Office of Generic Drugs 2023: Outlook and Opportunities

Iilun Murphy, M.D.
Deputy Director, Clinical and Regulatory Affairs
Office of Generic Drugs
Center for Drug Evaluation and Research
U.S. Food and Drug Administration

Generic Drug Forum
April 12, 2023

Outline

- 2022 At a Glance
  - GDUFA Science and Research
  - Product-Specific Guidances
- GDUFA III
  - Guidances and MAPPs
  - New Meetings and Processes
  - First- and Second-Cycle Approval Process Improvements
- Global Engagement
- Upcoming Events

Office of Generic Drugs

Vision

OGD is the world leader in the science and regulation of generic drugs, serving an essential role in advancing FDA's public health mission.

Mission

OGD ensures high-quality, affordable generic drugs are available to the American public.

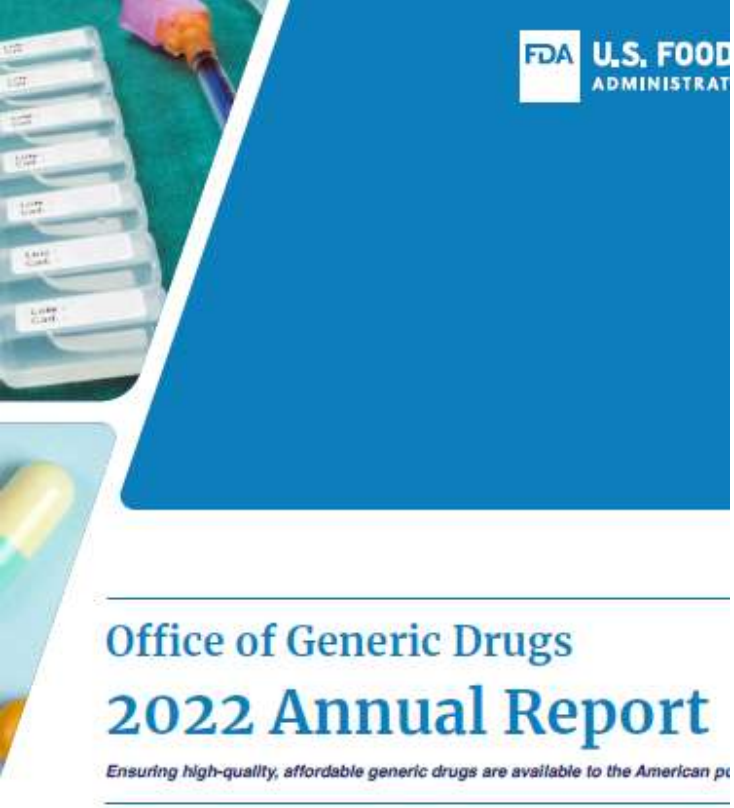
Cost Savings from First Generics

Example: Pregabalin capsules experienced a **95% price reduction** during the first twelve months of generic sales.

Prior to ANDA approvals, a 30-day supply was about $**450**.

July 2020 (when generics were on the market for a full year) this price fell to ~$**23**.

Savings during the year following these approvals amounted to more than $**6.6 billion**



