Public Stakeholder Meeting on Prescription Drug User Fee Act (PDUFA) Reauthorization

September 25, 2020

Dr. Theresa Mullin
Associate Director for Strategic Initiatives
Center for Drug Evaluation and Research
Food and Drug Administration

Outline for this briefing

- Welcome and Roll Call
- Public Stakeholder Consultation Process & Ground Rules for Stakeholder Meetings
- PDUFA Reauthorization Overview
- Overview of Stakeholder Perspectives
- Planning for future meetings

U.S. FOOD & DRUG ADMINISTRATION

PDUFA Reauthorization and Continued Stakeholder Consultation

September 25, 2020

PDUFA Reauthorization involves significant consultation

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(2) PRIOR PUBLIC INPUT.—Prior to beginning negotiations with the regulated industry on the reauthorization of this part, the Secretary shall—

(A) publish a notice in the Federal Register requesting public input on the reauthorization; (B) **hold a public meeting** at which the public may present its views on the reauthorization, including specific suggestions for changes to the goals referred to in subsection (a); (C) **provide a period of 30 days after the public meeting to obtain written comments** from the public suggesting changes to this part; and (D) **publish the comments on the Food and Drug Administration's Internet Web site.** **[Public Meeting held on July 23, 2020]**

(3) PERIODIC CONSULTATION.—Not less frequently than once every month during negotiations with the regulated industry, the Secretary shall **hold discussions with representatives of patient and consumer advocacy groups** to continue discussions of their views on the reauthorization and their suggestions for changes to this part as expressed under paragraph (2).

FDA-External Stakeholder Reauthorization
Discussion Ground Rules

- PDUFA reauthorization discussions are limited to issues of fee payment and review process enhancement—and cannot address regulatory policy

- It is important for FDA to have representatives of patient and consumer advocacy groups share their views on the performance commitments of PDUFA and their suggestions for any changes

- We request that you try to participate in all of these monthly meetings, so that we can progress our discussions of various topics and not need to repeat discussions due to a lack of continued consistent participation.

PDUFA
Background and Reauthorization Process

September 25, 2020

Andrew Kish
Director, Office of Program and Strategic Analysis
Center for Drug Evaluation and Research
Food and Drug Administration

Outline for this briefing

- PDUFA Background
- Financial Background and Fee Structure
- Workload and Performance
- PDUFA VI Commitments & Accomplishments
- Priorities for PDUFA VII

Before 1992, timeliness of FDA drug review was a big concern

PDUFA I

- User fees added resources for more review staff to eliminate the backlog of overdue applications and improve review timeliness
- FDA agreed to meet specific performance goals

Result:

- More predictable, streamlined process
- Patients gained earlier access to new drugs and biologics approved since 1992
- Overall, clinical development time and average time to approval dropped since 1992
- However, a recent Tufts study looking at the past decade, notes that while FDA review times for approvals continue to drop, development time has increased for certain non-orphan drugs*

** Source: Tufts Center for the Study of Drug Development, Impact Report Vol. 22 No. 4, July/Aug. 2020*

Basic PDUFA construct

- Fee funds are added to appropriated funds and are intended to increase staffing and other resources to speed and enhance review process
- User fees pay for services that directly benefit fee payers*
- Fee discussions with industry focus on desired enhancements in terms of specific aspects of activities in “process for the review of human drugs”
  - What new or enhanced process will the FDA want or industry seek to include in the next 5 years?
  - What is technically feasible?
  - What resources are required to implement and sustain these enhancements?
  - No discussion of policy.
- Experience: *Devil is in the Details*

** OMB Circular A-25; direct benefit distinguishes user fees from tax*

Performance commitments and fee funding have evolved since 1992

PDUFA | *1993-1997*
Added funds for pre-market review; reduced backlog and set predictable timelines (goals) for review action

PDUFA II (FDAMA) | *1998-2002*
Shortened review timelines, added review goals; added process and procedure goals; added some funding

PDUFA III (BT Preparedness & Response Act) | *2003-2007*
Significantly added funding; increased interaction in first review cycle (GRMPs); allowed limited support for post-market safety

