

The value of innovation

noun

1 the action or process of innovating.

2 a new method, idea, product, etc.

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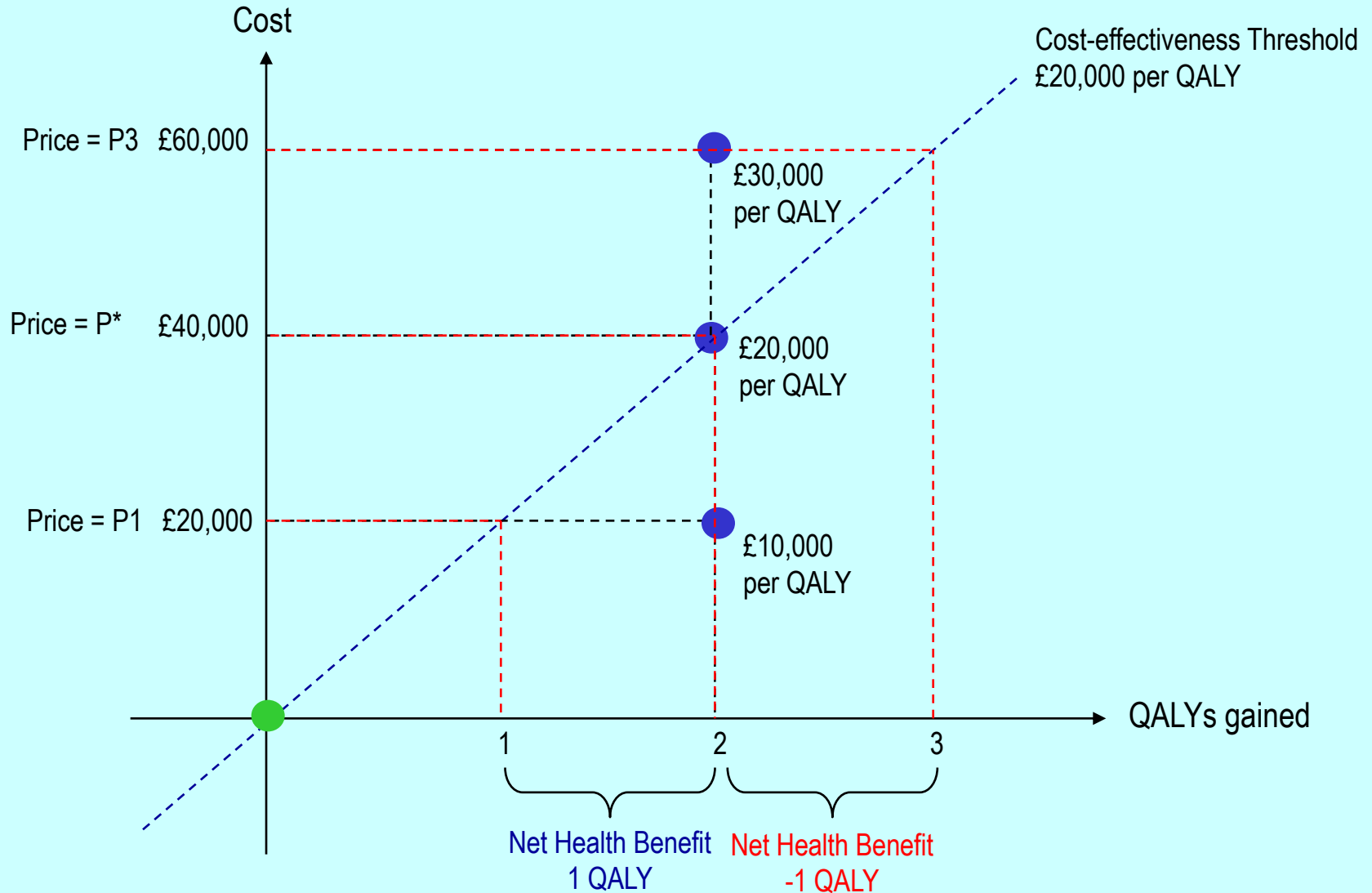
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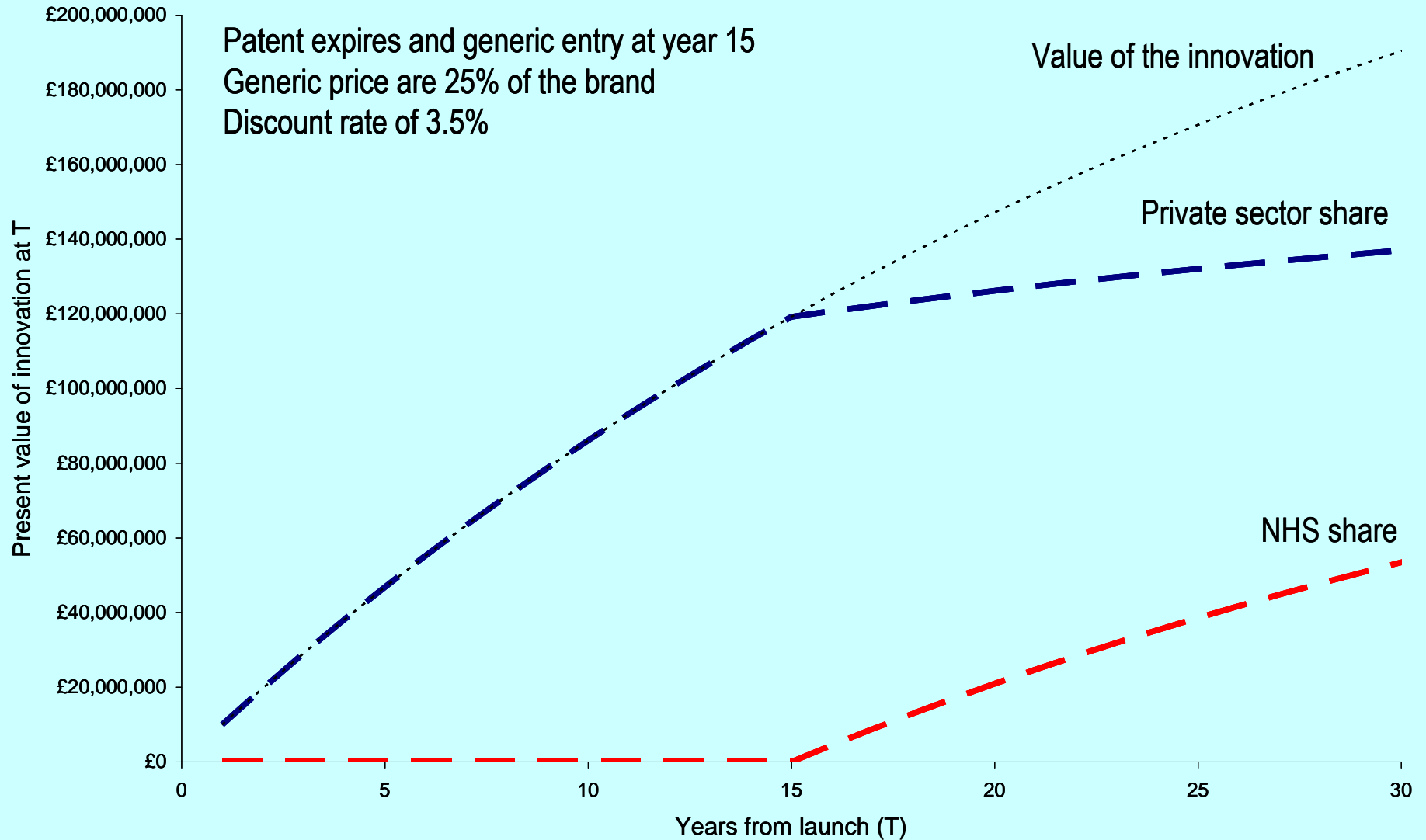
Outline

