

Life Cycle of a Biotech



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Presentation Outline

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- **Theoretical Biotech life cycle models**
 - Organisational life cycle
 - Financial life cycle
- **BresaGen Ltd – A case study**
 - ‘Theoretical’ vs ‘Actual’
- **Lessons Learned**



Organisational Life Cycle

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- Appearance, growth and disappearance of firms is compared to the processes of birth, growth, and death of biological organisms (Penrose, 1952)
- Both organisms and organizations undergo a different, yet definitive set of stages, which are a function of time (Malik & Hine, 2010)
- Organizational life cycle models assume that an organization goes through inception, growth, maturity and decline or re-development (Gupta & Chin, 1994)



Four Stage Model (Malik & Hine, 2010)

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- **Stage 1 – Embryonic/birth/infant**
 - endorse or create their own environment
 - small, highly centralized and informal, innovation-based
 - confronted with a struggle for survival in this phase
- **Stage 2 – Growing**
 - every possible opportunity to grow and learn, in hindsight realise that some openings can be threats that should have been avoided
 - output growth is high, design of the product begins to stabilize (clinical trials commence), new product innovation declines
 - gain recognition in the market from larger firms, VCs, Regulators
 - primary aim is the generation of enough revenues towards the continuation of operations and finances for adequate growth



Four Stage Model (cont...)

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- **Stage 3 – Maturity**

- organization matures, builds on success of its first horizon product
- Changes like accretion of technology, knowledge and skills, competence and productivity boosts, result in increased size, but a slow down in growth

- **Stage 4 – Decline**

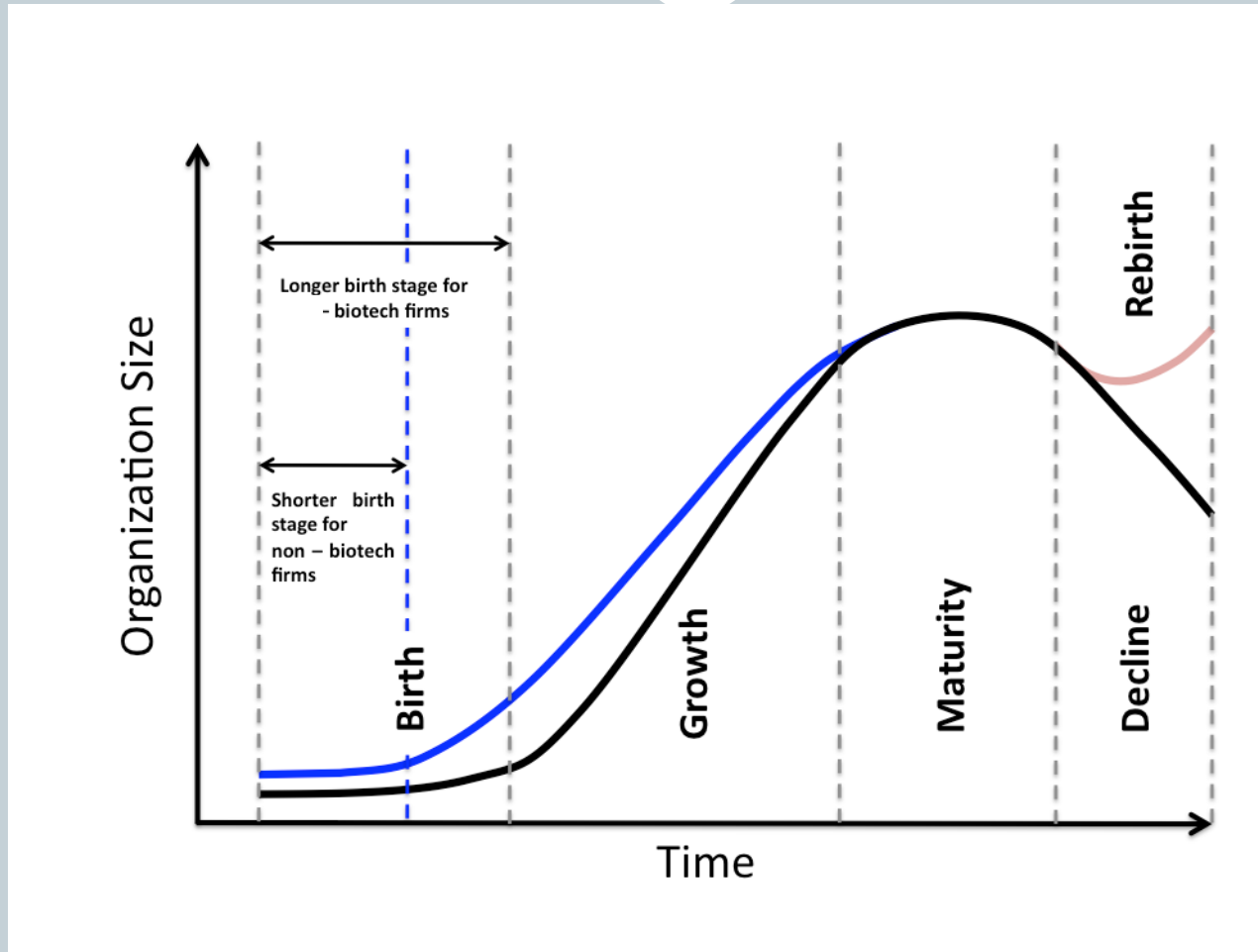
- fails to anticipate, recognize, avoid, neutralize, or adapt to external or internal pressures that threaten its long term survival
- may not be able to easily adapt itself to encounter changes in the environment, as a result of organizational inertia

