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Critical Path for Rare Neurodegenerative Diseases (CP-RND)

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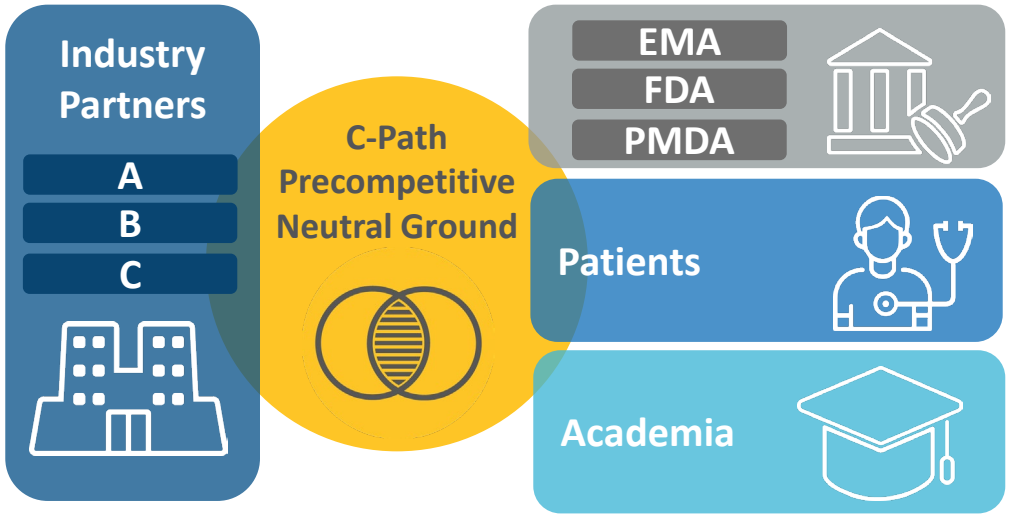
C-Path's Public-Private Partnership Model

- Foster development of new evaluation tools to inform medical product development and regulatory decision-making
- Convene scientific consortia of industry, academia, and government for sharing of data/expertise
  - ✓ The best science
  - ✓ The broadest experience
  - ✓ Active consensus building
  - ✓ Shared risks and costs
- Enable iterative EMA/FDA/PMDA participation in developing new methods to assess the safety and efficacy of medical products
- Obtain official regulatory endorsement of novel methodologies and drug development tools
- **Goal is to provide actionable solutions that lead to getting treatments to patients as efficiently as possible**.



Global Regulatory Successes

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C-PATH REGULATORY SUCCESSES

ALZHEIMER'S DISEASE

- EMA qualification opinion and FDA letter of support for AD imaging biomarker
- FDA letter of support for cerebrospinal fluid biomarker
- EMA letter of support for pre-dementia clinical trial simulation tool
- FDA Fit for Purpose & EMA qualification opinion for clinical trial simulation tool

CLINICAL OUTCOME ASSESSMENTS

- Four qualification decisions for five PRO measures

DUCHENNE MUSCULAR DYSTROPHY

- EMA letter of support for clinical trial simulation platform

MULTIPLE SCLEROSIS

- EMA qualification opinion for test battery of four PerfO measures

PARKINSON'S DISEASE

- EMA qualification opinion for model-based PD imaging biomarker
- FDA & EMA letters of support for PD imaging biomarker
- EMA letter of support for clinical trial simulation platform

POLYCYSTIC KIDNEY DISEASE

- EMA & FDA qualified Total Kidney Volume (TKV) imaging biomarker
- FDA letter of support for TKV imaging biomarker
- FDA designated reasonably likely surrogate marker for PKD trials (TKV)

PREDICTIVE SAFETY TESTING

- EMA, FDA & PMDA qualified non-clinical kidney safety biomarkers
- FDA qualified clinical kidney safety markers
- Six FDA & five EMA letters of support

TRANSPLANT THERAPEUTICS

- EMA qualification opinion for iBox Scoring System

TUBERCULOSIS

- EMA qualification opinion for translational drug development platform

TYPE 1 DIABETES

- EMA letter of support and subsequent qualification opinion for model-based islet autoantibodies biomarker for trial enrichment

FDA

- 8 Qualification Decisions
- 10 Letters of Support
- 1 Fit-for-Purpose Endorsement

EMA

- 9 Qualification Opinions
- 10 Letters of Support

PMDA

- 1 Qualification Decisions

Critical Path for Rare Neurodegenerative Diseases (CP-RND)

Accelerating Access to Critical Therapies for ALS Act (ACT for ALS): FDA awarded C-Path a grant to establish a PPP involving FDA/NIH, persons with lived experience/advocates, researchers and industry aimed at advancing research in ALS and other rare neurodegenerative diseases.