Office of Generic Drugs

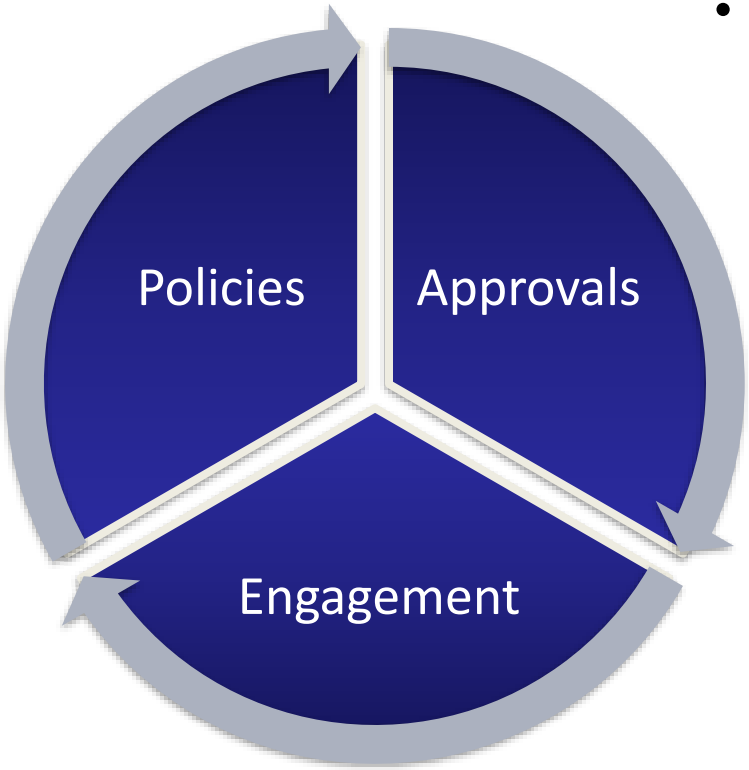
2022 At a Glance

- Generic Drug User Fee Amendments (GDUFA)
- Regulatory science education and research
- Generic drug approvals
- Communicating with industry
- Generic drug safety
- Advancing bioequivalence in generic drug assessments
- Policies that support efficient development of generic drugs
- International collaborations

Select 2022 Highlights

- **14 GDUFA III-related policy documents**

- **257 Product-Specific Guidances (PSGs)**
  - **119 new** and
  - **138 revised**



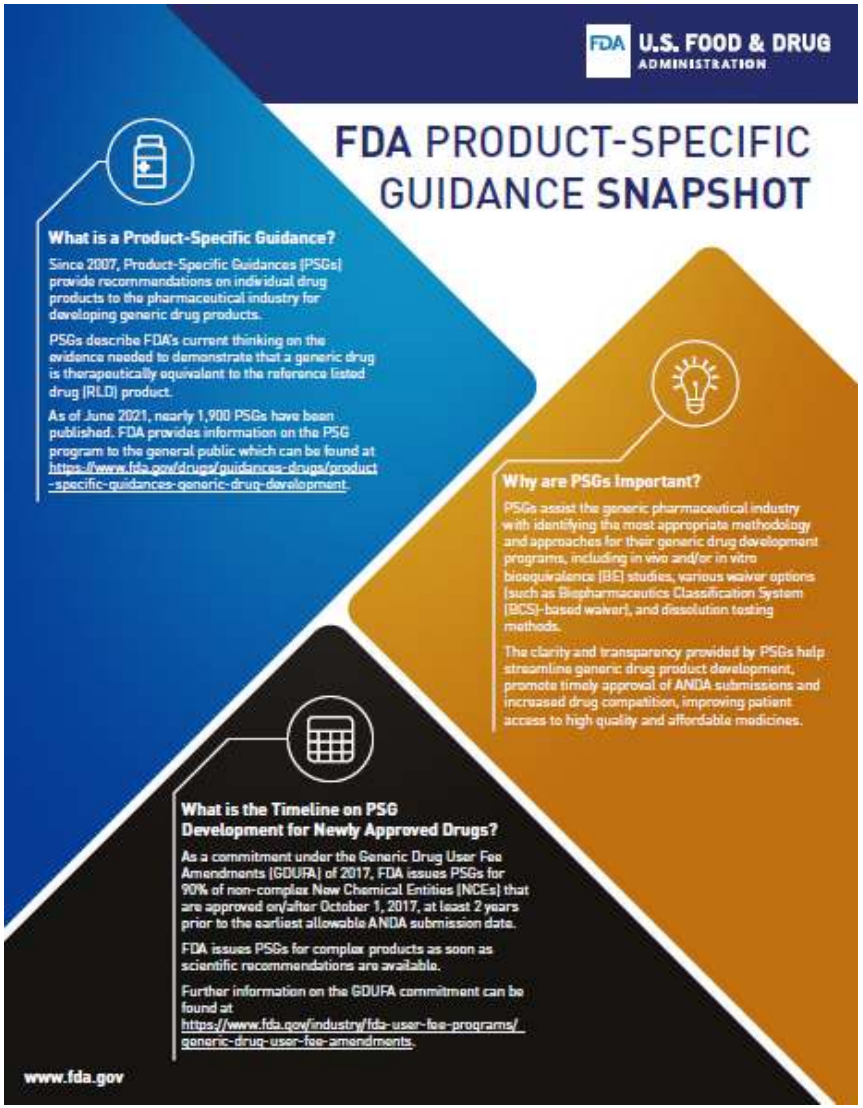
- **914 Abbreviated New Drug Applications** (ANDAs) approved or tentatively approved, including
  - **86 complex generics**
  - **107 first generics,** e.g.,
    - **14** first generics for **Alimta**
    - **8** first generics for **Velcade**

