

2023 Life Sciences Summit

FDA Regulatory and Compliance Overview



Agenda

1. Overview of FDCA and Enforcement Mechanisms

- Product Lifecycle: Getting a Product to Market
- FDA's Enforcement Tools

2. Current Good Manufacturing Practices (cGMPs)

- Meaning of Adulterated Products
- FDA Inspection Trends

3. Advertising and Promotion

- Meaning of Misbranded Products
- Takeaways from Warning Letters & Untitled Letters

4. Adverse Event Reporting

Overview of Postmarketing Surveillance Requirements





Overview of Food, Drug, and Cosmetic Act (FDCA) and Enforcement Mechanisms

Key Federal Agencies



CENTERS FOR
MEDICARE &
MEDICAID SERVICES

Payment under Medicare (Parts A, B, C and D)



HHS OFFICE OF INSPECTOR GENERAL

- Oversees integrity of the Federal health care programs
- ComplianceGuidance
- Administers Anti-Kickback Statute



DEPARTMENT OF JUSTICE

- False Claims Act
- Represent U.S.
 Government in courts



FOOD AND DRUG ADMINISTRATION

 Enforces the Food, Drug, and Cosmetic Act and implementing regulations

Scope of FDCA

 The FDCA governs the design, testing, approval, production, shipping, holding, promotion, distribution, import and export of:

- Drugs
- Medical devices
- *In vitro* diagnostics
- Food
- Dietary supplements

- Animal drugs and devices
- Cosmetics
- Tobacco products
- Radiation emitting electronic products
- There are several FDA Centers that report to the FDA Commissioner:

Center for Drug Evaluation & Research

Center for Devices & Radiological Health

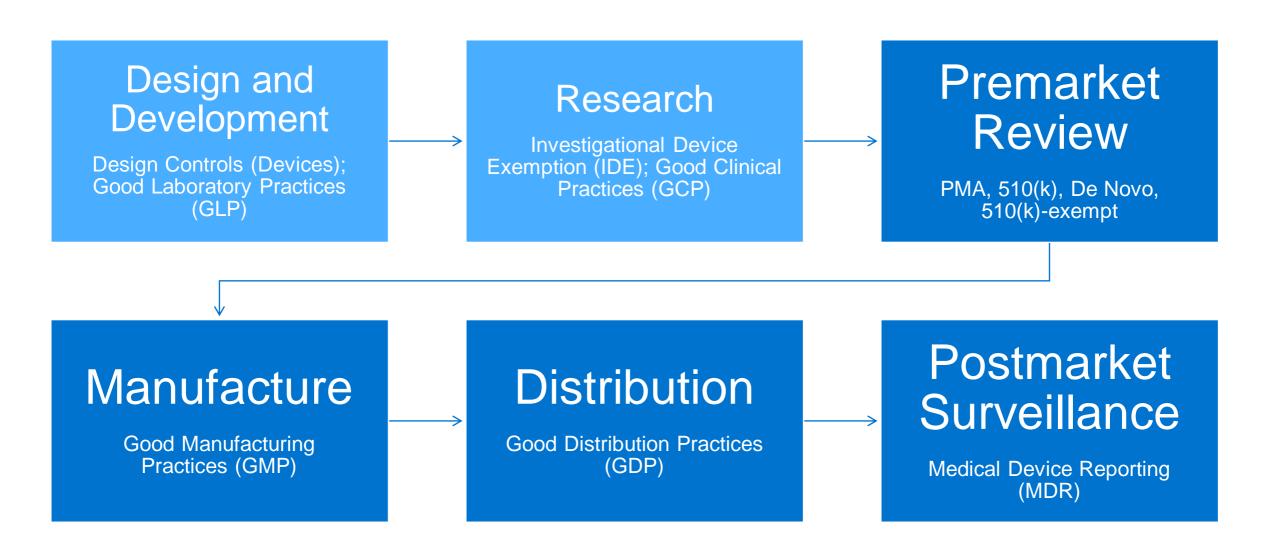
Center for Biologics Evaluation & Research Center for Food Safety & Applied Nutrition