...or Rebirth



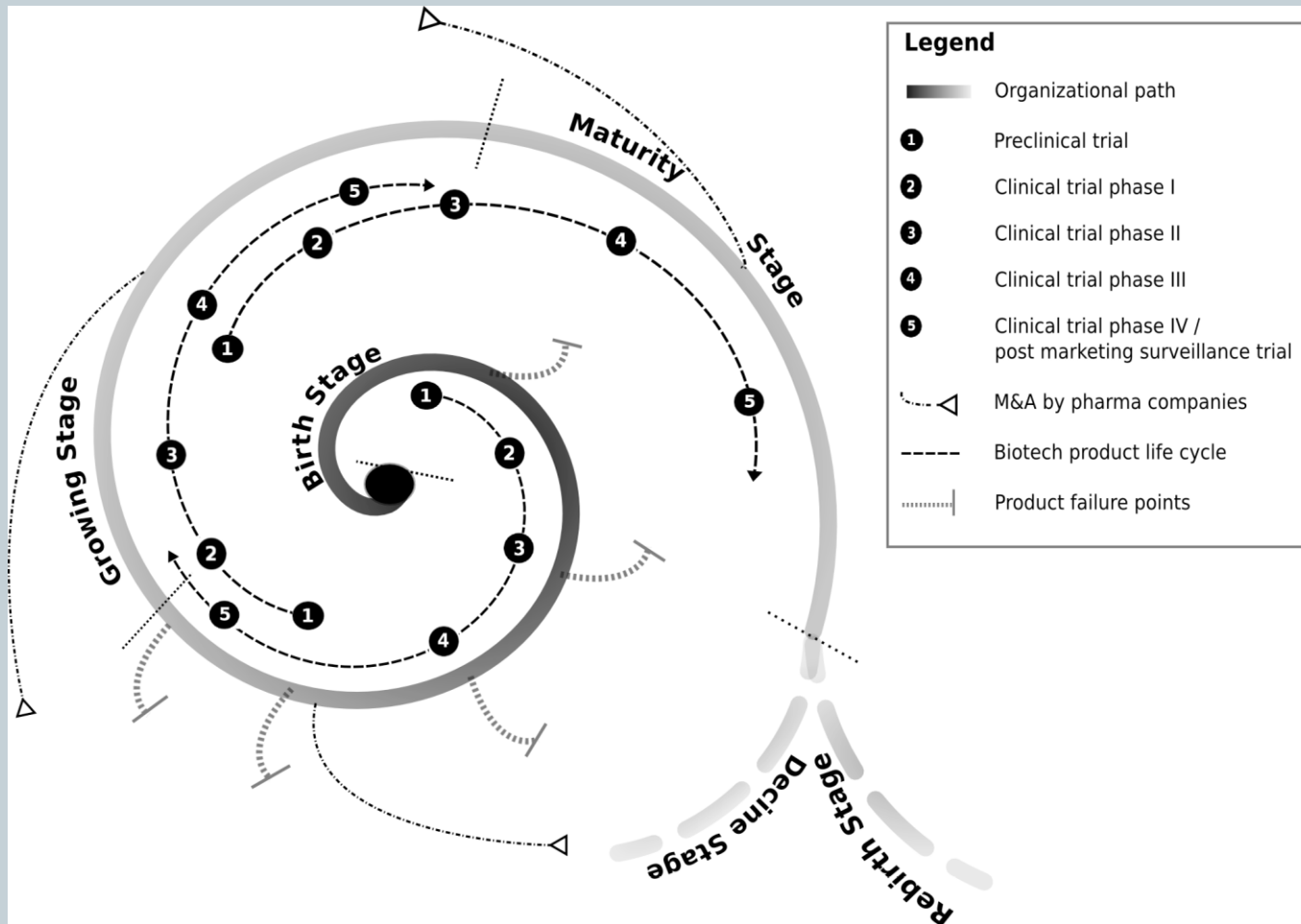
Typical Organisational Growth Cycle

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Path