

Selection of the Population Group to Study

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What is the challenge?

- To validate the QRA
- To study the impact of the QRA in
 - Consumers (the general population)
 - Patients (the clinical setting)

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Do we need all this?

Possible Study Designs

- An experimental study under controlled conditions
- An epidemiological study under real life conditions
 - (1) cross-sectional
 - (2) case-control
 - (3) cohort study

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Is this all, epidemiology can offer?

Hybride Study Designs

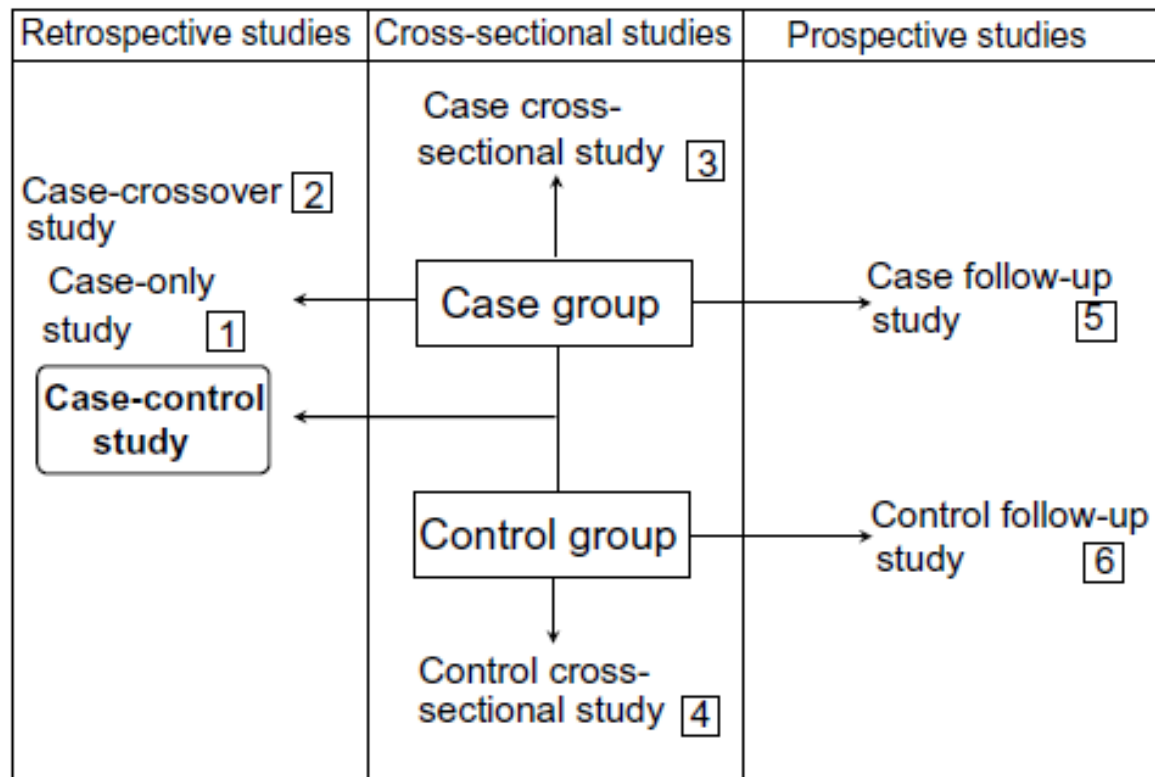


Figure 1. Case-control study design and additional design options.
 Stang, A, Jöckel, K-H

European Journal of Epidemiology 19: 527–532, 2004.
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Hybride Study Designs

1. Immediate results
- 3.&4. Immediate results in patients & consumers
5. Surveillance in patients
6. Surveillance in consumers

