5.1 or 7.4.2.5.2)

B.6 Model selection

Protocol 7.4.2.6

B.7 Software

Protocol 7.4.2.7

References

- Baio, G. and Dawid, A. P. (2015). Probabilistic sensitivity analysis in health economics. *Statistical methods in medical research*, 24(6):615–634.
- Dias, S., Ades, A., Welton, N. J., Jansen, J. P., and Sutton, A. J. (2018). *Network meta-analysis for decision-making*. John Wiley & Sons.