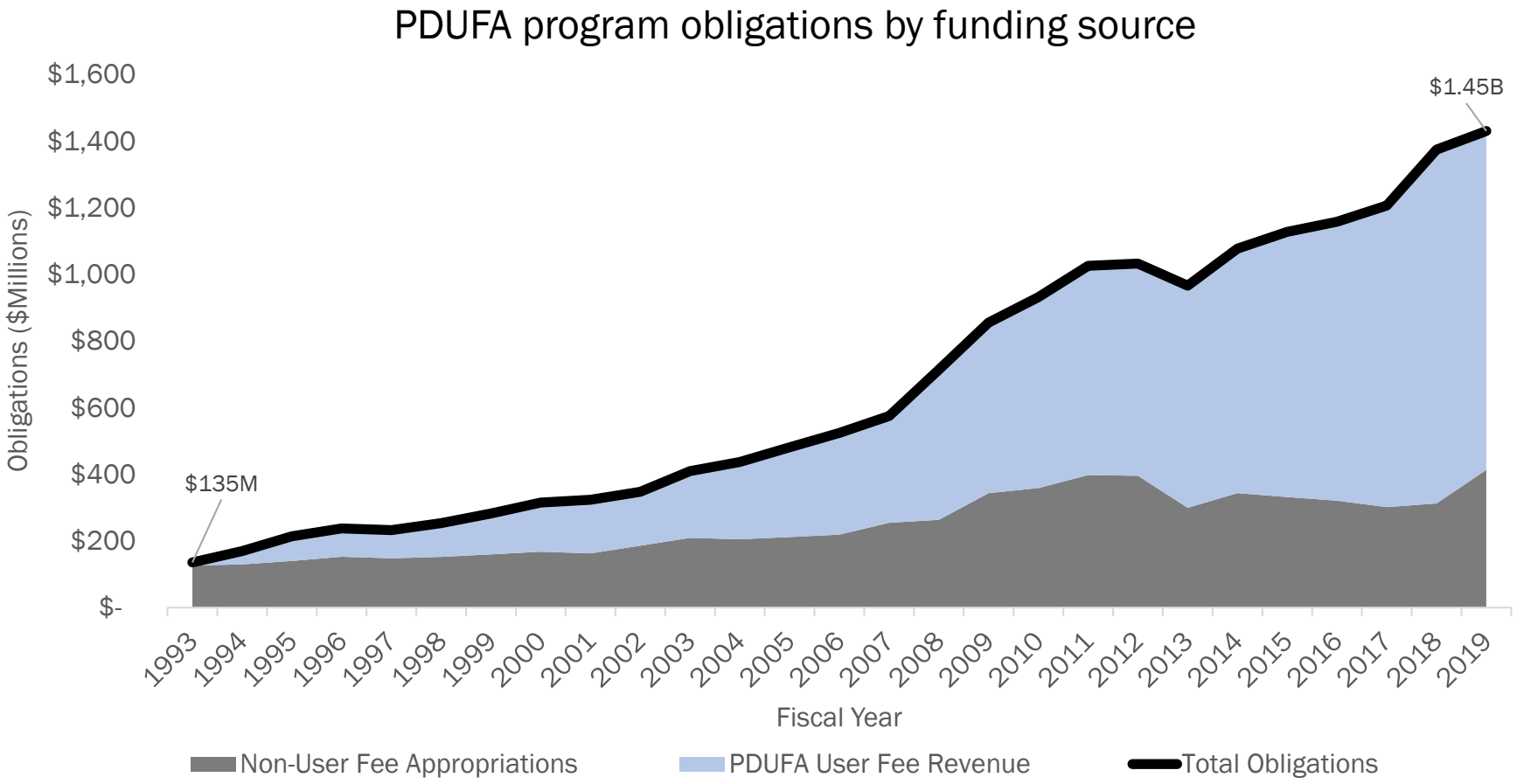
PDUFA IV (FDAAA) | *2008-2012*
Increased and stabilized base funding; enhanced pre-market review; modernized post-market safety system

PDUFA V (FDASIA) | *2013-2017*
Small increase to base funding; review enhancements increased communication with sponsors; strengthened regulatory science & post-market safety; set electronic data standards

PDUFA VI (FDARA) | *2018-2022*
Modernized the user fee structure; focused on HR and financial management improvement; created capacity planning capability; enhanced use of regulatory tools via benefit-risk, patient-focused drug development, complex innovative trial designs, model informed drug development; enhanced staffing for breakthrough therapy reviews; focused on communication with industry; explored RWE in regulatory decision-making

User fee revenue is critical to the program

User fee revenue has outpaced budget authority available for the program



PDUFA user fee revenue funded **7%** of the program in FY1993 to **71%** in FY2019

Current Fee Structure

- PDUFA VI modernized the user fee structure to improve program funding predictability, stability, and administrative efficiency.
- The new structure eliminated the supplement fees, replaced the establishment and product fees with a program fee, and shifted a greater proportion of the target revenue to the new more predictable and stable annual program fee.

- FY 2020 target revenue is $1,074,714,000
  - 20% collected from applications ($214,942,800 collected from ~73 fee paying full application equivalents)
  - 80% collected from the PDUFA programs ($859,771,200 collected from 2,642 program fees)

Fee Type	FY2020 Fee Amount
Applications with clinical data	$2,942,965
Applications without clinical data	$1,471,483
PDUFA program fee	$325,424

Workload & Performance

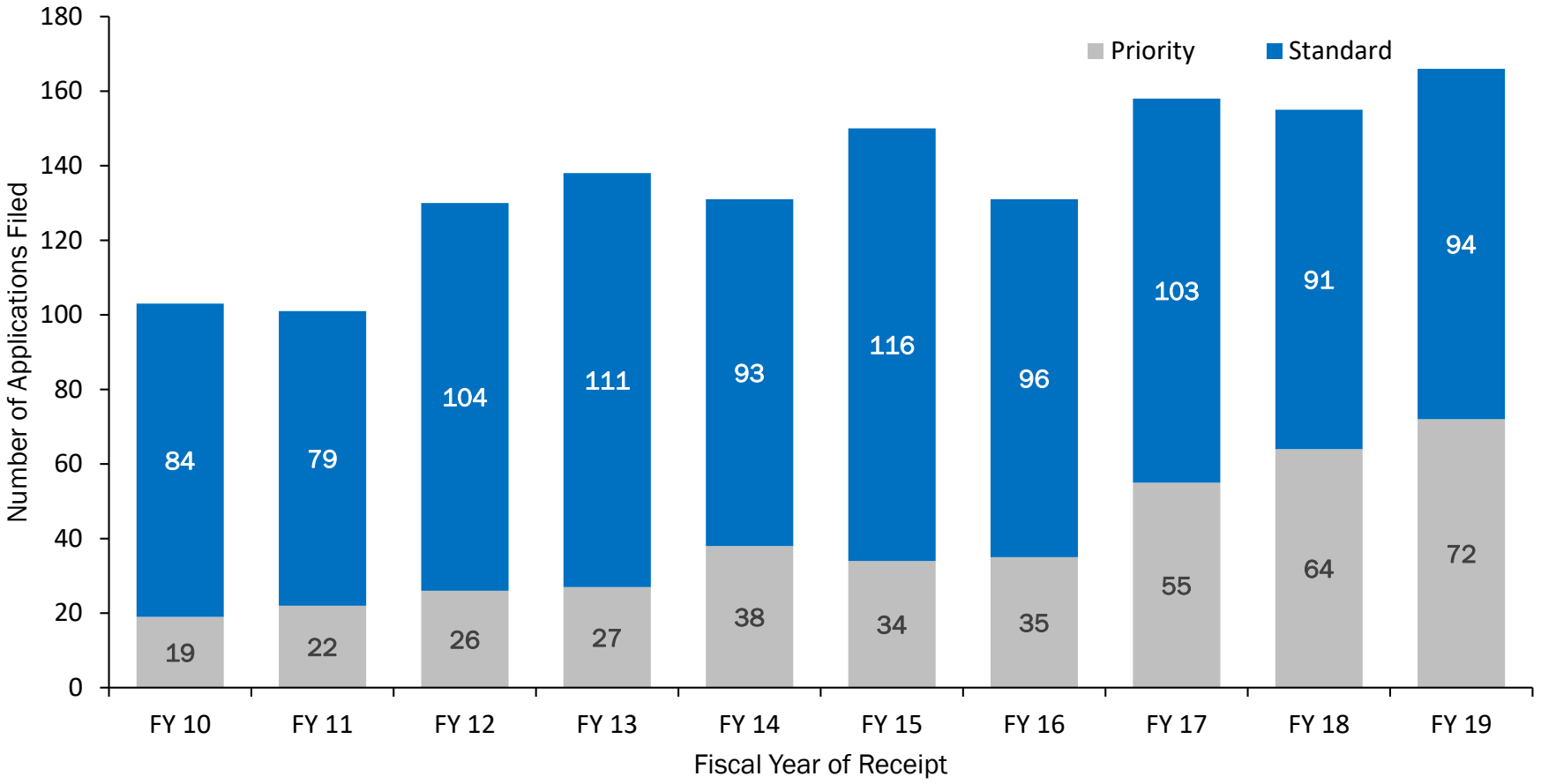
Fees support review work against a broad set of performance commitments

