Collaborative Efforts to Advance Drug Discovery in IBD

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What will you learn today?

Collaborative mechanism to advance drug discovery leveraging the Foundation’s research portfolio.
Outline

- Mission & Research Focus
- Collaborative effort to advance drug discovery
  - Rationale
  - Process
  - Outcomes
  - Take home message
Mission
To cure Crohn's disease and ulcerative colitis, and to improve the quality of life of children and adults affected by these diseases.
Research Focus

Overcome hurdles & accelerate research to drive the continuum from discovery to optimal care
Therapeutics Discovery Continuum

Basic Research

- Target Identification
- Target Validation

Drug Discovery

- Drug Candidate Discovery
- Drug Candidate Optimization

& Development

- Preclinical Development
- Clinical Development

Foundation’s Funded research

Animals Safety, Efficacy Pharmacology

Human Clinical Trials Safety Efficacy Pharmacology
How to Bridge the Gap Between the Bench & Bedside

- Specialized Infrastructure
- Pharmaceutical Scientists
- Financial Resources
3 Way Collaboration to Advance Drug Discovery
Strategy to Accelerate the Drug Discovery Continuum

**Academic Research Portfolio**
- Drug targets
- Targets biology
- Cell based assays
- Animal models

**Drug Discovery Lab**
- Drug discovery activities
- Chemical Libraries
- Pharma Scientists
- Candidate drugs
- Preclinical development

**Project Selection**
- Funding
- Oversight
- Partnerships
3 Way Collaboration: Strategy

Partnering with a leading drug discovery organization

(CROHN’S & COLITIS FOUNDATION) (Targets) + (evotec) (Drug candidates) = New product opportunities

Pharma and VC Partnerships
- Development
- Commercialization
3 Way Collaboration: Process

1. ID Drug Discovery Partner
2. ID Drug Target (Foundation’s Research Portfolio)
3. Collaboration Feasibility Conversation (CDA)
4. Define Scope of Work (SOW)
5. Collaboration agreements
6. Start Work
Drug Target Selection Criteria:

- Commercial potential
- Intellectual property
- Plan to reach clinic
- R&D resources
- Product Profile
- Evidence in IBD
- Scientific plan
- R&D team

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Outcome and Timelines

- Conversations with Evotec started on Early 2017
- 2 Drug targets (2 different academic labs) - Dec 2017
- SOW (2 months) - Jan-Feb 2018
- Agreement Foundation – Academic Labs (9 months)
- 1 Agreement successfully executed - Nov 2018
- 1 unsuccessful agreement -
  - Road block – Tech Transfer Office – Inflexibility to accept value
  - PI did not work with TTO to demonstrate value
- Drug discovery activities started Feb, 2019
3 Way Collaboration to Advance Drug Discovery
Take Home Message

- 3 way collaboration
  For Profit – Non Profit - Academia is possible

- Complex process – Persistence is key

- Takes longer than expected

- Tech Transfer Office inflexibility may be the biggest roadblock

- Academic PI plays a critical role in demonstrating value to TTO

- Once the project starts, research advance:
  - Quickly
  - Adhered to a well defined multi-step process
  - Respecting rigorous timelines
Next Steps

- First PoC Project (ID lead candidates)
- Generate New product opportunities
- RFP (New projects)
Collaborating to translate basic research into effective drug discovery and development activities
Thank you!