- **13,900 generic drug stakeholders** participated in
  - **13 webinars and public workshops**
- **108 pre-ANDA meetings granted**

Product-Specific Guidances (PSGs)

- **257 PSGs in 2022**
  - **154 PSGs for complex products,** including
    - **54 new PSGs for complex products**

- **2000+** PSGs total



U.S. FOOD & DRUG ADMINISTRATION

FDA PRODUCT-SPECIFIC GUIDANCE SNAPSHOT

What is a Product-Specific Guidance?

Since 2007, Product-Specific Guidances (PSGs) provide recommendations on individual drug products to the pharmaceutical industry for developing generic drug products.

PSGs describe FDA's current thinking on the evidence needed to demonstrate that a generic drug is therapeutically equivalent to the reference listed drug (RLD) product.

As of June 2021, nearly 1,900 PSGs have been published. FDA provides information on the PSG program to the general public which can be found at https://www.fda.gov/drugs/guidances-drugs/product-specific-guidances-generic-drug-development.

Why are PSGs important?

PSGs assist the generic pharmaceutical industry with identifying the most appropriate methodology and approaches for their generic drug development programs, including in vivo and/or in vitro bioequivalence (BE) studies, various waiver options (such as Biopharmaceutics Classification System (BCS)-based waiver), and dissolution testing methods.

The clarity and transparency provided by PSGs help streamline generic drug product development, promote timely approval of ANDA submissions and increased drug competition, improving patient access to high quality and affordable medicines.

What is the Timeline on PSG Development for Newly Approved Drugs?

As a commitment under the Generic Drug User Fee Amendments (GDUFA) of 2017, FDA issues PSGs for 90% of non-complex New Chemical Entities (NCEs) that are approved on/after October 1, 2017, at least 2 years prior to the earliest allowable ANDA submission date.

FDA issues PSGs for complex products as soon as scientific recommendations are available.

Further information on the GDUFA commitment can be found at https://www.fda.gov/industry/fda-user-fee-programs/generic-drug-user-fee-amendments.

www.fda.gov

www.fda.gov

2022 GDUFA Science & Research

~$20 million in generic drug science and research programs awarded

- **8 new contracts**
- **7 new grants**

continued to fund

- **26 ongoing grants**
- **25 ongoing contracts**

From GDUFA Research to Approval

GDUFA science and research advanced efficient demonstration of bioequivalence (BE) for complex generic drugs

addressed challenging product characterization issues

developed analytical measurement and statistical analysis tools

supported updates to generic product development recommendations in PSGs

2022 – FDA approved first generic cyclosporine ophthalmic emulsion, 0.05% (referencing Restasis)

GDUFA Science and Research and Product-Specific Guidances

PSG for nusinersen sodium intrathecal solution

- First PSG for this class of oligonucleotide drugs

Two PSGs for an exenatide subcutaneous suspension

- For the first time recommended two in vivo pharmacokinetic BE study options for this diabetes medication

