Non-small cell lung cancer (NSCLC) accounts for 80-85% of all lung cancers. 51.64% of patients with NSCLC are diagnosed with stage IV disease, which is the most advanced stage. 

Objective: To assess the cost-effectiveness of ceritinib versus alternatives in the treatment of ALK+ NSCLC in the UK.

Methods: A cost-effectiveness analysis was undertaken from the UK National Health Service (NHS) and Personal Social Service (PSS) perspectives. A multi-way sensitivity analysis was conducted including total costs and effectiveness. 

Key Model Assumptions: 
- At the start of treatment, all patients entered the stable disease state and were assumed to remain in this state for the remainder of the time horizon. 
- The probability of death was calculated based on national mortality rates. 
- The probability of progression was set at 100% for each treatment arm. 
- The utility values were based on health-related quality of life (HRQoL) data from the EQ-5D-5L.

Results: 
- Ceritinib was considered the most cost-effective option, with an incremental cost per quality-adjusted life year (ICER) of £36,161 compared to chemotherapy.
- The incremental cost per quality-adjusted life year (QALY) gained ranged from £25,891 to £68,261 for ceritinib compared to chemotherapy.
- The incremental cost per QALY gained for ceritinib was £60,698 compared with chemotherapy.

Conclusions: 
- Ceritinib is a cost-effective treatment option for ALK+ NSCLC in the UK, with an ICER of £36,161 per QALY gained.
- The model results suggest that ceritinib could be a viable treatment option for ALK+ NSCLC patients, particularly in light of the high incidence of disease and the need for effective treatment options.