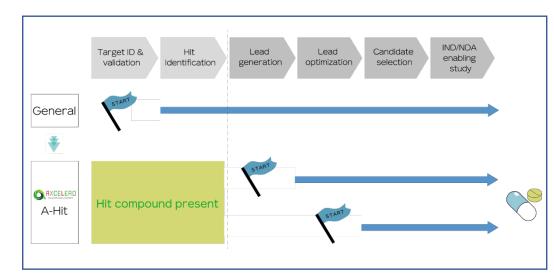




What is A-HiT project? (Axcelead's Hit-identified Target project)

- Legacy projects in Takeda Pharmaceuticals. Axcelead researchers carefully selected from over 700 projects
- At least hit compound and primary assay system present
- Generate and optimize candidate compounds in the scheme of "co-creation". IP of the compound developed belongs to the customer in principle
- Early stage drug discovery step can be significantly reduced

>80



Target available

122

Hit identification (41%)
Lead generation (38%)
Lead optimization (21%)

Potential of FIC

Co-crystallization

Original indication

Cardiovascular and metabolism (39%)
Central nervous system (34%)
Inflammation and immunology (11%)
Oncology (16%)



>40

Value of A-HiT project

Jump start and get candidate shortly

A-HiT project

- Assay system
 - Primary assay
 - ✓ Cell free / Cell-based
 - Counter assay
 - In vivo
 - ✓ PD
 - ✓ Efficacy
- Compound
 - Hit compound (HTS)
 - Lead compound
- Data / knowledge
 - Access to data
 - Former project member

AXL service

- Integrated drug Discovery (IDD) service
 - Lead generation
 - Lead optimization
- Repositioning
 - BI analysis
 - Get POC
 - √ Tg/KO model
 - √ iPS-D
 - ✓ CRISPR-Cas9
 - FRONTEO

"Concept Encoder"

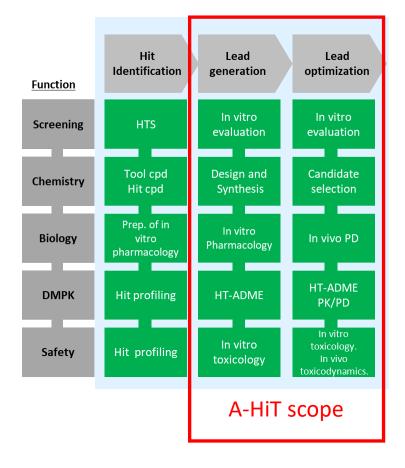
Output

- Candidate
 - Save time
 - Save cost
- IP of the compound developed belongs to the customer in principle
- New indication

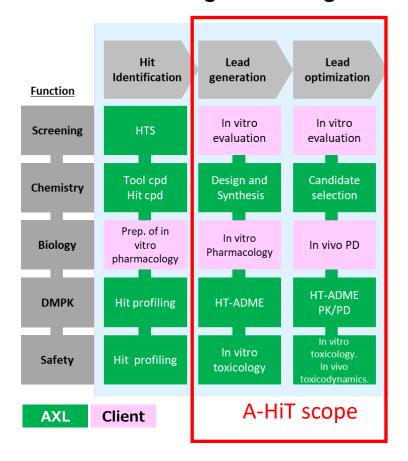


Collaboration scheme: we are flexible

Eg.1 Co-creation making full us of AXL capability

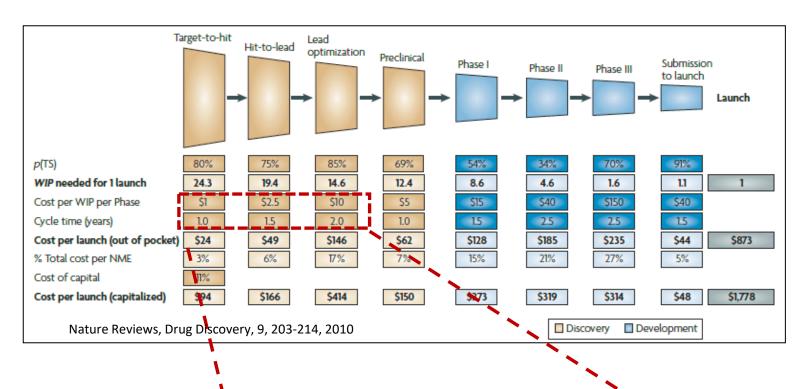


Eg.2 Complementary co-creation maximizing each strength





Save R&D time & cost by A-HiT project



Stage	Global standard		A-HiT project
	Period (month)	R&D cost (M\$)	Period (month)
Hit identification	12	1	2
Lead generation	18	2.5	9
Lead optimization	24	10	12



News release: start collaboration with Pharma

2020.06.29

Otsuka Pharmaceutical and Axcelead Drug Discovery Partners announce joint research in CNS indications

June 29,2020- Otsuka Pharmaceutical Co., Ltd. (Headquarters: Chiyoda-ku, Tokyo, President: Makoto Inoue; Otsuka Pharmaceutical) and Axcelead Drug Discovery Partners Co., Ltd. (Headquarters: Fujisawa, Kanagawa, President: Yoshinori Ikeura; Axcelead) announce a collaborative drug discovery research using the Axcelead Hit-identified Target (A-HiT) project* in the area of central nervous system diseases.

The two companies will jointly conduct lead generation and lead optimization research using compounds derived from the A-HiT project for drug discovery targets related to specific diseases as a seed, aiming to rapidly expand Otsuka's R&D pipeline.

https://www.axcelead.com/en/news/20200629.html