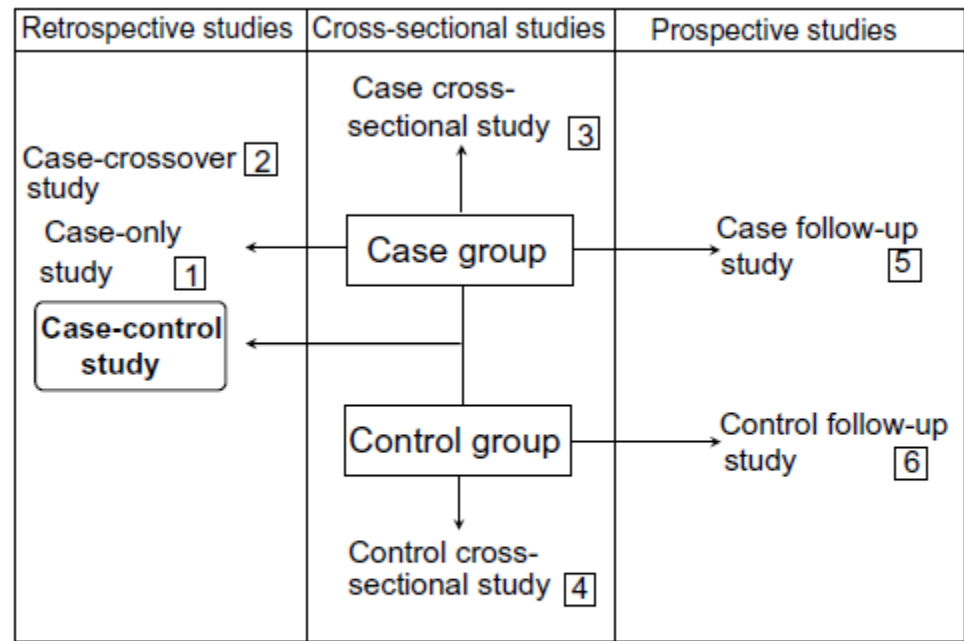
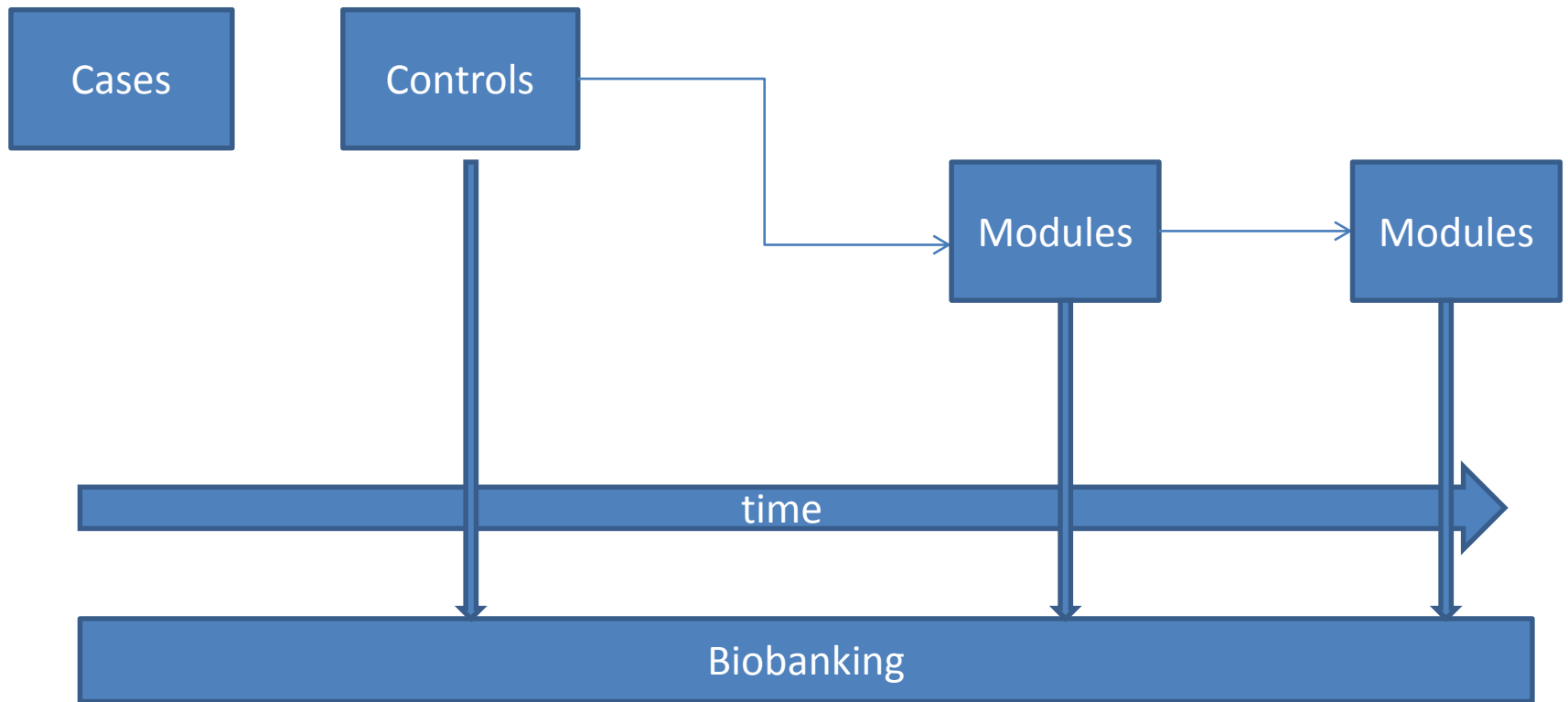