31 specific review & procedural goals most with specific and aggressive timeframes; in addition to other commitments

EXAMPLE	GOAL
NMEs & Original BLAs	90% of priority applications within 8 months *(6 months of filing date)* 90% of standard applications within 12 months *(10 months of filing date)*
Original non-NME NDAs and Original Efficacy Supplements	90% of priority applications within 6 months 90% of standard applications within 10 months
NDA/BLA Efficacy Supplement Resubmissions	90% of Class 1 resubmissions within 2 months 90% of Class 2 resubmissions within 6 months
Manufacturing Supplements	90% of prior approval supplements within 4 months 90% of non-prior approval supplements within 6 months
Special Protocol Assessments (SPA)	90% of SPAs within 45 days of receipt
Clinical Hold Response	90% of clinical hold responses within 30 days of receipt
Meeting Scheduling	90% of Type A/B/C meetings within 30/60/75 days of receiving request

NDA and BLA workload continues to trend upwards in PDUFA VI

Total NDAs and BLAs filed



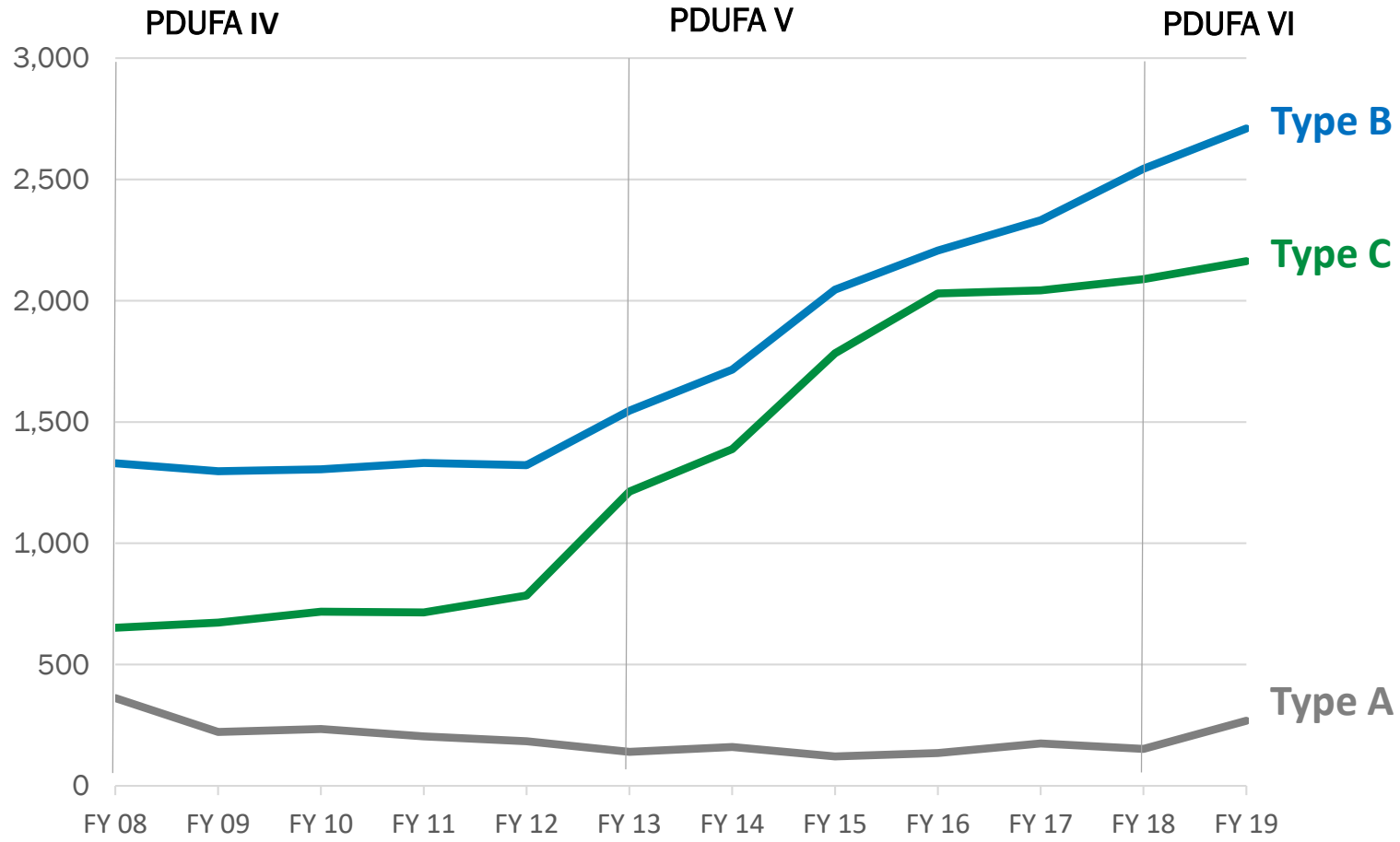
FDA meets or exceeds nearly all review goals

