MARCH 15, 2023

CP-RND: AN INTRODUCTION TO THE PATIENT COMMUNITY

An opportunity to share an overview of CP-RND and gain insight from the patient community.

c-path.org/cp-rnd
Welcome to the Critical Path for Rare Neurodegenerative Diseases patient engagement webinar. A few housekeeping items before we get started:

**Q&A**
Place all questions in the Q&A Chat box.
Send questions to “All Panelists” to ensure they are seen.

**Lines are muted**
All participant lines are muted to reduce background noise.

**Recording**
This presentation is being recorded and will be made available on the C-Path YouTube channel.

**Contact info**
CP-RND@c-path.org for more information or questions following the webinar.

Presented By: Critical Path Institute
This webinar is an opportunity to share an overview of CP-RND and gain insight from the patient community

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:30 - 9:40 am</td>
<td>Welcome/Opening Remarks</td>
<td>Jacqueline Corrigan-Curay (FDA)</td>
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<td>Klaus Romero (C-Path)</td>
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<td>9:40 – 10:00 am</td>
<td>CP-RND Overview</td>
<td>Collin Hovinga (C-Path)</td>
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<td>10:00 – 11:00 am</td>
<td>Panel Discussion/Q&amp;A</td>
<td>Patient Advocacy/FDA/C-Path/NIH</td>
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<td>11:00 – 11:15 am</td>
<td>Closing Remarks</td>
<td>Collin Hovinga (C-Path)</td>
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Dr. Hovinga oversees C-Path’s Rare Disease Cures Accelerator-Data and Analytics Platform and its Critical Path for Rare Neurodegenerative Diseases public-private partnership.
CP-RND OVERVIEW

- Introduction to Critical Path Institute (C-Path)
- Overview of Critical Path for Rare Neurodegenerative Diseases (CP-RND)
- Discuss Next steps and mechanisms for involvement

c-path.org/cp-rnd
Mission

Accelerating the path to a healthier world. C-Path builds solutions that remove bottlenecks in the drug development process.

Vision

Critical Path Institute removes competitive blocks in the medical product development process. This makes C-Path an indispensable partner for researchers, patients and regulators. Our role as a neutral convener in the medical and scientific industry accelerates therapies for patients in need.
• Act as a trusted, neutral third party
• Public-Private Partnerships
• Convene scientific consortia of patients, industry, academia, and government for sharing of data and expertise
  ✓ The best science
  ✓ The broadest experience
  ✓ Active consensus building
  ✓ Shared risk and costs
• Enable iterative EMA/FDA/PMDA participation in developing new methods to aid in the assessment the safety and efficacy of medical products
• Official regulatory endorsement of novel methodologies and drug development tools (DDTs)
Core competencies & concentration areas

Core Competencies
- Biomarkers
- Clinical Outcome Assessments
- Regulatory/Development Science
- Modeling and Analytics
- Data Management and Standards

Concentration Areas
- Neuroscience
- Immunology and Inflammation
- Infectious Diseases
- Safety Science
- Rare/Orphan Diseases
- Pediatrics

Unmet Medical Need

DDTs and Other Solutions

Bedrock Foundation: Unique Neutral Convener
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EXAMPLES, A SUCCESS STORY - REGULATORY FIRSTS

- **ALZHEIMER’S DISEASE**
  - FDA & EMA endorsed AD clinical trial simulation tool
  - EMA qualified model-based AD biomarker
  - FDA & EMA letters of support
  - Model-based AD biomarkers and pre-dementia clinical trial simulator

- **MULTIPLE SCLEROSIS**
  - EMA qualified Perf0 measure
  - Test battery for all forms of MS

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

- **PARKINSON’S DISEASE**
  - EMA qualified model-based PD imaging biomarker

- **TUBERCULOSIS**
  - EMA qualified translational drug development platform

- **PATIENT-REPORTED OUTCOME MEASURES**
  - FDA COA qualification
  - Symptoms of Major Depressive Disorder Scale
  - Non-Small Cell Lung Cancer Symptom Assessment Questionnaire
  - Asthma daytime and nighttime symptom diaries