Center for Tobacco Products

Center for Veterinary Medicine

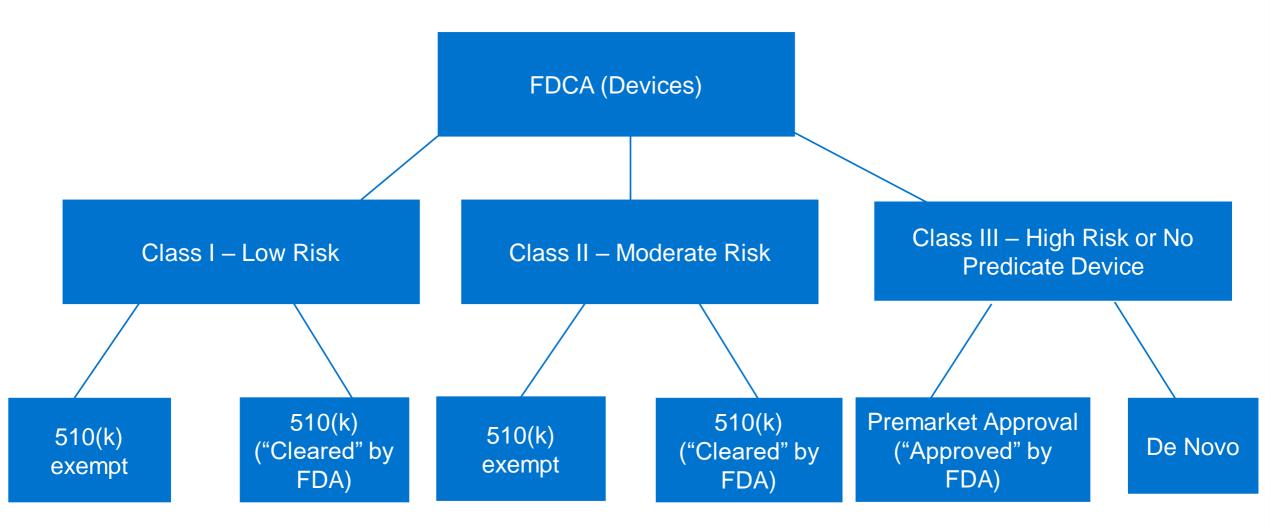
Office of Regulatory Affairs

FDA Oversight in a Medical Device Life Cycle

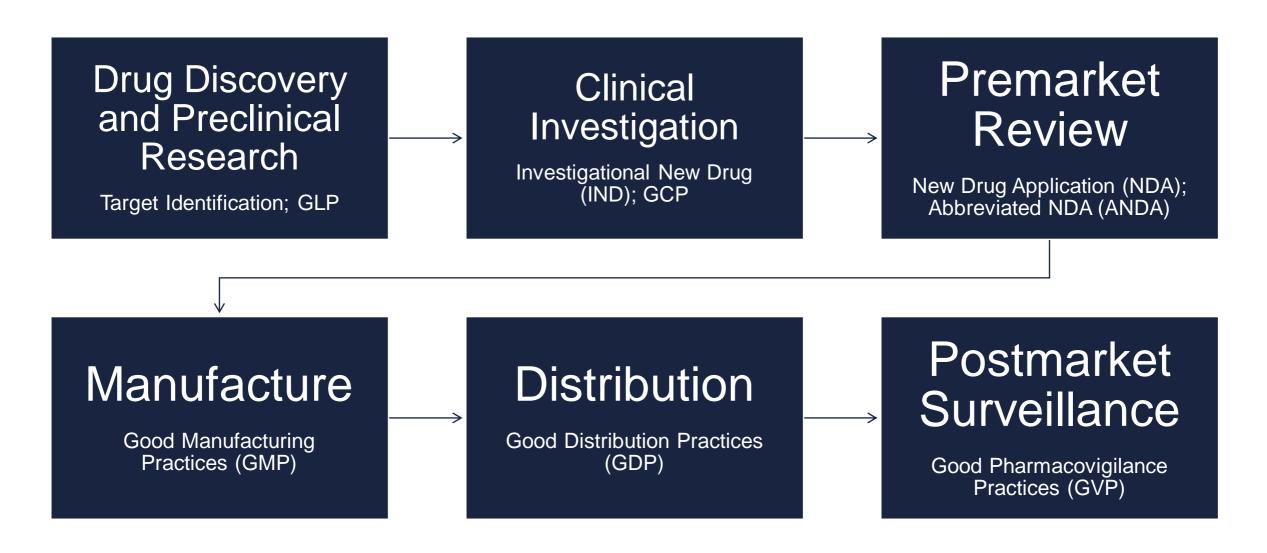


Medical Devices: Premarket Review

Comparing Marketing Pathways

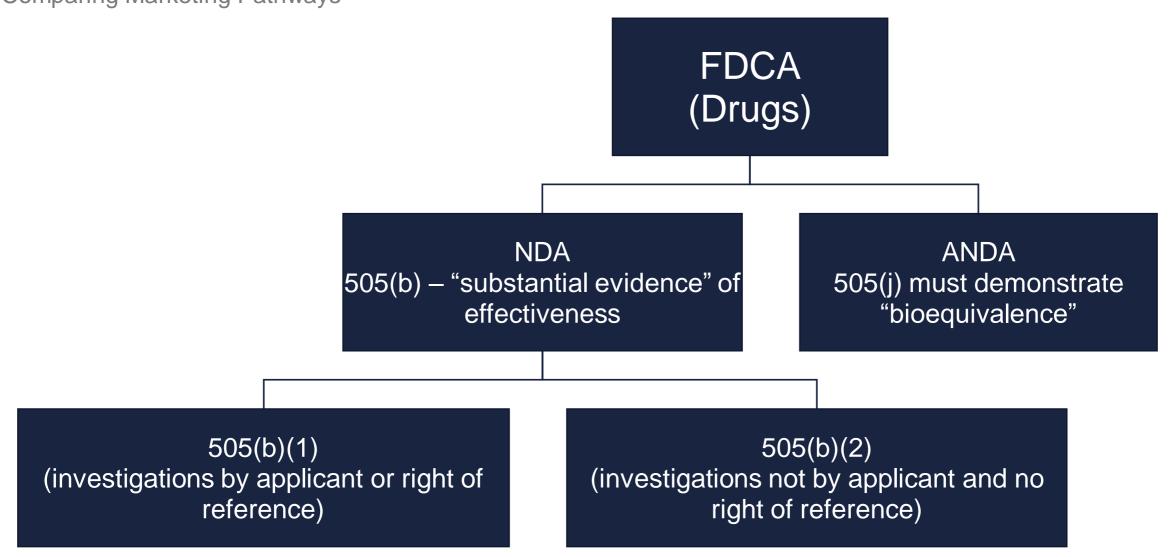


FDA Oversight in a Drug Life Cycle



Drugs: Premarket Review

Comparing Marketing Pathways



Combination Products

- Office of Combination Products (OCP) has authority to assign an FDA center to have primary jurisdiction for review of the product.
- Combination products are assigned based on the primary mode of action (PMOA).
- PMOA refers to "the single mode of action of a combination product that provides the most important therapeutic action of the combination product. The most important therapeutic action is the mode of action expected to make the greatest contribution to the overall intended therapeutic effects of the combination product."
- Examples:
 - Device coated or impregnated with a drug or biologic
 - Prefilled drug delivery systems (e.g., insulin injector pen, metered dose inhaler)



Key Agencies & Enforcement Tools

- FDA is the primary federal agency with authority to enforce the Federal Food, Drug, and Cosmetic Act. FDA will coordinate with DOJ for civil and criminal enforcement actions.
 - Global supply chain means OUS conduct can come under scrutiny
- Compliance and enforcement tools include:
 - Advisory Actions (e.g., Warning Letters, Untitled Letters)
 - Administrative Actions (e.g., Inspections, Recalls, Debarment, and Disqualification)
 - Enforcement Actions (e.g., Investigations, Seizures, Injunctions, Criminal or Civil Actions)







Current Good Manufacturing Practices (cGMPs)

Compliance with GMP

- Applicable Regulations:
 - For devices, current good manufacturing regulations are set forth in 21
 CFR Part 820 and are referred to as "Quality System Regulations" or QSR.
 - For drugs, current good manufacturing regulations are set forth in 21 CFR Parts 210 and 211.
 - FDA has issued a number of guidance documents that describe the agency's interpretation and current thinking of these regulations.
- Failure to follow cGMP renders the resulting product "adulterated."