Submission Type	Goal: Act on 90 Percent Within	Progress*	FY 2019 Current Performance	Highest Possible Final Performance
Original Priority NMEs and BLAs	6 months of filing date	16 of 43 complete	100%	100%
Original Standard NMEs and BLAs	10 months of filing date	0 of 31 complete	–	100%
Original Priority non-NME NDAs	6 months	10 of 16 complete	100%	100%
Original Standard non-NME NDAs	10 months	11 of 63 complete	91%	98%
Class 1 Resubmitted NDAs and BLAs	2 months	5 of 7 complete	80%	86%
Class 2 Resubmitted NDAs and BLAs	6 months	19 of 41 complete	95%	98%
Priority NDA and BLA Efficacy Supplements	6 months	54 of 74 complete	98%	99%
Standard NDA and BLA Efficacy Supplements	10 months	42 of 177 complete	95%	99%
Class 1 Resubmitted NDA and BLA Efficacy Supplements	2 months	4 of 4 complete	100%	100%
Class 2 Resubmitted NDA and BLA Efficacy Supplements	6 months	1 of 2 complete	100%	100%
NDA and BLA Manufacturing Supplements requiring prior approval	4 months	671 of 993 complete	98%	99%
NDA and BLA Manufacturing Supplements not requiring prior approval	6 months	821 of 1,440 complete	99%	99%

* This column does not include undesignated applications in the total. Undesignated applications have only pending status.

PDUFA meeting workload is increasing

CDER and CBER meeting requests and written response only (WRO) workload by fiscal year (FY)



Data as of 9/30/2019
TYPE B EOP meetings are combined with Type B metric
TYPE (A)(B)(C) WRO meetings are combined with their respective meeting type metric
*2019 data is preliminary

Meeting workload is a challenge

CDER and CBER meeting management performance by FY

Meeting Management Goal	Performance by Fiscal Year											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Type A Meeting Requests	63%	74%	65%	79%	85%	91%	90%	96%	90%	91%	93%	76%
Type B Meeting Requests	83%	80%	76%	85%	85%	89%	91%	91%	92%	92%	90%	91%
Type B(EOP) Meeting Requests	–	–	–	–	–	–	–	–	–	–	80%	82%
Type C Meeting Requests	81%	78%	76%	82%	87%	87%	88%	86%	92%	92%	92%	89%
Type A Meetings Scheduled	58%	64%	66%	84%	94%	92%	73%	64%	75%	75%	75%	70%
Type B Meetings Scheduled	77%	69%	73%	90%	93%	91%	71%	72%	69%	69%	63%	63%
Type B(EOP) Meetings Scheduled	–	–	–	–	–	–	–	–	–	–	74%	76%
Type C Meetings Scheduled	79%	74%	78%	88%	91%	92%	80%	80%	77%	77%	75%	74%
Type A Written Response	–	–	–	–	–	–	–	–	–	–	67%	80%
Type B Written Response	–	–	–	–	–	71%	79%	76%	77%	77%	77%	82%
Type B(EOP) Written Response	–	–	–	–	–	–	–	–	–	–	57%	70%
Type C Written Response	–	–	–	–	–	78%	86%	81%	85%	85%	84%	80%
Preliminary response for Type B(EOP) Meetings	–	–	–	–	–	–	–	–	–	–	85%	86%
Meeting Minutes	61%	69%	68%	83%	85%	87%	90%	89%	93%	93%	91%	92%

* This column is current performance as of 9/30/19 and does not include pending FY 2019 submissions/actions at that time.

Additional PDUFA VI Accomplishments & Commitments

Behind the scenes: A growing number of enhancements and activities

In addition to the performance review goals under PDUFA VI, FDA is implementing over **200 actions to fulfill PDUFA VI performance enhancement commitments.** These include:

70+ new or updated pilots, programs or processes

60+ data/list postings to the public website

40+ public meetings or public workshops

20+ new or revised guidances

10+ public reports

Recapping additional PDUFA VI commitments and enhancements

- Regulatory Science and Expediting Drug Development
- Regulatory Decision Tools to Support Drug Development and Review
- Modernization of the FDA Drug Safety System
- Management of User Fee Resources
- Improving FDA Hiring and Retention of Review Staff
- Improving the Electronic Submission Process and Transparency of IT activities

Regulatory Science and Expediting Drug Development

Enhanced Communication in IND Phase

To continue facilitating the conduct of efficient and effective drug development programs, FDA contracted with an independent third-party to assess the current communication practices in the IND phase and recommend best practices.

Rare Diseases

The Rare Diseases Program staff is becoming more integrated into review teams by attending product-specific meetings, holding annual trainings, and participating in conferences and/or trainings with patient stakeholders.

Combination Product Review

FDA implemented a Staff Manual Guide (SMG 4101), published/revised several documents of policies and procedures, and published several draft guidances.

Real World Evidence (RWE)

To further enhance the use of RWE in regulatory decision-making, FDA co-led a public workshops on the topic and continues to oversee additional projects and activities aimed at addressing concerns and considerations in the use of RWE in regulatory decision-making.

Regulatory Decision Tools to Support Drug Development and Review

Patient Focused Drug Development

FDA has held several public meetings and published a series of guidances to further enhance the incorporation of patients' voice into drug development and decision-making.