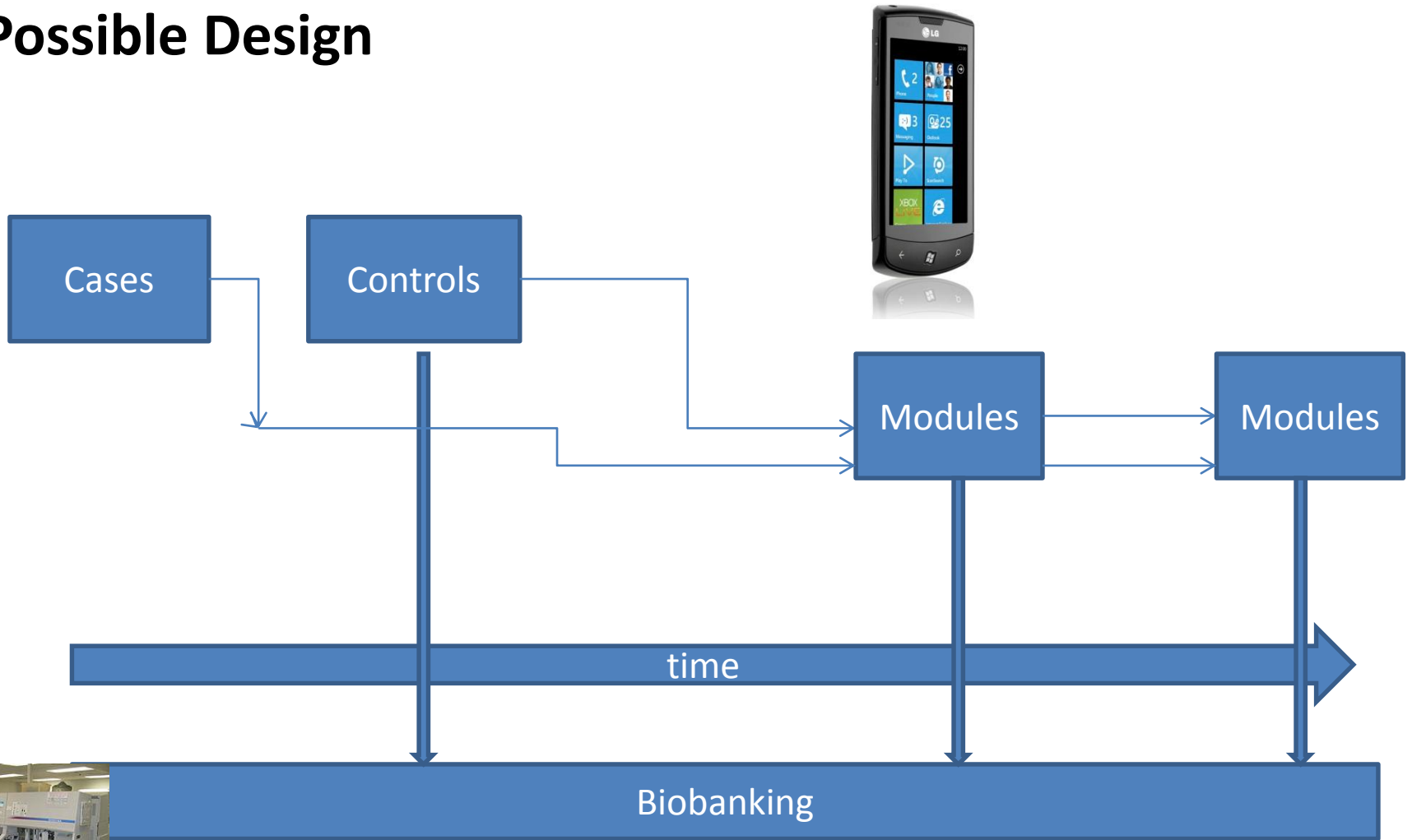
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Possible Design



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Epidemiology just in time: further aspects

- Using modern technology: Smart phones to assess exposure, symptoms, but even measurements may be possible
- Instruments may be adapted, changed or newly introduced (on the fly)
- Biobanking and modern techniques (e.g. methylation)
- Blood, urine, saliva, DNA, RNA,



Epidemiology: not to forget the classical challenges

- Confounding
- Definition of endpoints, exposures
- Latency & time since last exposure
- Selection & recall bias
-



Thank you for your attention