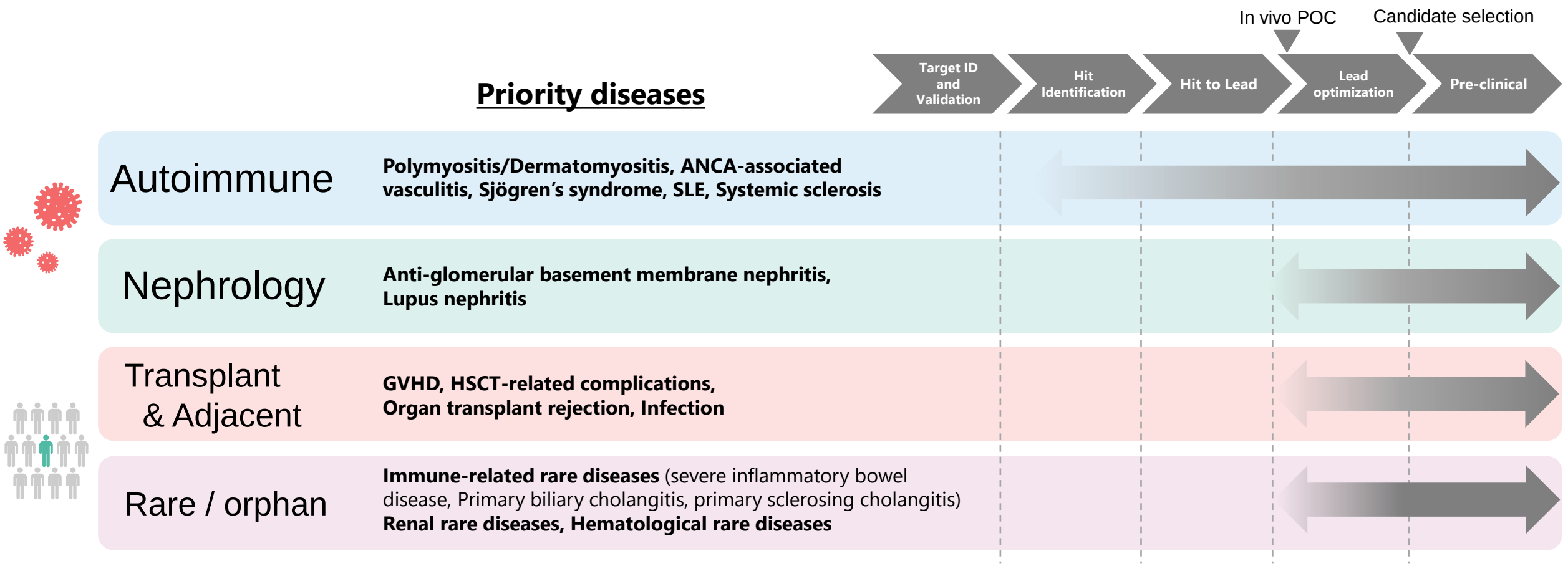
Asahi Kasei Pharma aims to enrich the lives of people around the world through the research and development of new drugs and pharmaceutical technologies.
To achieve the goal, we have been promoting open innovation activities worldwide. These activities include the introduction of cutting-edge technologies, partnership, and research collaboration. We are focusing on facilitating the discovery of preclinical lead compounds and improving the drug development process.

Asahi Kasei Pharma Open Innovation website: **www.asahikasei-pharma.co.jp/a-compass/en/**
If you have an interest, please contact us via the website.

Areas of Interest for early-partnering programs



- Focusing call points: Hospital and specialty care
- Territory: Targeting US and major developed countries including JP/EU

Areas of Interest for drug discovery technologies

1. **Synthetic Methods for Bioconjugation in Protein**

2. **Drug Discovery Platforms for the following modalities**
    - Proximity-Based Modalities
    - Orally Available Macrocycles
    - Cell Engagers and Multi-Specific Antibody

Synthetic Methods for Bioconjugation in Protein with High Yield

- **Chemical synthesis for N- or C-terminal specific protein modification with high yield**
- **Synthetic methods for chemo-selective and site-selective bioconjugation with high yield**
  - ✓ Uncontrolled reaction at multiple sites is out of scope.
  - ✓ Bond formation in buffered condition should be stable.
  - ✓ Scaling up for GMP production should be reasonably possible.
  - ✓ Quantitative data using model protein is required to confirm conversion rate, selectivity and Isolated yield.

Drug Discovery Platform for Proximity-based modalities

A) Targeted Protein Degradation (TPD) with Low Risk of Adverse Effects

- CRBN binder with following data
  - ✓ In vitro data showing no degradation of IMiD substrate
  - ✓ In vivo toxicology data supporting the elimination of adverse effect (e.g., neutropenia, thrombocytopenia, teratogenic toxicities)
- Tissue (e.g., immune cell, kidney) specific E3 ligase binder with following data
  - ✓ In vitro degradation data supporting the expected mechanism of action
  - ✓ In vitro selectivity data and its rationale

B) Extracellular TPD (eTPD) for Short Half-life Proteins, Catalytic eTPD or Orally Available eTPD

- ✓ eTPD via ASGPR and M6PR is out of scope.
- ✓ In vivo PK and PD data is required.
- ✓ [For Catalytic eTPD] data demonstrating the catalytic mechanism of action is also required.

C) Rational Design Approach and Screening Technology for Molecular Glues

- ✓ Molecular glue by unidentified or unknown E3 ligase is out of scope.
- ✓ Lead compound for immunology indication is desirable, while lead compound in oncology space is out of scope.
- ✓ All the following data should be provided.
  - Structural analysis
  - Data supporting the mechanism of protein degradation
  - [For CRBN analogues or any lead compound] In vitro data showing no degradation of IMiD substrate
  - [For CRBN analogues or any lead compound] In vivo toxicology data supporting the eliminated risk of adverse effect (e.g., neutropenia, thrombocytopenia, teratogenic toxicities)

Drug Discovery Platform for Orally Available Macrocyclic Compounds

- **Drug discovery capability owning all of;**
  1. **Macrocyclic library with unique chemical space**
  2. **Macrocyclic compound design**
  3. **Screening technology**

  ✓ In silico prediction only is out of scope.
  ✓ Natural product is out of scope.
  ✓ Track record to establish orally available lead compounds from the macrocyclic library is required.
  ✓ In vitro efficacy data and in vivo PK data via oral administration should be provided.
  ✓ Track record to identify any macrocyclic compound in clinical development is preferable.

Drug Discovery Platform for Multi-specific Antibody

A) Drug Discovery Platform for Cell Engager with Low Risk of Adverse Effects

- T cell engager with a low cytokine release
- NK cell engager
- Other novel cell engagers
  - ✓ Tumor-cell-specific technology (e.g., tumor protease, pH dependent) is out of scope.
  - ✓ Non-clinical data on efficacy and safety are required.
  - ✓ Efficacy data comparing with some conventional antibody should be preferably provided.

B) Drug Discovery Platform for Multi-Specific Antibody with High Efficiency

- Platform to effectively design functional multi-specific antibody
  - For example, method to rapidly identify common light chain for bi-specific antibody, method to accelerate selective pairing of cognate HC and LC, etc.
- High-throughput generation platform for multi-specific antibodies
  - For example, method to rapidly generate a variety of desired multi-specific antibodies, etc.
  - ✓ In vitro data supporting the concept of improved efficiency is required.
  - ✓ Track record to identify any multi-specific antibody in clinical is preferable.