

Drug Delivery Devices - A Decision Analysis

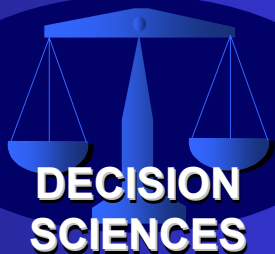
Figures are for illustration only

Alfons Lieftucht, Lee Hodge

GlaxoSmithKline

Decision Analysis Affinity Group (DAAG) Conference

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Agenda

- **Choices**
- **Issues**
- **Expert Assessments**
- **Results**
- **Observations & Lessons Learned**



- **Two drug delivery devices in development for a compound**
- **Parallel development of devices costly**
- **But benefit of insurance for better chance of success**



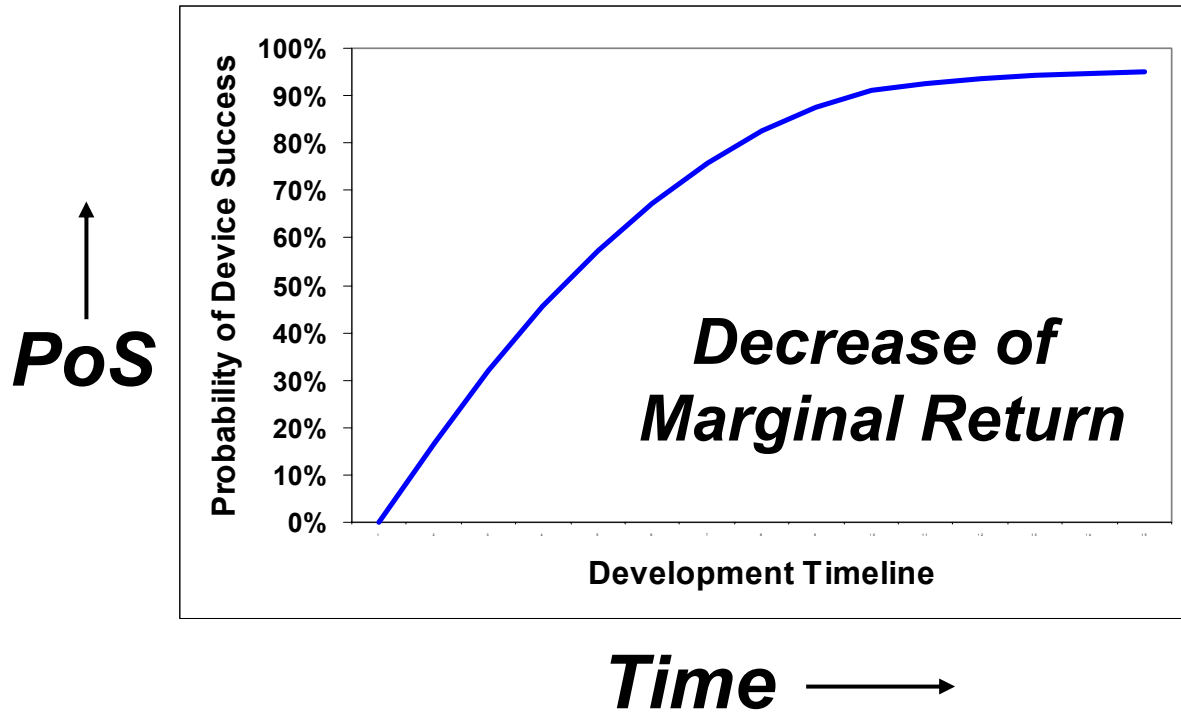
- **Time to market critical in light of competition**
- **Decision makers seeking evaluation focusing on current options**