and Stages of a Biotech Company

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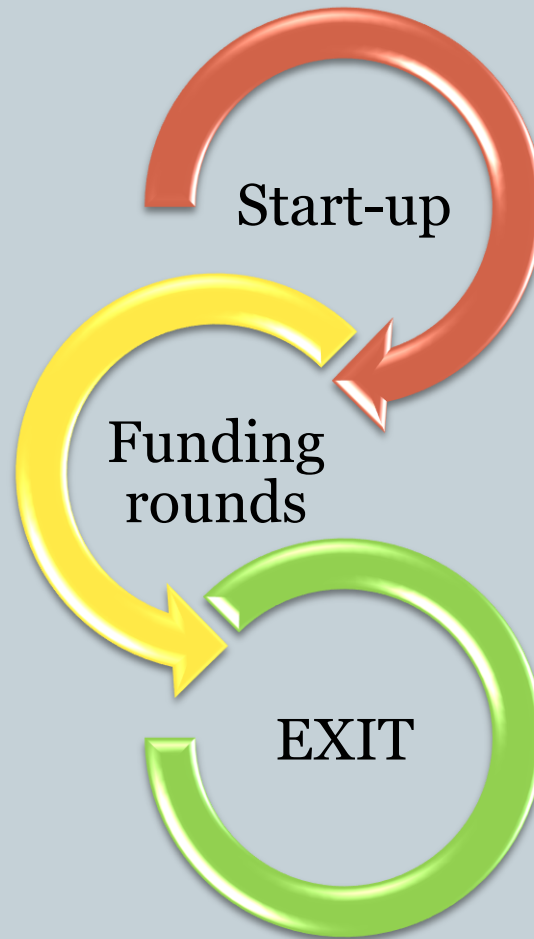


