



Response Evaluation In Neurofibromatosis Schwannomatosis INTERNATIONAL COLLABORATION

- If sharing any data or information from these slides generated by the REiNS International Collaboration, please acknowledge the authors, group chairs, and specific working group.
- If using any information presented with a citation, please reference the primary source.

Opportunities to Engage with FDA

REiNS Summer Meeting June 23, 2023

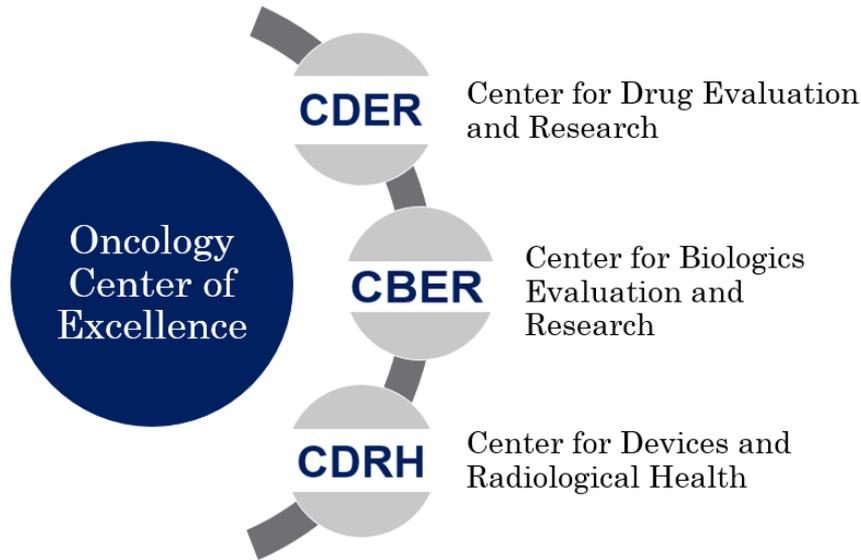
Diana Bradford, MD
Cross-Disciplinary Team Leader, Division of Oncology 2
Office of Oncologic Diseases (OOD)
Center for Drug Evaluation and Research (CDER)
U.S. Food & Drug Administration



Outline

- FDA Review Centers and Divisions
- Opportunities for Formal Advice
- Other Opportunities for Feedback and Engagement

Review of Rare Tumor Submissions



- Clinical review teams includes Medical and Pediatric Oncologists, Neurologists, Neurosurgeons, Radiation Oncologists

Office of New Drugs: Outside OOD



Disease Area*	Division
Dermatology	Division of Dermatology and Dentistry
Rare/Genetic Diseases	Division of Rare Diseases and Medical Genetics
Neuroscience	Divisions of Neurology I & II, Division of Psychiatry, Division of Anesthesiology, Addiction Medicine and Pain Medicine
Imaging	Division of Imaging and Radiation Medicine
Ophthalmology	Division of Ophthalmology
Endocrinology	Division of General Endocrinology

* non-comprehensive list; see <https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/office-new-drugs>

Potential Roles of Natural History Studies in Drug Development



- Patient selection
- Clinical outcome assessment selection
- Biomarker selection
- Use as external control



Meetings under INDs

Formal Meetings Between the FDA and Sponsors or Applicants of PDUFA Products Guidance for Industry

DRAFT GUIDANCE

This guidance document is being distributed for comment purposes only.

- Types A – D, F
- May be requested at any point in development (pre-IND to pre-NDA)

Specific Formal Meeting Types

- Type A – urgent
- Type B – milestone meetings (pre-IND, etc.)
- Type C – other
- Type D – limited topics
- Type F – new molecularly targeted iPSP

Formal Meetings: Selumetinib Example



Year	Point in Development	Meeting with FDA
2014	Phase 1 NCI selumetinib data available	<u>Type B</u> pre-IND/End of Phase 1 meeting
2017, 2018	<i>Phase 2 SPRINT trial ongoing</i>	<u>Type C</u> meetings regarding data needed to support NDA
2019	Phase 2 SPRINT results available	<u>Type B pre-NDA</u> /Breakthrough meeting
Sept. 2019	NDA submission completed	N/A



What should be included in a meeting package?

Outline found in 'Formal Meetings' Guidance (link below)

- IND/product details
- Program details (regulatory pathway, proposed indication)
- Sponsor meeting attendees and requested FDA disciplines
- Proposed agenda and background
 - Specific questions for discussion
 - Sufficient background to enable discussion of questions
 - Will vary based on questions and topics for discussion

Critical Path Innovation Meetings (CPIM)



- CDER program
- Goals:
 - Discuss methodology or technology
 - Provide general advice on how this may enhance drug development
- *Not* product-specific

Critical Path Innovation Meetings (CPIM)

- Examples (publicly available list):

Registry for Pediatric Inflammatory Bowel Disease	November 2016
Pediatric Cholestatic Liver Disease Endpoints	July 2016
Drug development tools to aid rare disease natural history development	December 2018
Embedding Qualitative Patient Interviews in Neurofibromatosis Clinical Trials to Facilitate Drug Development	February 2021