Transitioning into GDUFA III

GDUFA III

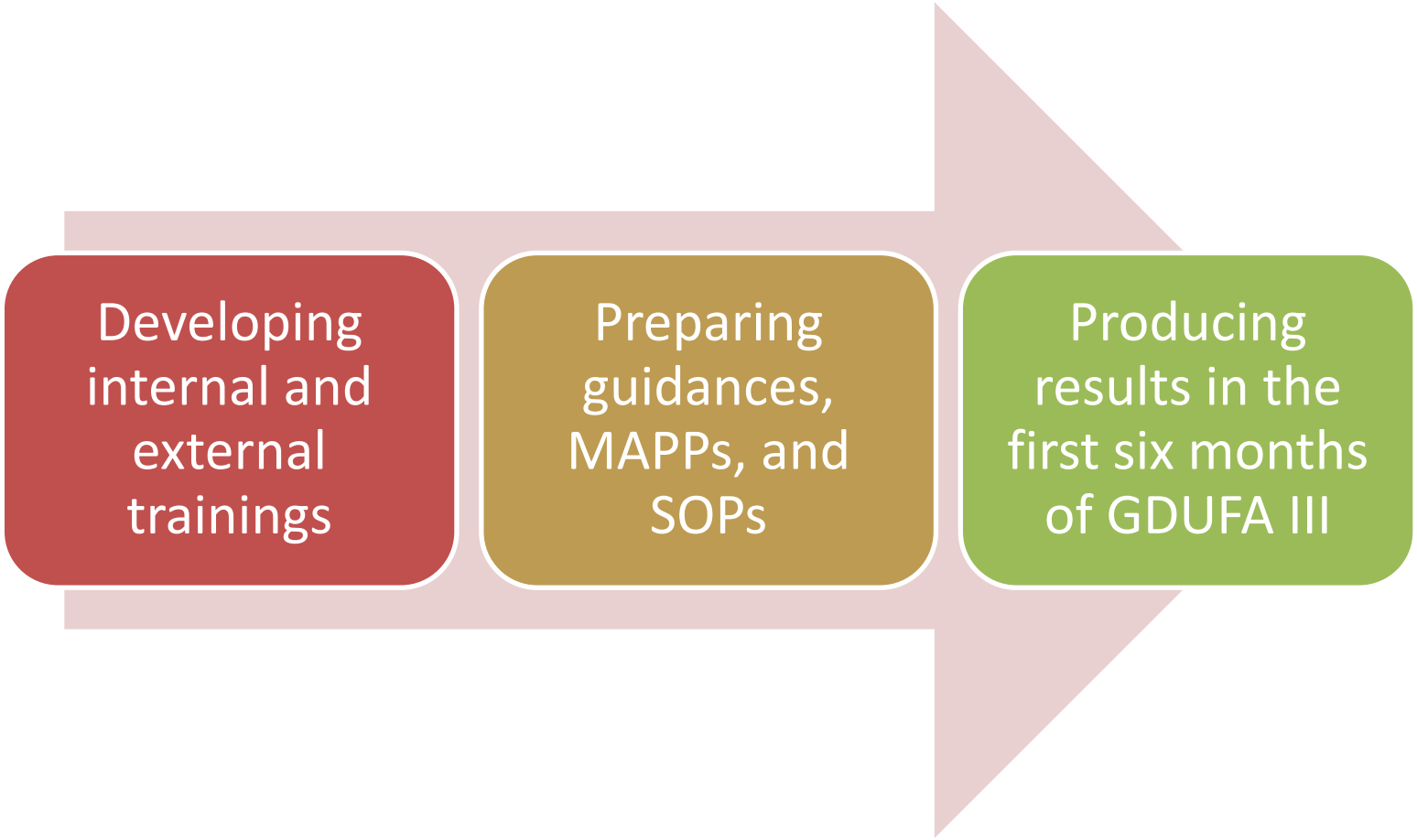
Further enhance all applicants' ability to develop more complete submissions

Appropriate resourcing to meet current and future demands

Continue maturing the regulatory pathway for complex generics

Continued enhancement of user fee resource management

A Strong Start to GDUFA III



GDUFA III Metrics Reporting

Generic Drugs Program Monthly and Quarterly Activities Report

Share | Tweet | LinkedIn | Email | Print

With the start of GDUFA III in FY 2023, the Generic Drugs Program monthly and quarterly activities reports were combined into one report. Also, reported metrics have been updated to reflect reporting requirements outlined in the GDUFA III Commitment Letter.