Enhancing Benefit Risk Assessment

FDA published an update to the "Structured Approach to Benefit-Risk Assessment in Drug Regulatory Decision-Making" implementation plan and held a meeting to gather stakeholder input on key benefit-risk topics.

Model-Informed Drug Development (MIDD)

To facilitate the development of models derived from preclinical and clinical data sources, FDA has established the MIDD pilot program, holding workshops and having published a guidance on Population Pharmacokinetics, among other activities.

Complex Innovative Designs (CID)

To facilitate the further use of complex adaptive, Bayesian, and other novel clinical trial designs, FDA established the CID program which grants meetings and increased interaction to sponsors to discuss their approach toward complex innovative trial designs.

Drug Development Tools (DDTs) Qualification Pathway

To facilitate the enhancement of the drug development tools qualification pathway for biomarkers, FDA continues to hire staff, host public meetings, and regularly post information about DDT submissions.

Modernization of the FDA Drug Safety System

Expanding Sentinel System and Integration into Pharmacovigilance Activities

FDA added capabilities to Sentinel's querying tools, held a public workshop on Implementation of Signal Detection Capabilities, and published a revised guidance on *Postmarketing Studies and Clinical Trials—Implementation of Section 505(o)3*.

Communication of Postmarketing Safety Findings

FDA updated policies and procedures concerning tracking postmarketing safety signals to include consistent and timely notifications to sponsors.

Management of User Fee Resources

Resource Capacity Planning Capability

FDA created and staffed a resource capacity planning capability to better predict future workload and understand associated resource demands. In addition, FDA developed a new capacity planning methodology that accounts for sustained increases in workload to replace the PDUFA workload adjuster.

Modernized Time Reporting

FDA is modernizing it's time reporting practices and systems in all Centers engaged in PDUFA work. CDER and CBER modernized their time reporting throughout FY 2018 and FY 2019 and FDA plans to continue modernization in CDRH, ORA, and Office of the Commissioner in subsequent years.

Financial Transparency and Efficiency

FDA contracted with an independent third party to evaluate PDUFA program resource management during FY 2018 to ensure user fee resources are administered, allocated, and reported in an efficient and transparent manner. Published PDUFA 5-year financial plans each year and held annual public meetings starting in FY 2019 to discuss the plans, along with implementation of other management of user fee resources commitments.

Improving FDA Hiring and Retention of Review Staff

Modernizing Hiring System Infrastructure

To modernize hiring system infrastructure and augment our system capacity, FDA deployed a position description library and is expecting to deploy a position-based management system.

Augmentation of Hiring Staff Capacity and Capability

Three contracts were awarded to vendors to provide continuous support for FDA's human resources capacity.

Establishment of a Dedicated Scientific Staffing Unit

FDA staffed a new HR unit focused on developing and implementing scientific staffing hiring strategies and plans.

Comprehensive and Continuous Assessment of Hiring and Retention

FDA brought on third-party contractors to conduct an initial and interim assessment of to better understand thus improve hiring practices.

Improving the Electronic Submission Process and Transparency of IT activities

Predictability and Consistency of PDUFA E-submissions

FDA has been publishing targets for Electronic Submissions Gateway (ESG) availability, current ESG operational status on the public website, and has invited industry to participate in user acceptance testing.

Transparency and Accountability of E-submissions and Data Standards Activities

Among other activities, FDA holds quarterly meetings with industry on electronic submissions and data standards and also posts regular updates to the FDA data standards catalog and to the Data Standards Action Plan.

Performance data and completed deliverables are available to the public

Completed PDUFA VI deliverables can be found on FDA's website:

https://www.fda.gov/industry/prescription-drug-user-fee-amendments/completed-pdufa-vi-deliverables

FDA released a new PDUFA performance dashboard that allows users to view and download current and historical performance data:

https://www.fda.gov/about-fda/fda-track-agency-wide-program-performance/fda-track-pdufa-performance

Priorities for PDUFA VII

Priorities for PDUFA VII

- Promote sustainable innovation in drug development
  - *Supporting innovation in drug development through model-informed drug development, complex innovative designs, clinical outcome assessments, and rare disease endpoint development*
  - *Sustainable patient-focused drug development and exploring the use of Patient Preference Information (PPI) studies*
- Enhance regulatory predictability and post-market safety
  - *Increasing capacity to manage new and expanding product areas, such as cell and gene therapy*
  - *Enhancing FDA's predictability and efficiency in our post-market safety activities, through the Sentinel initiative and timely REMs assessments*
- Advance the regulatory infrastructure for digital technologies and new sources of data
  - *Advancing the regulatory infrastructure to enable new ways of collaboration, modernizing IT infrastructure, and acquiring expertise in digital technologies and data produced from those technologies.*
- Enhance operational capabilities, efficiency, and agility
  - *Sustain hiring and financial management improvements achieved in PDUFA VI.*

Impact of COVID

- On February 4, 2020, the Secretary of the Department of Health and Human Services (HHS) determined that there is a public health emergency that has a significant potential to affect national security or the health and security of United States citizens living abroad, and that involves the virus that causes COVID-19.
- FDA has received a significant amount of new drug development programs and trials since the emergency began.

590+

Drug development programs in planning stages[1]

310+

Trials reviewed by FDA[2]

5

COVID 19 treatments currently authorized for Emergency Use[3]

0

Treatments currently approved by FDA for use in COVID-19

258

COVID-19 Pre-IND Meeting Requests

PDUFA VII
Stakeholder Perspectives Received to Date

July 23, 2020 Public Meeting and Docket

https://beta.regulations.gov/document/FDA-2010-N-0128-0087

Graham Thompson
Office of Program and Strategic Analysis
Center for Drug Evaluation and Research
Food and Drug Administration

PDUFA Public Meeting

Patient Advocates Input

- Nearly all patient groups supporting increasing patient and caregiver input throughout the development process, including ensuring minority participants or more representative patient groups in clinical trials.
  - Patients asked for more input on how to gather patient experience data and how FDA uses it.
  - Patients supported the expansion of clinical outcome assessments to include patient-centered core outcomes through meaningful patient involvement.
- Most patient groups supported increasing resources for FDA, including for gene and cell therapies and technology modernization, as well as encouraging an emphasis on retention over hiring new employees.
- Many patient groups encouraged a greater use of real world evidence, and several requested additional guidance on the use and limitations of RWE for clinical trials and regulatory submissions.
- Many groups also supported the use of decentralized clinical trials to decrease patient burden of travelling to trials and increase patient retention.
- Other areas mentioned by patient groups included reviewing lessons learned from COVID and expanding post-market surveillance.

