Development of and access to Innovation

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Issues for the EU Biotech Ecosystem

- Investment in IT = lower risk as perceived by some VCs.
- Many VCs not specialized in health care to fully judge quality of science and innovation potential of asset.
- Too thin a spread of funds across many rather than focused investment in top science & top innovation.
- Funds in EU bound to countries are creating barriers.
- Lack of business experience with entrepreneurs
- Lack of collaboration of top Life Science Academia with top Business Schools
- Particularly in EU not many mature Biotechs exists:
 - Movement of key assets out of the EU for later stage dev. & market capitalization,
 - Drain of key business opportunities from the EU stock markets,
 - Lack of realization of big revenue in the region,
 - Lack of trust building wrt ROI for VCs in EU -> reluctance to fund beyond phase I readiness,
 - Phase I readiness is attractive for Big Pharma to buy asset, but ROI for investors is remote.
 - In US healthy competition exists between IPO and acquisition
- Healthy and fully functioning Biotech ecosystem needs mature Biotechs that manufacture & sell their medicines



Issues for the Access to Innovation

- EU Parliament driven research (Godman et al. 2016): "Present Pharma R&D produces few innovative medicines for diseases for which no treatment exist".
- Highly-parallel "micro-innovation" in established treatment areas.
- Payers find it very difficult to remove medicines from reimbursement lists once they made it there other than for safety reasons.
- Novel treatment paradigms such as Hep. C eradication (short-term, high cost) do not fit the existing health economic models
- Ethics vs. Economy: What is a meaningful treatment benefit for a cancer patient?



Possible Solutions

- Biotechs: Building a compelling Evidence Generation to Value Demonstration Chain right from Research -> Needs experienced R&D folks.
- VCs need to better understand Innovation and Quality Research in life science.
- Larger and more focused funds in EU without barriers.
- EU Parliament driven research (Godman et al. 2016): 85-90% of novel medicines not believed to provide significant benefit over existing.
- Re-defining Innovation to force larger steps -> needs more holistic approaches to biology and disease mechanisms (e.g. high content biology rather than focus on single targets and linear pathways, extensive use of genetics and IT).
- Harmonized HTA processes and criteria (minimum effectiveness increase, e.g. for several cancer medicines) that need to be logical, meaningful, and plausible to all Health Care Stakeholders incl. Patients.
- Need improved Horizon Scanning for big leap innovations to better prepare definition of reimbursement models between pharma and payers.



DIA BioVenture Day Topics

- Funding models: What can be improved?
- At the DIA BioVenture Day in March, the German Stock exchange will be present to discuss their approach to funding innovation.
- We will assess whether we have to re-define Innovation to avoid small step innovation where ROI is questionable for Industry & Health Economy.
- We will discuss how novel and disruptive treatment paradigms (e.g. Hep.
 C) can be accommodated through novel health economic models.