- **TYPE 1 DIABETES**
  - EMA letter of support for model-based islet autoantibodies biomarker for trial enrichment

- **FDA**
  - 6 Qualification Decisions
  - 1 Fit-for-Purpose Endorsement
  - 7 Letters of Support

- **EMA**
  - 7 Qualification Decisions
  - 7 Letters of Support

- **PMDA**
  - 1 Qualification Decision

Presented By: Critical Path Institute
Accelerating Access to Critical Therapies for ALS Act (ACT for ALS): FDA awarded C-Path a grant to establish a PPP involving FDA/NIH, patients/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

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.
“LEARN AND CONFIRM”

FDA + C-Path
Accelerating therapeutic innovation & regulatory science in RND

“Learn and Confirm” Approach

NIH + C-Path
Preclinical and clinical discovery and translation in RND

NIH + Partners
Accelerate Medical Product Development in RND

Identify knowledge gaps

Address knowledge gaps

Presented By: Critical Path Institute

c-path.org/cp-rnd
HD Regulatory submissions for quantitative clinical trial simulation platform to FDA and EMA 2022

Continuity for CPTA COA-focused effort, data interfacing, and disease staging definition for 2023

Defining potential regulatory strategy for FA & PSP quantitative modeling for 2023 and identifying new rare diseases for Task Groups

ALS stakeholder and needs map under development

ALS endpoint/modeling inventory under development

Planning data strategy for ALS with NIH/FNIH

Presented By: Critical Path Institute
C-Path is working with NIH and the Foundation for the National Institutes of Health (FNIH) with the intention to expand and design the Public-Private Partnership.

Planning meetings to outline an overarching ALS strategy:
- Roles and responsibilities for NIH/FNIH ALS initiative and CP-RND
- Shared learnings
- Data plan
- Advocacy
- Common roadmap and pipeline

Next steps
How Can You Get Involved?

• We need your feedback, attend one of our upcoming open house landscape discussions
  ✓ Patient Advocacy Forum: 3/23 2-3pm ET | 3/27 2-3pm ET
  ✓ Industry Forum: 3/23 3-4pm ET | 3/27 3-4pm ET
  ✓ For more information or to register email cp-rnd@c-path.org.

• Share your data
  ✓ Clinical trials
  ✓ Registry Data

• Attend our follow up Town Hall Meetings over the next several months and the C-Path Rare Disease Annual Meeting (September 2023)
PANEL DISCUSSION

Q&A

Place all questions in the Q&A Chat box.

Send questions to “All Panelists” to ensure they are seen.

LINES ARE MUTED

All participant lines are muted to reduce background noise.
Dr. Martinez is a highly motivated neuroscientist with experience in science communication, research program management and leadership and biomarker and drug development in neurodegenerative diseases.
Dr. Campbell has worked on the FDA's Clinical Outcome Assessments team. Her focus is inpatient-focused drug development and the use of patient experience data in the regulatory setting.
Dr. Witten has worked in several areas at the Food and Drug Administration, most recently as the Deputy Director at the Center for Biologics Evaluation and Research (CBER).
Dr. Koroshetz has held leadership roles in a number of NIH and NINDS programs and was selected Director of the National Institute of Neurological Disorders and Stroke in 2015.
Lauren Boak, PhD

Industry Co-director,
Huntington’s Disease Regulatory Science Consortium (HD-RSC)

Dr. Boak has worked for Roche in both Switzerland and the United Kingdom. Her work gives her opportunities to work on potentially transformative medicines for patients with nervous system disorders.
Mr. Bartek has held various voluntary positions with NORD; Alliance for a Stronger FDA, Alliance for Regenerative Medicine; NIH/NCATS; and more
Mr. Green was diagnosed with ALS in 2018 at the age of 48. Today, his life’s work is improving the fight against this disease. He is active with many patient organizations and serves as a volunteer patient advisor to companies working on ALS therapies.
Q&A
NEXT STEPS

- Initiated Stakeholder Engagement
- Identification of unmet needs
  - Data inventory assessment
- Workstreams and working groups formalized
  - Scientific Plan Drafted

1. Patient Introduction Webinar
   March 15, 2023

2. Annual Meeting
   TBD September 2023
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