PDUFA Public Meeting

Consumer Group Input

- Consumer groups supported increasing patient involvement in the drug development process.
- Consumer groups also supported increasing staff to meet directly with consumer and patient advocates as well as increasing resources to evaluate direct-to-consumer drug advertising.
- Groups supported an increase in post-market surveillance and evaluation, including funding staff and resources for this task, as well as timely post-market communication and examining off-label prescribing.

PDUFA Public Meeting

Healthcare Professional Input

- Nearly all healthcare professional groups supported advancement of post-market drug safety evaluation, including by expansion of the Sentinel System, conducting adequate and unannounced safety inspections, and modernizing drug safety system.
- Some groups supported adequate funding for hiring, training and retaining highly qualified FDA staff, especially to support cell and gene therapy.
- Some groups supported the use of RWE/RWD to maximize the usefulness of tools used for collecting adverse event information. Additionally, groups supported the FDA releasing an annual report on FDA's acceptance of RWE to fulfill post-approval requirements.
- Commenters also mentioned increasing inclusion of patients and caregivers in FDA decision making and drug development.

PDUFA Public Meeting

Industry Input

- Most industry and trade groups supporting increasing FDA and sponsor communication. Groups asked for more predictable, timely engagement, and strengthening scientific dialogue between FDA and sponsors.
- Commenters supported the further increasing use of RWE/RWD in FDA decision making.
- Commenters encouraged the modernization of FDA's technology infrastructure, advancing digital health technologies, and the capturing and use of high-quality, point of care data.
- Commenters supported optimizing FDA infrastructure, staffing, and resources, including resources for CBER and gene and cell therapies.
- Other areas mentioned by industry and trade groups included introducing more decentralized and patient friendly clinical trials, utilizing PFDD and patient engagement, and increasing or modernizing post-market safety and surveillance.

PDUFA VII
Stakeholder Perspectives Received to Date

Comments from Participating Groups

William Lewallen
Office of the Center Director
Center for Drug Evaluation and Research
Food and Drug Administration

Overview of Stakeholder Perspectives

- In the following section, each stakeholder group that submitted their “short lists”, will provide a brief overview of their list
  - FDA has tried to pull from the short lists the most frequently cited themes
- Please note, with over 20 groups presenting, we’re time restrained to keep each presentation to under 2 minutes
- The order of the presentations are sequenced in the order in which they were received

American Cancer Society Cancer Action Network

- **Patient representative programs**

We request 1) additional staff resources to increase the strength and reach of the program, 2) regular reporting on the utilization of patient representatives, 3) the development of additional engagement models that don't involve product-specific information sharing and thus have a lower conflict of interest clearance burden

- **Decentralized Trials Guidance**

We request a public meeting and the development of permanent guidance promoting decentralized and hybrid clinical trial design.

- **Developing science of disparities**

We request dedication of resource at FDA to conduct necessary research on differences in metabolism, safety or efficacy of drugs or drug classes that may create disparate outcomes. Further we request the development of guidance to inform subgroup research when differences are expected based on mechanisms of action or prior research.

Muscular Dystrophy Association

- Financial and personnel resources available to keep up with gene and cell-based therapeutic reviews
- Advancing the utilization of decentralized clinical trial designs
- Further evolution of Patient-Focused Drug Development and other patient involvement opportunities
- Organization and involvement of the Rare Disease Program
- Expanding Oncology Center of Excellence pilots such as Real-time Oncology Review and Project Facilitate
- Regulatory paradigms for individualized or “n-of-1” therapies
- Further innovation of expedited review programs

Society for Women's Health Research

- Continue FDA’s focus on hiring and retaining experienced, highly qualified staff.
- Better integrate real-world evidence (RWE) within agency drug approval and decision- making initiatives.
- Continue efforts to gather patient input on drug development and to prioritize diverse patient voices to the greatest extent possible.

Critical Path Institute

- Expanding agency participation in pre-competitive scientific public-private partnerships and consortia
- Enhancing regulatory science to expedite and drug development and review
  - PDUFA Regulatory Science Research Program
- Enhancing regulatory decision tools to support drug development and review
- Establishing efficient review timelines for drug development tool endorsement pathways (i.e., Drug Development Tool Qualification Program and Fit-for-Purpose Initiative)
- Advancing the modernization of Agency data infrastructure
- Promoting and incentivizing collaborative data sharing

Society of Gene and Cell Therapy / BGR Group

- Allocate a greater share of PDUFA user fees to CBER, since current PDUFA funding growth of the center has not kept pace with current and expected workload increases at CBER.

- Update the following guidance documents:
  - *Expedited Programs for Regenerative Medicine Therapies for Serious Conditions* and *Expedited Programs for Serious Conditions Expedited Programs for Regenerative Medicine Therapies for Serious Conditions*
- Provide new guidance documents on the following topics:
  - CMC requirements for clinical-stage manufacturing changes for gene and cell therapy products, including phase-appropriate CMC information that is necessary prior to a Phase III trial, as well as in later stages of development, including comparability criteria, lot release criteria, critical quality attributes (CQA), and critical process parameters for different product classes—retroviral vectors, AAV vectors, CAR T-cell/TCR therapies, and genetically-modified stem cells. Guidance should also include information regarding FDA's views on the design of process validation protocols; the CQAs, potency testing, and analytic assays that are required to support a BLA submission; and the appropriate use of, and requirements for the BLA supplement process for manufacturing changes.
  - Requirements for clinical immunogenicity testing for AAV gene therapies.