**3rd Cycle
embedded
Technology /
Product
Development
Life Cycle!**



Financial Life Cycle of a Biotech

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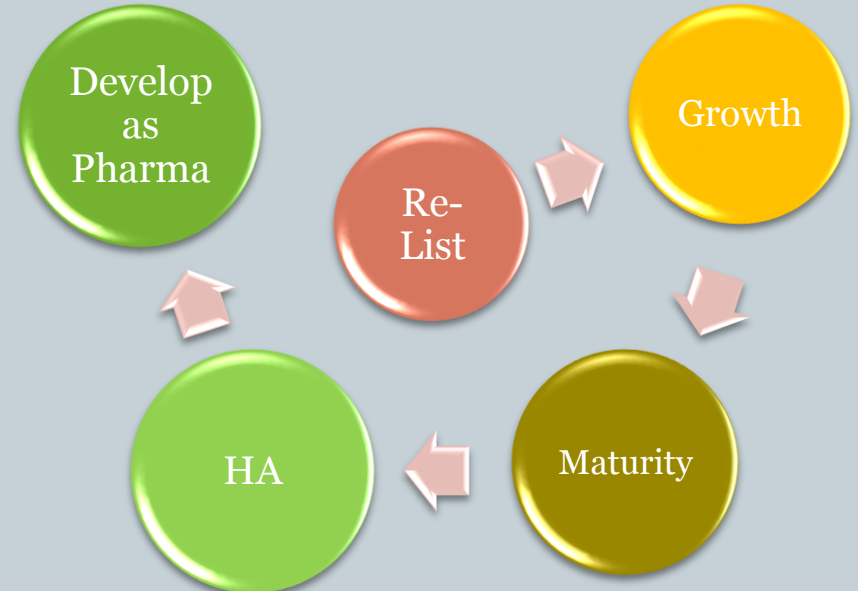
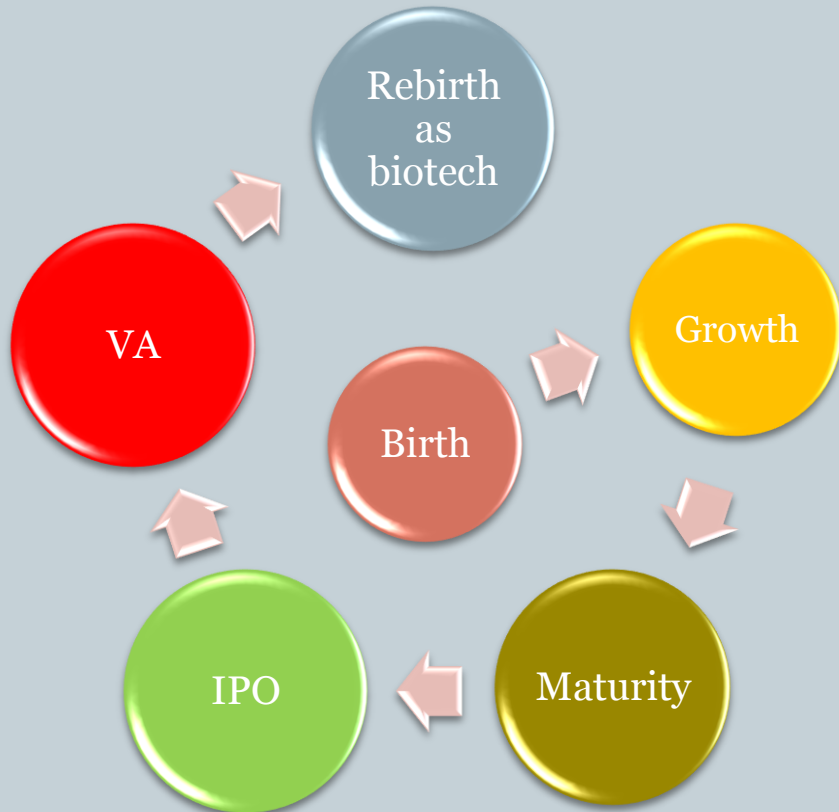


Life is more complex!!!

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BRESA > BresaGen Ltd

BresaGen > Hospira Adelaide



Lessons Learned

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- Three life cycles need to be managed for success:
 - Technology or product development
 - Financial – successful exit
 - Organisational development
- Focus needs to be on increase in value, via product or technology development, rather than financial exit need
- Global activity – need local presence in key geographies like US





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Thank You