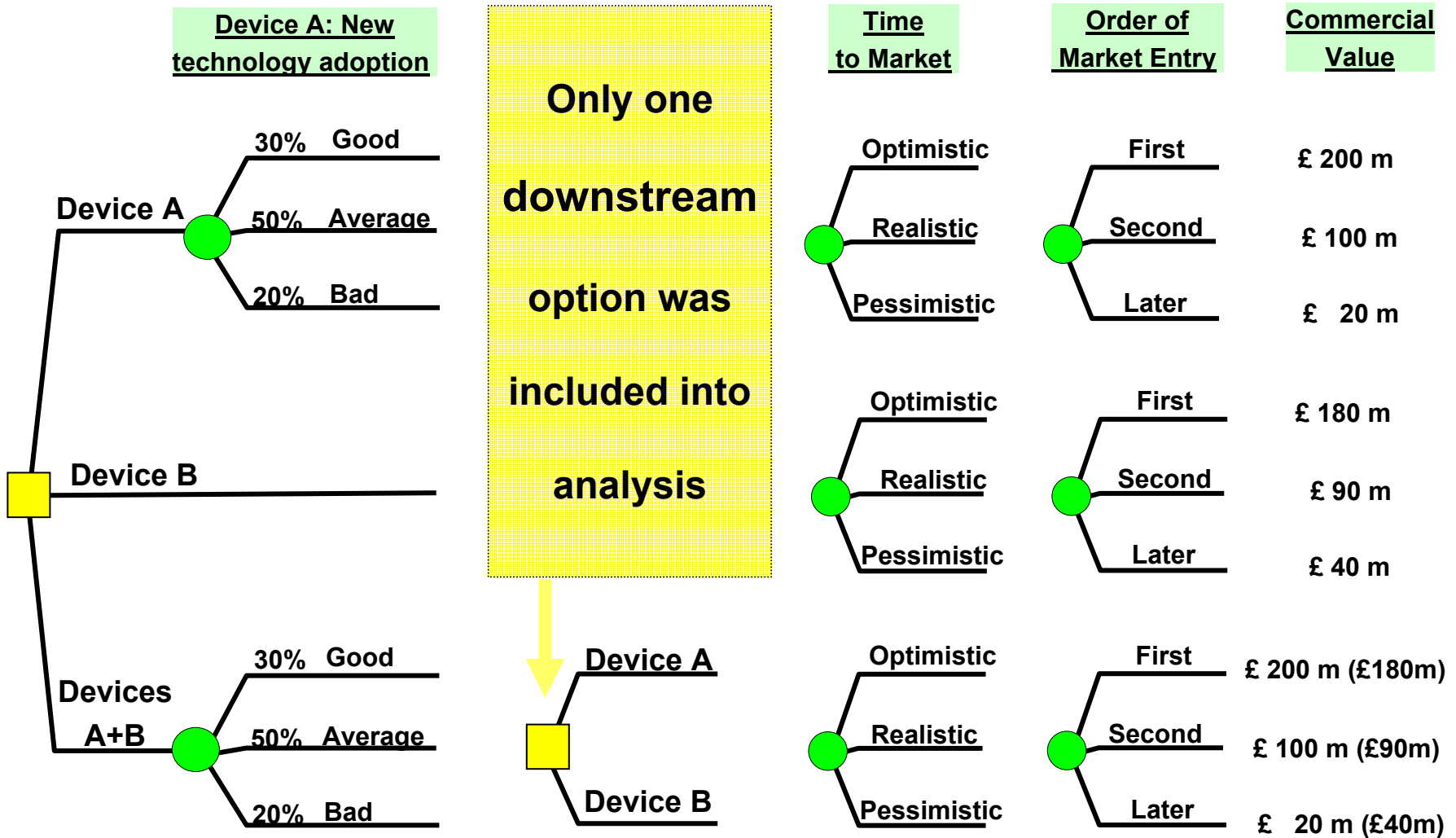
- **Substantial uncertainty around time needed to launch**
- **To a degree dependent on resource availability**
- **Chance of success described as correlated to time available**



