Biotechnology and Venture Capital in Switzerland and Europe

Agenda

- Biotechnology in Switzerland / Europe
- Market trends in Europe
- Venture Capital in Switzerland / Europe
- Valuation of Biotechnology Companies
- Venture Valuation

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Swiss Biotech

Switzerland is not all about Cheese and Chocolate

It is also about Biotech/Pharma, Medtech and Nanotech

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Swiss Biotech

- 120 Biotech Companies
- 120 other Companies with Biotech activities
- 70 new founded companies within 5 years
- Renowned Universities
  - Federal Institutes of Technology: ETHZ and EPFL
  - University of Basel, Geneva, Lausanne and Zurich
- Switzerland has one of the highest per capita scientific publication rate

Source: Swiss Biotechnology Industry Guide, 2001

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Swiss Biotech

3 main clusters
- BioAlps (Geneva, Lausanne)
- BioValley (Basel)
- Greater Zurich Area (Zurich)

Source: Location Switzerland, 2001

Swiss Pharma/Biotech

The Swiss multinationals
- Novartis (listed)
- Roche (listed)
- Serono (listed)
- Lonza (listed)
- Syngenta (listed)

Examples of innovative start-ups
- Actelion (listed)
- Cytos Biotechnology (to be listed)
- Geneprot (private)
- Modex acquiring IsoTis (both listed)
- Prionics (private)

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European Biotech

Main geographical Clusters

Source: BID, University of Siena, 2001

European Biotech

Number of dedicated Biotechnology Companies

Source: BID, University of Siena, 2001
European Biotech

Private Biotechnology Companies

- US: 331
- Europe: 441
- Canada: 1775
- Asia/Pacific: 1115


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European Biotech

Number of employees in Biotechnology

- US: 34180
- Europe: 141000
- Canada: 7005
- Asia/Pacific: 6518


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European Biotech

- Fundings of European start-ups are smaller than those of their US/Canadian counterparts
- European Biotech sector maturing
- Few big Biotech companies => less partnering opportunities
- Many small, recently founded companies
- Governmental support in some countries (Germany, France)

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Market trends

- From exit-strategies to maintaining investment => larger, later funding rounds
- IPO window shutdown has not stopped VC Investment in European biotech
- VCs are used to wait between 6 to 15 years for a drug to reach the market => more long-term oriented investors
- Some funds pay back their funds to investors
- Pool of experienced managers from big pharma companies

Innovative Financing

- Reversed merger i.e. Cytos in Switzerland
- Consolidation - Cash meets product pipeline i.e. British Biotech and Morphosys, Modex and IsoTis
- Financing / Partnership with strategic Investor (big pharma, big biotech)
- Additional Venture Capital financing round
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Venture Capital Scene

Venture Capital Firm Total Invested

1. Alta Partners 24 $532.1 m
2. Novartis BioVentures 17 $384.5 m
3. MPM Capital 17 $557.3 m
4. 3i 15 $308.9 m
5. Forward Ventures 13 $275.0 m
6. CDIB Ventures 12 $306.6 m
7. J.P. Morgan Partners 12 $383.8 m
8. Lombard Odier 12 $256.4 m
9. HBM BioVentures 11 $261.9 m

Source: VentureReporter.net, Summer 2002
Venture Capital Scene

Results from 1st Quarter 2002

- European VC investment fall 32% (from EUR 1.7 bn to 1.2 bn) => Germany alone 76%
- Still strong Biotechnology Investments
- Deal size grew by 20%
- Less deals (from 401 to 259)

Source: E&Y and VentureOne, 2002

Venture Capital Cycle

- Understand the Venture Capital Cycle
- Look at the whole Company Life Cycle
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Biotech Valuation Issues

- Volatility of quoted companies
- Difficulty due to long cycle
- Traditional valuation methods unsuited
- Industry lacks transparency (number of companies and therapeutic approaches)
- Multiple forms of competition (capital supply, IP, partnerships, market share & sales force)
- Importance of understanding the VC cycle
- Influence of public capital markets

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Valuation approaches

- Operations-based methods:
  \(\Rightarrow\) business plan, fundamentals

- Market-based methods:
  \(\Rightarrow\) price, trends, comparison difficulties

- 5 methods:
  - Discounted Cash Flows/DTA \(\Rightarrow\) Operations meth.
  - Real Options/Monte Carlo \(\Rightarrow\) Mixed meth.
  - Venture Capital method \(\Rightarrow\) Market meth.
  - Market Comparables
  - Comparable Transactions

\(\Rightarrow\) use several methods and weigh depending on the company valued

Drug Project Valuation

- Decision tree analysis to incorporate clinical trial investments and transition probabilities
- Possibly Monte Carlo simulations
Factors to influence value

Soft factors are essential ...

• Management
• Market
• Science & Technology

... and the company stage

to define the risk profile of company

Venture Valuation

• Independent Valuations
• Experts Finance / Biotech / Medtech
• Not a venture capitalist
• Customers are investors and companies
• Experience in USA/Canada and Europe
• Systematic / Validated Approach
Thank you

Presentation available on:
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...and how do you value your company?