When Do We Have Enough Evidence?

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NICE Conference: The future of drug evaluation in the

UK: a debate





The context

Limited evidence

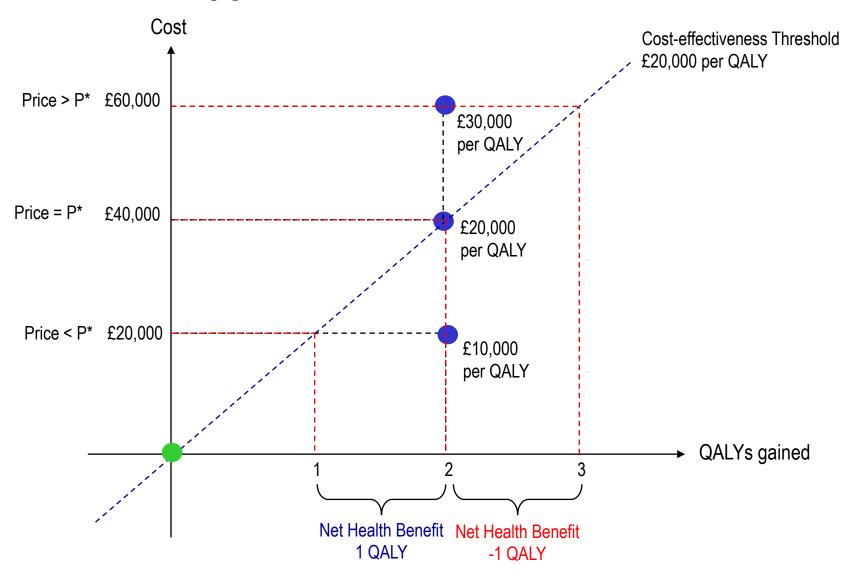
Launch	Market access	Routine use
Regulatory trials - comparators? - which patients? Limited head-to-he Some safety	Phase IV - comparative? - randomised? ead	Knowledge about use Safety data increases

Potential for more evidence

Limits to gaining more

evidence

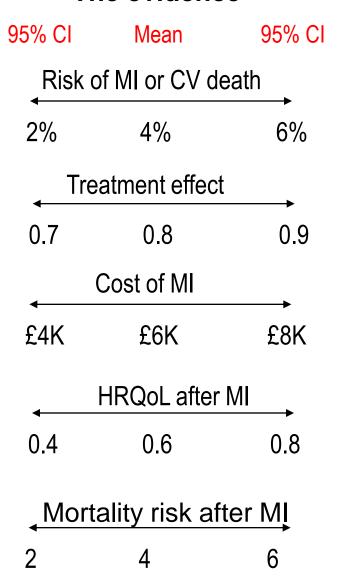
The basic appraisal decision



Claxton et al. British Medical Journal 2008;336:251-4.

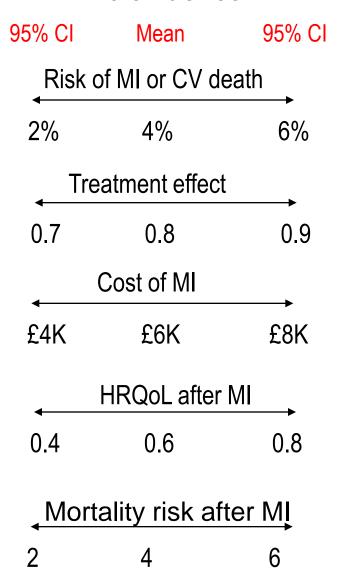
Uncertainty matters

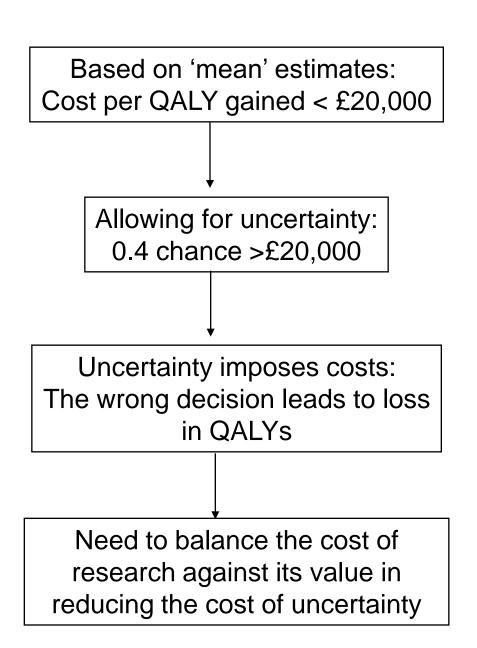
The evidence



Uncertainty matters

The evidence



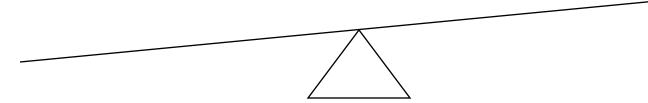


Making decisions under uncertainty

A two-decision world

- Costs of research are too high compared to reduction in cost of uncertainty
- 'External' research is underway and the costs of reversing the decision modest
- Further research will not be disincentivised
- No more research is feasible

- Research of value: costs of research are low compared to reduction in cost of uncertainty
- High costs of reversing a decision following research
- 'Yes' decision likely to disincentivise research



Positive guidance

Negative guidance

Making decisions under uncertainty

More nuanced decisions

Arrangement	Considerations
Only in research	 How different from a 'no' decision? Cost per QALY<£20,000 Clear justification Define what research is needed
Patient access schemes	Reduce effective price of productLowers cost per QALYCan reduce the cost of uncertainty
Conditional guidance	 Define what research is needed Will research be undertaken by manufacturer? What cost to the NHS? Cost of reversing the decision
Conditional guidance (at lower effective price)	 How is effective price lowered? Can incentivize research (get premium price) Cost of NHS undertaking the research Cost of reversing the decision

Bright horizons

- The spirit of Cooksey collaborative arrangements with NHS
- Better evidence at launch
 - NICE's Scientific Advisory Programme principal focus on design of Phase 3 trials
- Early cost-effectiveness modelling
 - Quantify likelihood of licence and reimbursement
 - NICE sets clear and transparent framework
 - Can have international influence
 - NHS input of modelling for UK?
 - Social value ≠ commercial value: share cost of development

Conclusions

- Appraisal decisions are initially addressed when evidence is inevitably limited
- Evidence has value in terms of health, just like interventions
- Sufficiency of evidence rests of when the cost of undertaking research cannot be justified by the reduction in uncertainty
- Appraisal Committee's decisions influence use of interventions and likelihood of future research
- Need explicit framework for how uncertainty is factored into NICE decisions
- Need for more nuanced decisions to reflect value of additional evidence