Critical Path Innovation Meetings (CPIM)

- Guidance: Critical Path Innovation Meetings, Guidance for Industry
 - Information on process
- CPIM website
 - FAQ's
 - Policy/Procedures
 - Full list of topics held
 - Webinar, video & podcast
 - Contact information

FDA Rare Disease Team

- Coordinate development of **CDER policy, procedures and training** for the review of treatments for rare diseases.
- Assist in outside development and maintenance of good science as the basis for the development of treatments for rare diseases.
- Work collaboratively with **external and internal rare disease stakeholders** to promote the development of treatments for rare disorders.
- Maintain collaborative relationships with **CDER's review divisions** to promote consistency and innovation in the review of treatments for rare disorders.
- Work collaboratively with **international regulatory agencies** to discuss and exchange scientific and regulatory information related to rare diseases.

FDA CDER & NIH NCATS Regulatory Fitness in Rare Disease Clinical Trials Workshop



- Held May 16 – 17, 2022
- Multistakeholder discussion focused on drug development and regulatory considerations for rare diseases
- Event materials: recordings, transcript, and [extensive FDA resource list](#)



CDER Patient-Focused Drug Development

- Aims to incorporate patient voice in drug development
- Externally-led PFDD meetings allow patient input and multistakeholder discussion to facilitate clinical trial design
- Suited for diseases which:
 - affect functioning/activities of daily living
 - for which there are limited therapies
- Toolkit: [Planning an Externally-Led PFDD \(nih.gov\)](#)



Relevant Oncology-Specific Programs for Rare Cancers

- OCE Rare Cancers Program
- OCE Pediatric Oncology Program
- OCE Patient-Focused Drug Development (PFDD)
- OCE Real-World Evidence (RWE) Program

OCE Real World Evidence Program

Program Statement

Collaboratively advance the appropriate use of real-world evidence in oncology product development to facilitate patient-centered regulatory decision-making.



Focus Areas

Regulatory Review

Regulatory Science Research & Collaboration

Regulatory Policy

Education & Engagement

Real World Data

Sources

Electronic Health Records

Administrative Claims

Registry

Patient Generated Health Data

Types

Demographics and Social Determinants

Medical

Pharmacy

Genomic

Laboratory and Diagnostics

Radiology and Imaging

Radiation Oncology

Patient Reported Outcomes

OCERWE@fda.hhs.gov

Other tools

- Rare Disease Cures Accelerator- Data Analytics Platform (RDCA-DAP)
 - [RDCA-DAP | Critical Path Institute \(c-path.org\)](https://www.c-path.org/rdca-dap)
- FDA Orphan Products Natural History Grants Program
 - [Natural History Study \(nih.gov\)](https://www.nih.gov/nhgs)
- Rare Disease Endpoint Advancement Pilot Program
 - [Rare Disease Endpoint Advancement Pilot Program | FDA](https://www.fda.gov/oc/rdca-dap)
- Accelerating Rare disease Cures (ARC) Program
 - [Accelerating Rare disease Cures \(ARC\) Program | FDA](https://www.fda.gov/oc/rdca-dap)

Select FDA Guidances

Demonstrating Substantial Evidence of Effectiveness for Human Drug and Biological Products

Draft Guidance for Industry, December 2019

Rare Diseases: Natural History Studies for Drug Development Guidance for Industry

Draft Guidance for Industry, March 2019

Rare Diseases: Common Issues in Drug Development

Draft Guidance for Industry, February 2019

Rare Diseases: Early Drug Development and the Role of Pre-IND Meetings *Draft Guidance for Industry, October 2018*

FDA Patient-Focused Drug Development Guidance Series for Enhancing the Incorporation of the Patient's Voice in Medical Product Development and Regulatory Decision Making
FDA

Recently Published RWE Guidances

Real-World Data: Assessing Electronic Health Records and Medical Claims Data To Support Regulatory Decision-Making for Drug and Biological Products

Draft Guidance for Industry, September 2021

Data Standards for Drug and Biological Product Submissions Containing Real-World Data

Draft Guidance for Industry, October 2021

Real-World Data: Assessing Registries to Support Regulatory Decision-Making for Drug and Biological Products Guidance for Industry

Draft Guidance for Industry, November 2021

Considerations for the Use of Real-World Data and Real-World Evidence To Support Regulatory Decision-Making for Drug and Biological Products

Draft Guidance for Industry, December 2021

Submitting Documents Using Real-World Data and Real-World Evidence to FDA for Drug and Biological Products

Guidance for Industry, September 2022

Considerations for the Design and Conduct of Externally Controlled Trials for Drug and Biological Products

Draft Guidance for Industry February 2023



Acknowledgements

- FDA Rare Disease Team
- Catherine Lerro
- Donna Rivera
- Nicole Drezner
- Harpreet Singh
- Paul Kluetz
- Rick Pazdur



U.S. FOOD & DRUG
ADMINISTRATION