Meaning of "Adulterated" Products

Under the FDCA, there are several ways a drug or device can be deemed "adulterated" including:

Where the methods used in, or the facilities or controls used for, its manufacture, processing, packing, or holding "do not conform to or are not operated or administered in conformity with current good manufacturing practice."

"strength differs from, or its purity or quality falls below, that which it purports or is represented to possess" (applicable to drugs)

"the owner, operator, or agent of such factory, warehouse, or establishment delays, denies, or limits an inspection, or refuses to permit entry or inspection"

FDA cGMP Inspections

- FDA's primary way of enforcing cGMPs is by having investigators conduct inspections at FDA-registered facilities. Activities that trigger facility registration requirement:
 - For **Drugs**: "establishment that **manufactures**, **repacks**, **relabels**, **or salvages** a drug, or an animal feed bearing or containing a new animal drug" (21 CFR 201.17)
 - For Devices: "engaged in the manufacture, preparation, propagation, compounding, assembly, or processing of a device" (21 CFR 807.20)
- Domestic inspections are scheduled based on a risk-based approach and are typically unannounced. Foreign inspections are preannounced in many cases but are sometimes unannounced.
- If the FDA inspector observes deficiencies at the facility, they will issue a Form FDA 483, which will list out each of the observations. The company must respond in writing within 15 business days.

Common GMP Violations based on 2009-2022 Inspection Data

Medical Devices

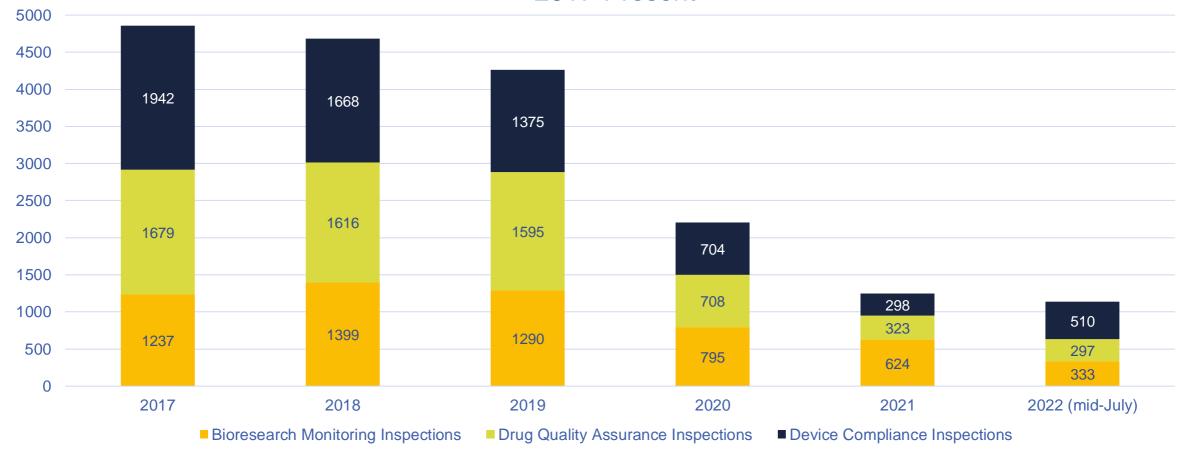
- Written procedures (21 CFR 820.100)
- Complaint procedures (21 CFR 820.198)
- Purchasing controls (21 CFR 820.50)
- Process validation (21 CFR 820.75)
- Controls over nonconforming product (21 CFR 820.90)