ACTIONS BY MONTH	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	FY-2023
Approvals	58	60	52										170
First-Time Generics	1	3	6										10
First-Cycle Approvals	14	13	10										37
Imminent Actions	7	10	7										24
Tentative Approvals	13	13	7										33
First-Cycle Tentative Approvals	0	2	1										3
Imminent Actions	1	3	3										7
Complete Responses	148	120	124										392

GDUFA III Guidances and MAPPs

- ANDA Submissions: Prior Approval Supplements Under GDUFA
- Communicating ANDA Review Status Updates with Industry MAPP
- Competitive Generic Therapies
- Controlled Correspondence Related to Generic Drug Development
- Evaluating Requests for and Conducting Product Development and Pre-Submission Pre-ANDA Meetings MAPP
- Facility Readiness: Goal Date Decisions Under GDUFA
- Failure to Respond to an ANDA Complete Response Letter Within the Regulatory Timeframe
- Formal Meetings Between FDA and ANDA Applicants of Complex Products Under GDUFA
- Information Requests and Discipline Review Letters Under GDUFA
- Issuance of Information Requests and/or Discipline Review Letters for ANDAs MAPP
- Pre-Submission of Facility Information Related to Prioritized Generic Drug Applications (Pre-Submission Facility Correspondence) Draft Guidance
- Prioritization of the Review of Original ANDAs, Amendments MAPP
- Product-Specific Guidance Meetings Between FDA and ANDA Applicants Under GDUFA
- Post-Complete Response Letter Clarification Teleconferences Between FDA and ANDA Applicants Under GDUFA
- Review of Drug Master Files in Advance of Certain ANDA Submissions Under GDUFA
- Soliciting Public Comment on Appendix A of “Amendments To Abbreviated New Drug Applications Under GDUFA“ Federal Register Notice

As of 3/2/23

Highlighted Guidance – Product-Specific Guidance Meetings Between FDA and ANDA Applicants Under GDUFA

- February 17, 2023 **new draft guidance** provides
  - information on requesting and conducting PSG teleconferences, pre-submission PSG meetings, and post-submission PSG meetings.
  - procedures that will promote well managed PSG meetings and help ensure that such meetings are scheduled and conducted in accordance with the time frames set forth in the GDUFA III commitment letter.

- Part of our Drug Competition Action Plan, which seeks to improve the efficiency of the generic drug development, review, and approval process.

New GDUFA III Meetings and Processes

New meetings:

- Post-CRL scientific
- Enhanced mid-cycle review meetings
- Product-specific guidance

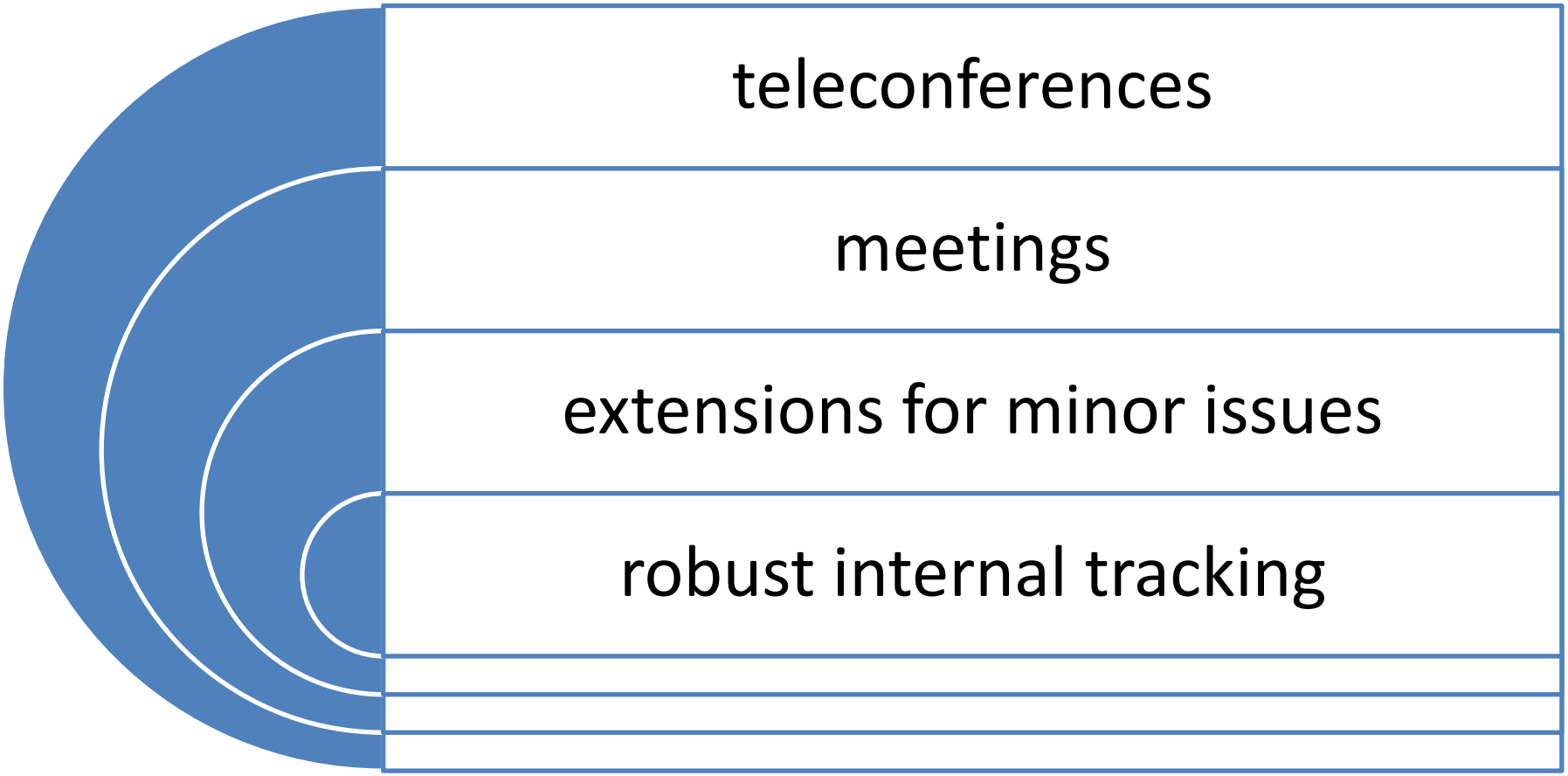
New meeting formats:

- In-person/Face to Face (Hybrid) option for Pre-ANDA Product Development meetings and Pre-submission meetings

New review processes:

- Facility major to minor
- Facility not ready

Enhancements Leading to First- and Second-Cycle Approvals



OGD GLOBAL AFFAIRS INTERNATIONAL EFFORTS

Convergence through international collaboration and dialogue

Regulatory harmonization efforts

Regulatory strengthening and capacity building

Highlighted Guidance: M13A Bioequivalence for Immediate-Release Solid Oral Dosage Forms

- January 31, 2023 draft guidance intended to provide **harmonized, global, scientific recommendations** for conducting BE studies during both development and post approval phases that can increase the efficiency of drug development and accelerate the availability of safe and effective orally administered IR solid oral dosage forms.

- M13 is the first ICH guidance developed on harmonizing BE standards for generic drugs following the publication of the ICH Reflection Paper "Further Opportunities for Harmonisation of Standards for Generic Drugs" (November 2018).

Upcoming Events

- April 20-21, 2023 (hybrid): FDA/CRCG Considerations for and Alternatives to Comparative Clinical Endpoint and Pharmacodynamic Bioequivalence Studies for Generic Orally Inhaled Drug Products
- May 2, 2023: SBIA Webinar on M13A
- May 10, 2023 (hybrid): FDA/CRCG DDCP 101 Training
- May 11, 2023 (hybrid): GDUFA Science and Research Initiatives Public Workshop
- May 15, 2023: Webinar on GDUFA III meetings
- June 15, 2023 (hybrid): FDA/CRCG Workshop on Mitigating the Risk of Harmful Impurities and the Effect of Antioxidants on BE
- October 12, 2023 (hybrid): FDA/CRCG Workshop on Advances in PBPK Modeling and its Regulatory Utility for Oral Drug Product Development
- November 2 – 3, 2023 (hybrid): FDA/CRCG Workshop on Comparative User Interface Assessment for Drug-Device Combination Products
- December 7 – 8, 2023 (hybrid): FDA/CRCG Workshop on Characterization of Complex Excipients/Formulations

We Are OGD

Ask me why...

"We collaborate beyond our borders to **safeguard our patients.**"

"As a single mom in school, I had to find the means to afford my son's pneumonia medication and compromising my son's well-being is never an option."

www.fda.gov

FDA

FDA U.S. FOOD & DRUG ADMINISTRATION