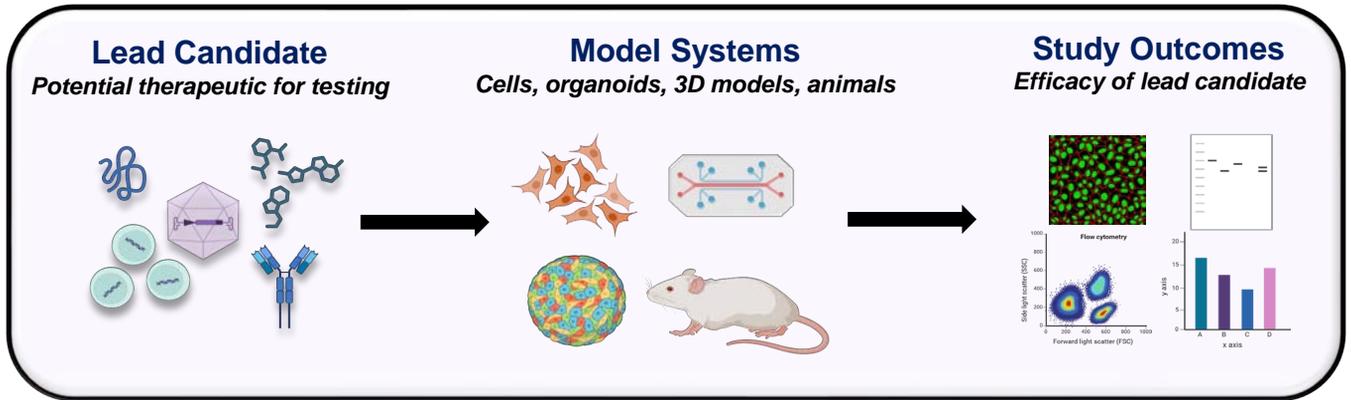


PROOF OF CONCEPT

Proof of concept (POC) studies are needed to test the efficacy of a gene therapy or drug candidate in preclinical models



Information to be gathered from a POC study

- Target identification and validation
- Mechanism of action
- Estimation of the effective human dose and dosing regimen
- Pharmacokinetic/pharmacodynamic relationships
- Off-target effects



Steps in conducting a POC study

- Select AAV serotype for desired tissue tropism
- Optimize vector elements in lead candidate
- Select appropriate disease model system
- Conduct in vitro and in vivo testing
- Evaluate gene and protein expression, biodistribution
- Measure changes in disease endpoints



POC study results

Inform the clinical trial



- Model selection and age
- Route of administration and study duration
- Assays and efficacy measurements

Clinical trial design

Guide the POC study requirements



- Disease indication and target population
- Dosing regimen
- Study endpoints and biomarkers



POC study design (dosage, route of administration, efficacy endpoints) must align with the intended clinical study plan

PaVe-GT relevant resources: [PCCA INTERACT package](#); PCCA pre-IND package (coming soon)