Drugs

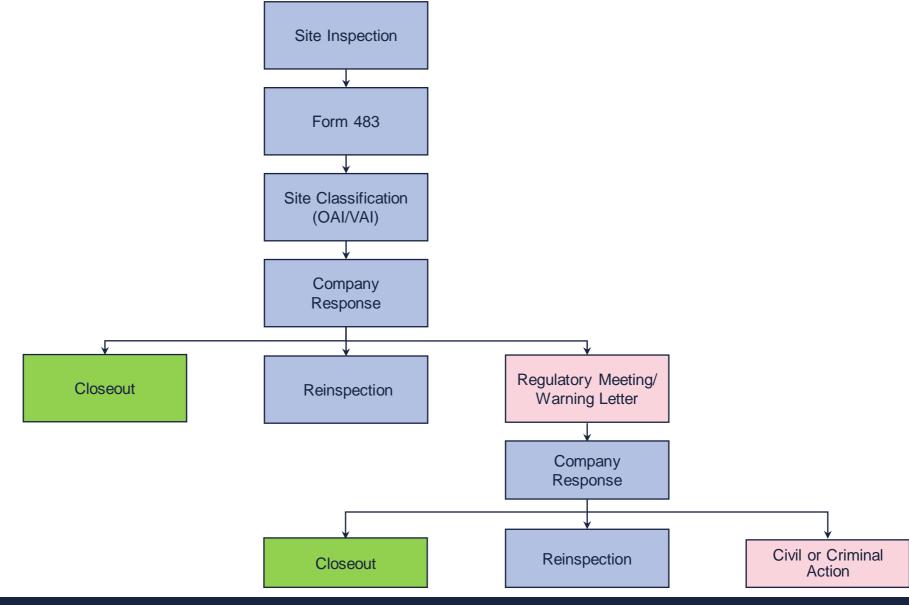
- Lack of written procedures, or procedures not being fully followed (21 CFR 211.22, 211.100)
- Scientifically sound laboratory controls (21 CFR 211.160)
- Investigations of discrepancies and failures (21 CFR 211.192)
- Testing and release for distribution (21 CFR 211.165)
- Cleaning, sanitizing, and maintenance (21 CFR 211.67)

Regulatory Environment

Good Manufacturing Practice (GMP) and Good Clinical Practice (GCP) Inspections 2017-Present



Site Inspection and Escalation Flow Chart



Recalls

Grounds for Recall

As defined in FDA regulations, "a firm's removal or correction of a marketed product that the Food and Drug Administration considers to be in violation of the laws it administers and against which the agency would initiate legal action, e.g., seizure."

Process

Recalls are typically carried out voluntarily by manufacturer. In rare instances where manufacturer fails to voluntarily recall a product that poses a risk to public health, FDA may issue a mandatory recall order to the manufacturer (in some but not all product contexts).

Classifications

Class I: a situation in which there is a reasonable probability that the use of, or exposure to, a violative product will cause serious adverse health consequences or death.

Class II: a situation in which use of, or exposure to, a violative product may cause temporary or medically reversible adverse health consequences or where the probability of serious adverse health consequences is remote.

Class III: a situation in which use of, or exposure to, a violative product is not likely to cause adverse health consequences.



Advertising and Promotion



FEDERAL TRADE
COMMISSION

Regulation of Promotion and Advertising



FDA regulates the labeling of all medical devices and drugs



For advertising, jurisdiction is split: FDA: Rx drugs and "restricted" devices FTC: OTC drugs and non-restricted devices

Key Terms

- Label: "a display of written, printed, or graphic matter upon the immediate container of any article." 21 U.S.C. § 321(k)
- Labeling: "[a]II labels and other written, printed or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such article." 21 U.S.C. § 321(m)
- Advertising: not formally defined but would include, for example, journals, publications, and radio, TV, and print ads.

"The distinction between labeling and advertising, both of which draw attention to the article to be sold, is often superficial or nebulous. Both are used for a similar purpose, i.e., to provide information about the product. Thus, according to an appellate court decision: 'Most, if not all advertising, is labeling.'" –FDA Guidance

Meaning of "Misbranded"

Under the FDCA, there are several ways a drug or device can be deemed "misbranded" including:

Where the labeling is "false or misleading in any particular"