- The value of an innovation to the NHS?
 - Value, price and NICE guidance
- The potential value of innovation
 - The future benefits of innovation
 - Taking account of future prices
 - Uncertain benefits
- Sufficient incentives?
 - Patent protection
 - Costs of research and development
 - Public subsidies to research and development
- Other aspects of value
 - Other socially valuable aspects of health
 - Non health social value (perspective)

Value price and NICE guidance?



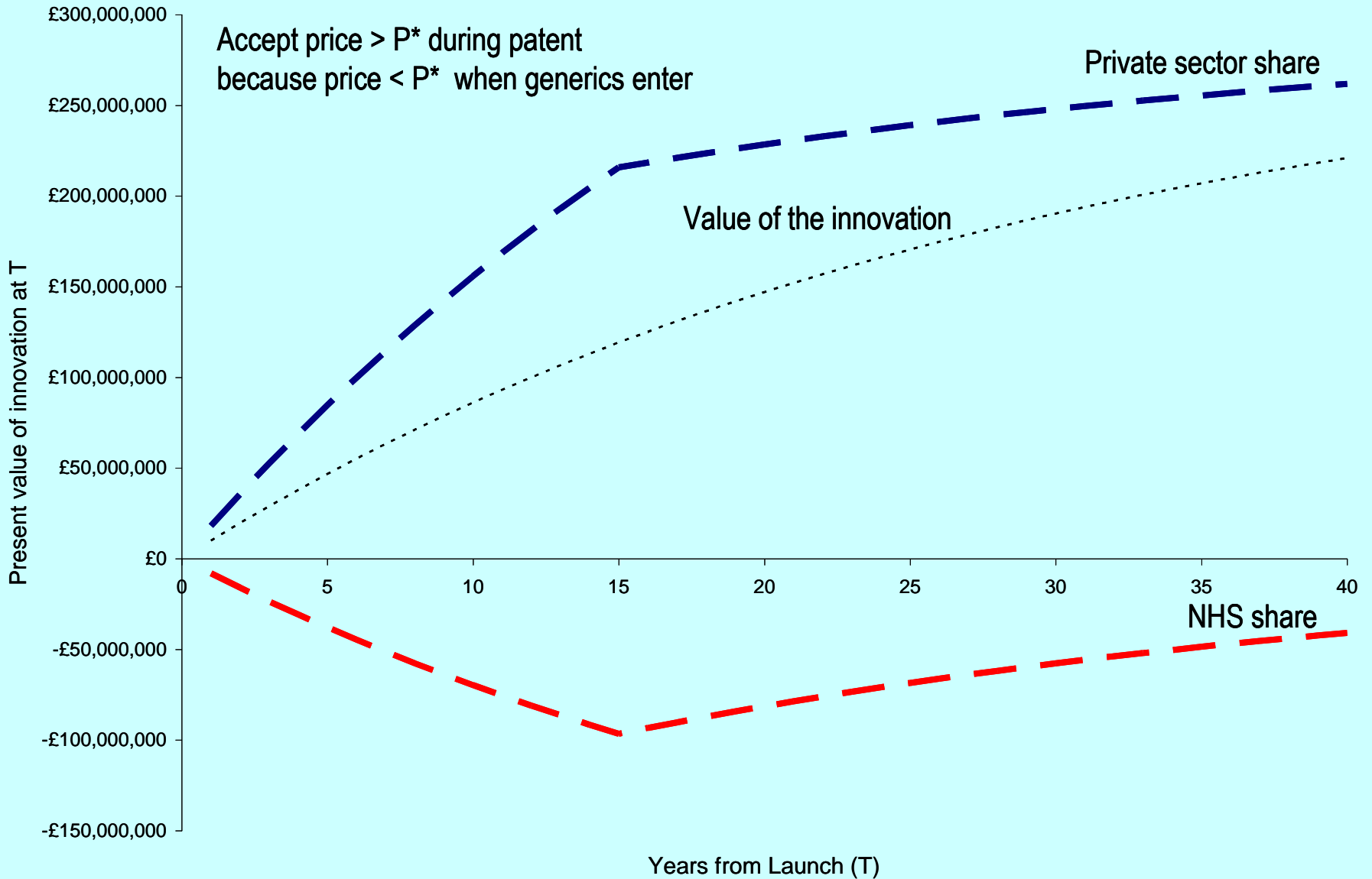
NICE offers full appropriation



The potential value of innovation?

- The future benefits of innovation (lead to future innovations)
 - Incremental and new innovations
 - New indications
- When should the NHS pay for them?
 - Who should anticipate future benefits?
 - Why should the NHS pay twice?
- Problem for incentives?
 - Full appropriation of future value is not necessary or efficient
 - Patent sufficient to raise initial capital
 - Total rewards and how rewards are shared
 - Only get more reward if the NHS does indeed pay twice!

Taking account of future prices



Potential but uncertain benefits?

- Close to launch evidence is least mature
 - Limited evidence of long term effects etc
- NICE methods
 - Best use of all evidence (permissive)
 - Extrapolation over time and to different setting
- Benefit of early access and value of evidence
 - Coverage with evidence development
 - Only in research
- New PPRS (flexible pricing, outcome based patient access)
- Rewards for good evaluative research and demonstration of claimed benefits

Sufficient incentives?

- Patent protection
 - Length, width and height
 - Requires comparison with other sectors (other government agencies)
 - Similar or greater returns
- Costs of research and development
 - Are the costs of regulation justified?
 - Cost of failures (should have been abandoned earlier)
 - A more rigorous demand side (NICE) may reduce costs
- Public subsidies to research and development
 - Infra-structure
 - Fundamental research
 - Translation and evaluative research

Other aspects of value?

- Other socially valuable aspects of health?
 - Not specific to innovations
 - Not enough to identify additional benefits
 - How much life expectancy willing to give up
 - Would simply reallocate rewards
- Non health social value (perspective)
 - Not specific to innovations
 - Effective technologies can offer benefits or impose costs
 - Non NHS costs of care
 - External effects for society
 - Some Implications
 - Non marginal effects
 - Price to appropriate all social value
 - Socially undesirable reallocations and conflict with other social objectives
 - DH commissioned review (summer 2009)

Conclusions

- Appropriate incentives should:
 - Disincentivise innovation that is not sufficiently socially valuable to provide an adequate return on investment
 - Reward those innovations that are sufficiently valuable
 - Not impose barriers to entry of new and more efficient innovators
- Clear and predictable signal of collective demand
 - NICE – a more predictable signal than in other markets
- Sufficient incentives?
 - Other policy tools and areas of government (not the NICE remit)
 - Requires comparison with other sectors
 - More predictable demand may reduce costs
- Other aspects of value
 - Not specific to innovation but all technologies and activities
 - Not enough simply to observe other benefits
 - Not increase rewards to innovation but reallocates them