- Utilize optional CBER-sponsor communication plans early in the development of RMAT- or breakthrough-designated products to enhance regulatory predictability by identifying the most appropriate times for meetings and the type of data to be discussed at each landmark.

Milken Institute

- increasing diversity in clinical trials and patient engagement (including through FDA consideration of ways to further define agency expectations, share best practices and tools, and drive the development of innovative approaches, including the use of mobile technologies, to increase racial and ethnic diversity in clinical trials, as appropriate)

- enhancing transparency for patients and the biomedical ecosystem (including through creating a position/group in the Commissioner's Office that can initiate, lead, and oversee the agency's transparency initiatives, as well as creating new/extended transparency initiatives)

- ensuring cell and gene therapies get to patients in a timely manner (including ensuring sufficient resources for the agency and an efficient development and approval pathway to get these products to patients without unnecessary delays)

- expanding FDA's clinical outcomes assessments work to develop patient-centered core outcome sets

Alliance for Aging Research

- PDUFA VII should be used to publish more disease-specific guidances for older adults, akin to the draft guidance document Inclusion of Older Adults in Cancer Clinical Trials.
- PDUFA VII should be used to prioritize the testing, evaluation, and use of decentralized and virtual clinical trials that decrease the burden of patient participation in clinical trials.
- PDUFA VII should be used to issue guidance to provide further clarity on the circumstances under which real-world evidence would be accepted and identify the limitations of real-world data.
- PDUFA VII should require the publication of data from post-market studies on older adults. Such data can enhance clinical guidelines, including dosing, side effects, and treatment response, and inform patient decision-making.
- PDUFA VII should require that companies make their patient registry data available to the FDA through regular reports. Such reports should be submitted at least once annually.
- PDUFA VII should continue the FDA's investment in developing publicly available and validated clinical outcome sets.
- PDUFA VII should require that the FDA simplify its hiring processes and resolve inefficiencies that result from having multiple pay scales and hiring authorities.

Juvenile Diabetes Research Foundation (JDRF)

- Develop a Center of Excellence for Autoimmune diseases
  - This would be highly advantageous for people with T1D and other autoimmune diseases

- Enhance the use of Real World Evidence (RWE) for use in regulatory decision-making*

- Improve FDA hiring and retention of review staff*

**These both were previous ask of JDRF that were incorporated into PDUFA VI; however we would like for these to be further considered and continued*

American Association for Cancer Research

- Continuing evaluation of real-world data sources and real-world evidence for regulatory decision making.
- Learning from trial adaptations put into place for COVID-19 to make clinical trials more efficient while maintaining the agency's gold standard. This should include evaluation of tools and methods that support decentralized clinical trials.
- Working to ensure clinical trial populations are diverse and representative of real-world populations.
- Providing sufficient resources for FDA staffing needs, particularly in the areas of cell and gene therapy, artificial intelligence, and digital health.
- Continuing the incorporation of patient input into agency decision making through patient-focused drug development programs.

CureDuchenne

- SUPPORT STRONG SCIENCE: MAINTAIN HIGH STANDARDS FOR SAFETY AND EFFECTIVENESS AND ENSURE AGENCY PROCESSES ARE EFFICIENT AND FLEXIBLE
- CONTINUE THE EVOLUTION OF INCORPORATING THE PATIENT VOICE INTO REGULATORY DECISION-MAKING
- TRANSLATE TO RARE DISEASE THE TOOLS AND METHODS PUT IN PLACE FOR COVID-19 VACCINE AND TREATMENT DEVELOPMENT, ESPECIALLY IN ARENAS THAT RESULT IN BETTER ACCESS AND EFFICIENCY FOR CLINICAL TRIALS

Cancer Support Community

- The FDA should publish guidance no later than FY 2023 that sets forth formal requirements on the capture, reporting, and meaningful communication of patient experience data collected in clinical trials.

American Osteopathic Association (AOA)

- Accelerated Approval Processes
- Coordination with the Centers for Medicare and Medicaid Services (CMS) for Coverage

Parent Project Muscular Dystrophy

- I. J. Enhancing Regulatory Decision Tools to Support Drug Development and Review;
  - o1. Enhancing the Incorporation of the Patient's Voice in Drug Development and Decision-Making
  - o2. Enhancing Benefit-Risk Assessment in Regulatory Decision-Making

- I. I. Enhancing Regulatory Science and Expediting Drug Development;
  - o4. Advancing Development of Drugs for Rare Diseases
  - o6. Enhancing Use of Real World Evidence for Use in Regulatory Decision-Making

- I. J. Enhancing Regulatory Decision Tools to Support Drug Development and Review;
  - o3. Advancing Model-Informed Drug Development

The ALS Association

Top Priorities:

- I. I. Enhancing Regulatory Science and Expediting Drug Development;
  - Advancing Development of Drugs for Rare Diseases
  - Enhancing Use of Real World Evidence for Use in Regulatory Decision-Making
- I. J. Enhancing Regulatory Decision Tools to Support Drug Development and Review;
  - Enhancing the Incorporation of the Patient's Voice in Drug Development and Decision-Making
  - Enhancing Benefit-Risk Assessment in Regulatory Decision-Making
  - Enhancing Capacity to Review Complex Innovative Designs
- I. K. Enhancement and Modernization of the FDA Drug Safety System;
  - Timely and Effective Evaluation and Communication of Postmarketing Safety Findings Related to Human Drugs

Second Tier:

- I. J. Enhancing Regulatory Decision Tools to Support Drug Development and Review;
  - Advancing Model-Informed Drug Development
  - Enhancing Drug Development Tools Qualification Pathway for Biomarkers

National Alliance on Mental Illness

- Improving Inter-Center consistency and measuring time to review across Centers,
- Improving FDA communication with patient and disease organizations,
- Ensuring consistent use of PFDD across all Centers within CDER,
- Assessment of current practices for combination drug reviews, and
- Transparency around use of surrogate endpoints.

