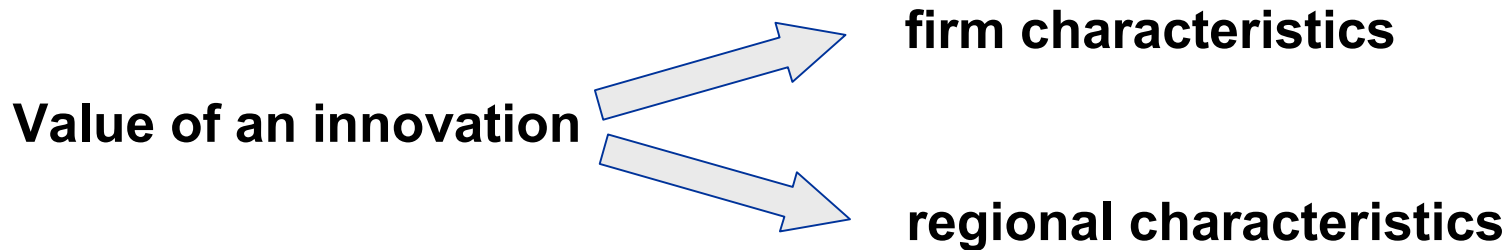


Discussion of Myriam Mariani:

What determines technological hits? Geography and firm competencies in biotechnology vs. „traditional“ chemicals

**EPIP Conference, 24. April 2003
Carolin Socher, University of Munich**



Focus on European chemical industry: „traditional“ vs. biotech sector

➔ **Relevant topic; lack in literature**

➔ **Topic of current interest (e.g. governmental support programs)**

Overall chemical industry

Only firm characteristics has an effect over the probability of producing technological hits.

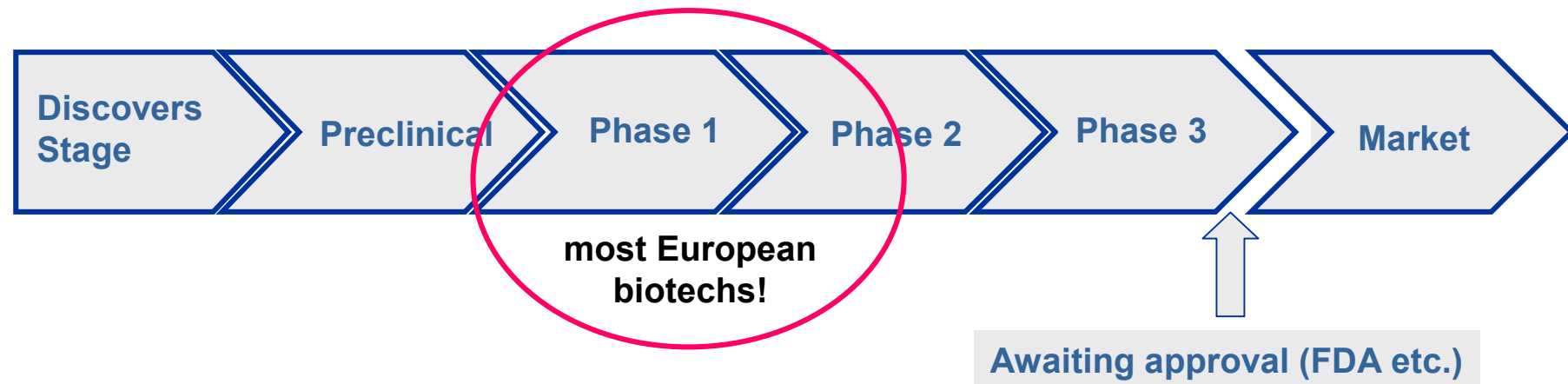
„Traditional“ sector vs. biotech

➡ „Traditional“ sector: only firm characteristics matter

➡ Biotech sector: firm characteristics and geography matters
(→ biotech more concentrated/novel sector/more small companies)

Bias with dependent variable (forward citations within 5 years)

- self-citation excluded (large companies)
- BUT: novel and young industry in Europe. (The biotechnology endeavor, all in all, is in an very early stage of the technology life cycle.)



Biotech worldwide:

Currently are worldwide 468 drugs in Phase 3. 60% (280) are coming from young biotech firms!

Variable: co- and de localised patents

- Aftalion firms are a good coordination mechanism for inventors located in different regions (=de localised).
- Co localised patents can be outcome of a firm or of a cluster.
- BUT: joint patents (young firm and „Big Pharma“)

Interpretations

- Cluster variable does not measure interaction within cluster!
- Role of government region specific support?
- Motives for being located in a cluster?!

Generalization of results

- Industry specific and/or industry stage specific?!