- ✓Ataxias- CPTA
- ✓Huntington's Disease-HD-RSC
- ✓**Amyotrophic lateral sclerosis (ALS)**
- ✓Others being developed through Task Groups (PSP, FTD)

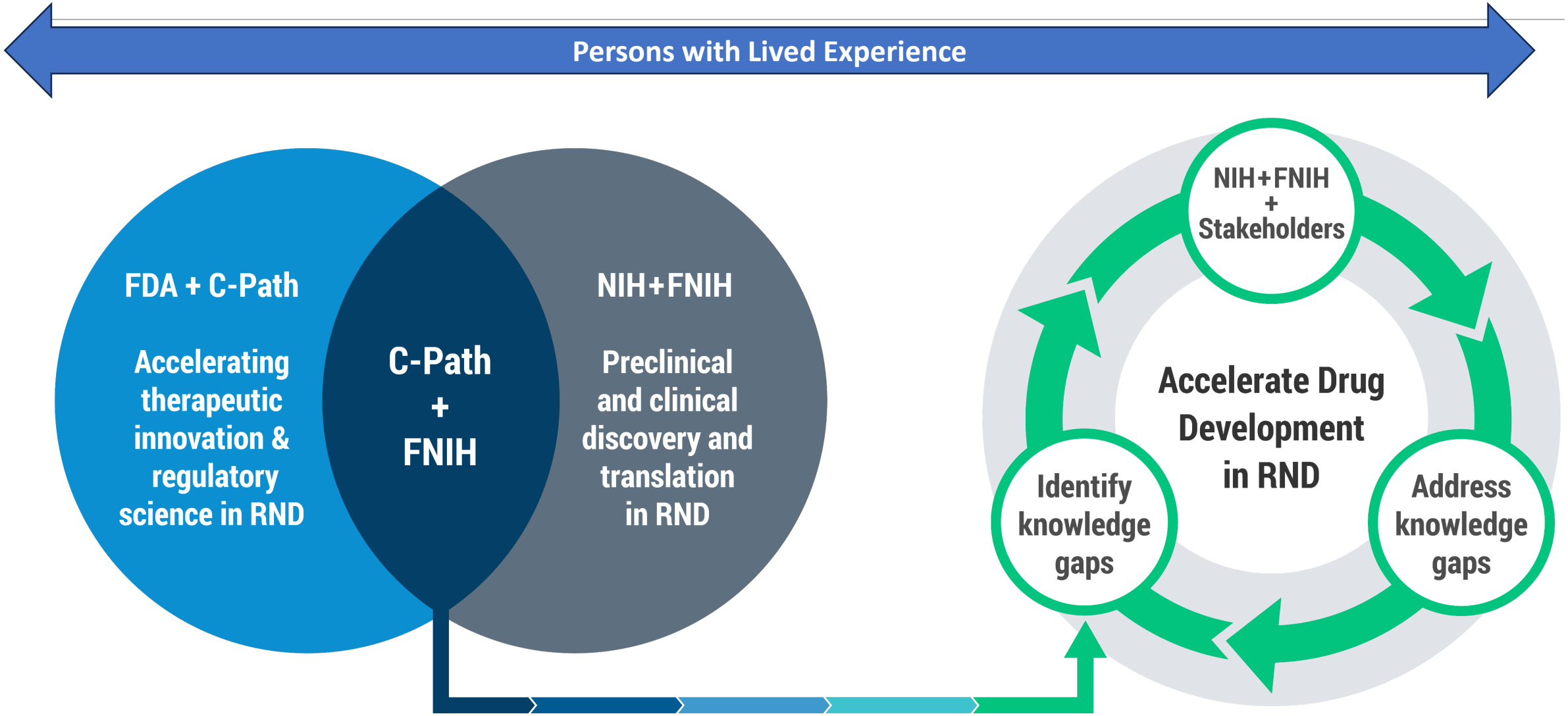
A critical role in this model is the consistent input and engagement with patients, caregivers and the advocacy community.

Collaboration with researchers and industry experience will help define scientific evidence and gaps in drug development.

Identified Focus Areas

- ALS Focused Real World Data Warehouse/Data Portal
  - Data standards
  - Capable of scientific and regulatory use
- Biomarkers (e.g., NfL, TDP43, DHTs)
- Clinical Outcome Assessments
- ALS Disease Staging/Progression Model/Clinical Trial Simulation Tool

Learn and Confirm Strategy



- *Goal, "Accelerate the development and approval of therapies for ALS; ultimately leading to a cure."*

- Integration of regulatory considerations and persons with lived experience input into research ***early and often*** to most efficiently advance drug development

- CP-RND can be a meaningful collaborator in advancing drug development in ALS by:
  - Generating drug development tools to address unmet needs
  - Providing advice on Federally funded research projects (non-competitive projects) to help with their regulatory strategy

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Thank you.