Connecting cell biology to patient response: clinical applications of multi-scale systems pharmacology

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Multi-scale systems pharmacology

Mechanism-based model

Virtual Patients

Simulated response
Advancing QSP Toward Predictive Drug Development
ASCPT Pre-conference, March 13th

• Mechanism-based systems models (QSP) enable **extrapolation**:  
  • New patient populations, drugs, dosing regimens, combinations, biomarkers

• Mechanism-based systems models are **intuitive** to biologists and clinicians  
  • Stakeholder engagement
The Gartner hype cycle for emerging technologies

- Peak of Inflated Expectations
- Plateau of Productivity
- Trough of Disillusionment
- Technology Trigger

QSP?