Device Development - Key Tradeoff

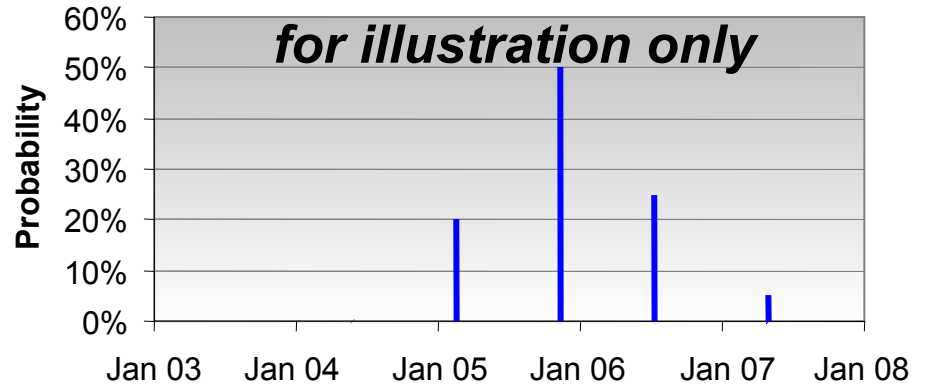


Expert Assessment - Time to Launch

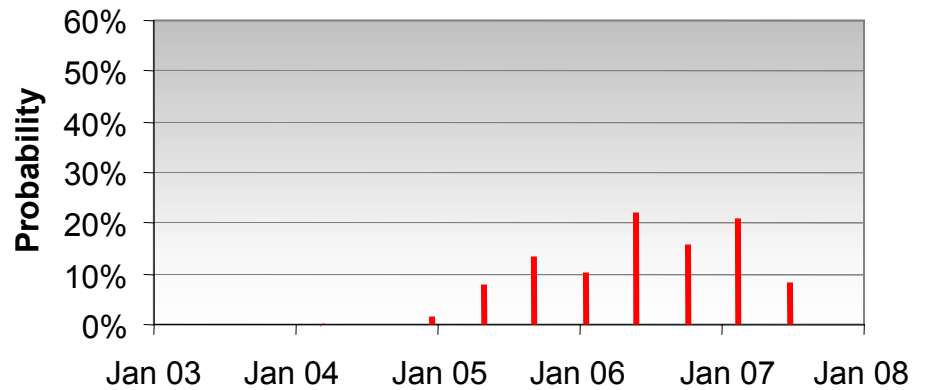


Expert Assessment - Timelines

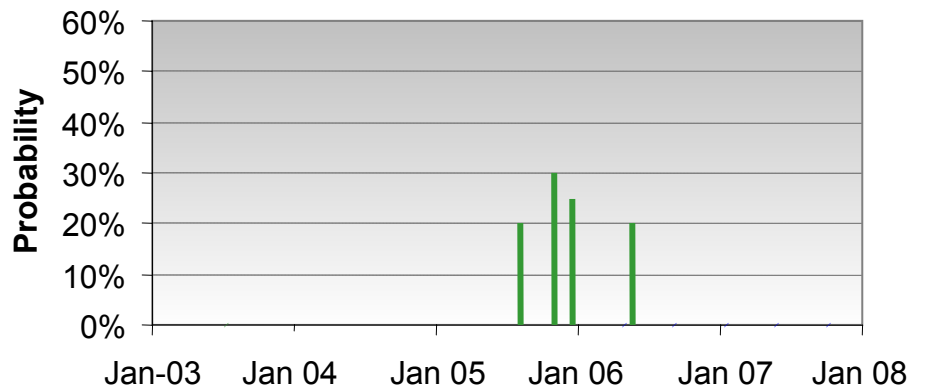
 **Competitor X**



 **Delivery Device A**



 **Delivery Device B**



Results - Measures of Value

	eNPV	eINV	eROI	incremental eNPV	incremental eINV	incremental eROI
Device A	£39 m	£6 m	6.5	ref.	ref.	6.5
Device B	£89 m	£19 m	4.7	£50 m	£13 m	3.8
Device A+B	£98 m	£24 m	4.1	£9 m	£5 m	1.8

eNPV: expected net present value

eINV: expected investment cost

eROI: expected return on investment (=eNPV/eINV)

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- **‘Best option’ depends on choice of metric**
 - Any issues the analysis has left out?
 - Any objectives that were not measured?
 - Go for value or go for efficiency?
- **Portfolio:**
 - Is Budget limited?
 - How efficient is the best alternative investment?



Observations and Learnings

- **Device Success was better captured in timeline terms than in probability of success terms**
- **Interviews suggested decreasing marginal return on chance of success on development time**
- **Choice of the right metric matters; clarify with decision maker early**