LUNGevity

- Enhance current efforts to make clinical trials more inclusive.

  -FDA should add an area of focus to goal 1.I, namely, ensuring generalizability of clinical trial results by enrolling a diverse population that is representative of disease burden.

  -FDA should finalize the draft guidance published in 2019 on enhancing the diversity of clinical trial populations. Identifying metrics sponsors should meet, as well as ways to hold them accountable, will also be important; this could be accomplished through bringing together stakeholders and sponsors through workshops and/or working groups.

  -FDA should update the community on the status of planned guidance on decentralized clinical trials.

- Continue to explore ways to incorporate RWD into the drug development process.

  -FDA should build on section 1.I.6, and have as a deliverable a sharing of learnings from RWD submissions (e.g., through a FAQ document or webinar).

- Ensure adequate resources for FDA staffing needs.

  -FDA should continue the types of assessments outlined in section 3.E, updating as staffing and resource needs change.

Global Health Technologies Coalition

- Use of new surrogate endpoints
- Use of real world evidence in regulatory decision-making
- Systematic approaches to collect and utilize robust and meaningful patient and caregiver input
- Advancement and use of complex adaptive, Bayesian, and other novel clinical trial designs
- Enhancing regulatory decision tools to support drug development and review, in particular the goals around enhancing the incorporation of the patient's voice in drug development, with an eye towards maintenance of stringent regulatory review and human rights

Cystic Fibrosis Foundation

- Decentralized clinical trials
- Clinical trial endpoints
- Clinical trial participation barriers
- CBER resources
- Increasing opportunities to meet with FDA on clinical trial development
- Drug development tool (DDT) qualification process
- Rare Disease Cures Accelerator Initiative
- Patient representative program
- Patient-focused drug development (PFDD) and Real world evidence (RWE)

UsAgainstAlzheimer's

- **I. Enhancing Regulatory Science and Expediting Drug Development;**

  6. Enhancing Use of Real World Evidence for Use in Regulatory Decision-Making

- **J. Enhancing Regulatory Decision Tools to Support Drug Development and Review;**

  1. Enhancing the Incorporation of the Patient's Voice in Drug Development and Decision-Making

  2. Enhancing Benefit-Risk Assessment in Regulatory Decision-Making

  3. Advancing Model-Informed Drug Development

  6. Enhancing Drug Development Tools Qualification Pathway for Biomarkers

Physicians Committee

- Increasing use of New Approach Methodologies (NAMs) in regulatory decision-making
- Increasing integration of NAMs and reducing and replacing animal use in drug development
- Prioritizing representative and diverse nonclinical models in drug development

National Organization for Rare Disorders (NORD)

- Increase in PDUFA Funds Dedicated to CBER for Both FTE's and Technical Infrastructure
- Development of Clinical Outcome Assessments
- Strengthening Patient Focused Drug Development
- Memorializing COVID-19 Lessons Learned
- Updating FDA Databases

Personalized Medicine Coalition

Targeted CDER and CBER Staffing Needs

- We are interested in hearing FDA's perspectives on where hiring challenges still exist after passage of legislation enacting PDUFA VI as well as 21st Century Cures.
- We are interested in hearing about the current and projected staffing needs within CBER to review the growing number of cell and gene therapy applications.

Real-World Evidence/Real-World Data

- We are interested in receiving an update from FDA on real-world evidence activities since PDUFA VI and how PDUFA VII can address issues around the need for repeated use of real-world databases for regulatory submission. Further, we would like to hear FDA's perspective on guidance that can be pursued in PDUFA VII related to real-world evidence.
- We are interested in an update on FDA's Technology Modernization Action Plan and also learning about resources FDA needs in PDUFA VII to move more quickly to full implementation of the plan.

Digital Health and Decentralized Clinical Trials

- We are interested in learning more about any resource needs FDA has to further support clinical trials that integrate the use digital health technologies.
- We are interested in advancing decentralized clinical trials to improve patient access to therapies, increasing diversity of trial populations, and collect ongoing data on use of approved therapies. For this reason, we would like to hear FDA's perspective on mechanisms to expedite the use of decentralized clinical trials through PDUFA VII.

Global Genes

- Fund PFDD staff to provide support for the externally-led patient-focused drug development program
- Fund the Patient Affairs Staff to provide support for cross-Center (drug & biologic) education, as well as the patient listening session program
- Support a function within CDER/CBER to provide advice and input to stakeholders, including patient advocacy organizations, on patient experience data collection and other such efforts that fall under FDA's PFDD Guidance Series

PDUFA VII
Identifying Topics of Interest for Future Meetings

William Lewallen
Office of the Center Director
Center for Drug Evaluation and Research
Food and Drug Administration

Identifying topics of interest for future meetings

Based on the submitted short lists, we have identified the following six themes as key areas of interest for future meetings:

a. Increased funding and staffing to enhance the Incorporation of Patient Voice in Drug Development and regulatory Decision-Making

b. Increase the allocation of user fees for CBER/CDER to modernize FDA's data infrastructure, hire more review staff, and improve FDA's hiring processes to advance better recruitment, training, and retention strategies

c. Increase the strength and reach of Patient and Rare Disease Programs while improving diversity in patient engagement

d. Enhance FDA's use of regulatory science, to improve upon and leverage existing decision-making tools, to expedite drug development and review (e.g. COAs, MIDD, RWE, etc.)

e. Improve the integration of real-world evidence (RWE) within agency drug approval and decision making and provide guidance to further clarify the circumstances under which real-world evidence would be accepted while identifying the limitations of real-world data

f. Enhance current efforts to make clinical trials more inclusive and diverse

PDUFA VII
Closing Remarks

Dr. Theresa Mullin
Office of the Center Director
Center for Drug Evaluation and Research
Food and Drug Administration