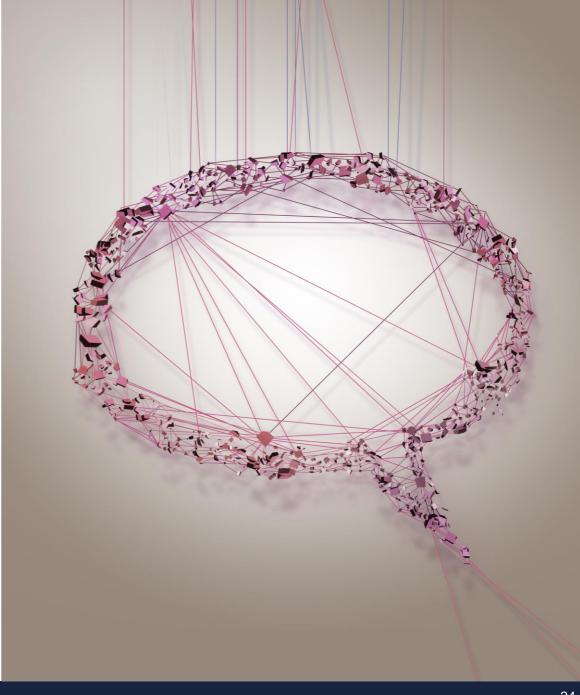
Label does not bear adequate directions for use and warnings

Package fails to
contain the name
and place of
business of
manufacturer, packer,
or distributor; or an
accurate statement
of quantity of
contents

Drug is healthendangering when used as prescribed, recommended, or suggested in the labeling

Meaning of "Intended Use"

- As defined in FDA regulations (21 C.F.R 801.4; 201.128), "intended use" refers to the "objective intent" of the persons legally responsible for the labeling of devices and drugs.
- Intent can be shown via:
 - labeling claims
 - advertising matter
 - oral or written statements by persons or their representatives
 - circumstances surrounding the distribution of the article



How do FDA and FTC "find" violative ads?

- FDA attendance at conferences, expos, and booths
- FDA surveillance online, print, TV
- Competitor complaints
- HCP complaints
- National Advertising Division (NAD) complaints



Warning Letter to CytoDyn, Inc.

February 2022



Promotion of Pipeline Products

- Office of Prescription Drug Promotion (OPDP) issued a warning letter based on a Youtube video featuring the former President/CEO of CytoDyn, Dr. Nader Pourhassan, who made certain statements about leronlimab, an investigational COVID-19 treatment.
- OPDP alleged that the former executive made "conclusory statements" about the safety and efficacy of the investigational product (e.g., "our results were really strong..." and "when we gave a dose of leronlimab, the survival rate was 78%. Once we gave them another dose, the survival rate went up to 82%").
- OPDP alleged that the video "significantly mischaracterizes" the clinical trial data given that the larger trial conducted in patients with severe COVID-19 disease "failed to find **any** effect" (emphasis by OPDP) on the primary study endpoint or any secondary endpoints.

Warning Letter to CPAPNEA Medical Supply

January 2020

Off-Label Promotion

- CPAPNEA Medical Supply has a cleared 510(k), K181219, for the Optipillows EPAP mask for the sole intended use of alleviating snoring during sleep in adults.
- Based on materials collected during inspection and website review, CDRH alleged that the EPAP mask was misbranded because the product was promoted beyond its cleared use, i.e., the company claimed that its product could treat obstructive sleep apnea and that it could be used as a substitute for Continuous Positive Airway Pressure (CPAP) devices.
- Marketing of the product in this manner constituted a "major change or modification" that required the submission of a new 510(k) submission.



Untitled Letter to Biohaven Pharmaceuticals

March 2021

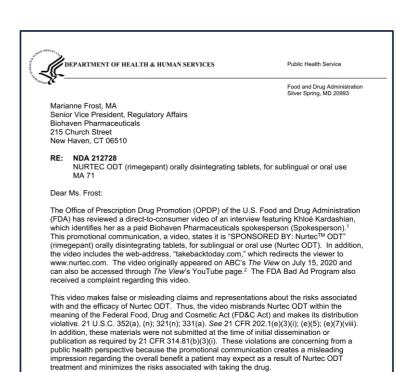
Comparative Claims

Background

- DTC video of an interview with spokesperson Khloe Kardashian regarding migraine medication (Nurtec)
- Video reviewed by FDA and complaint received via FDA Bad Ad Program

FDA Findings

- Unsupported efficacy claims and comparative claims (even if spokesperson is discussing her own experience)
- Failed to adequately communicate
 - > Full FDA-approved indication and limitations of use
 - > Contraindications and adverse events
 - > Safety information



Background

Below are the indication and summary of the most seri associated with the use of Nurtec ODT.³ According to (PI):

In the video, a host of *The View* describes Biohaven Pharmaceu
This video is available on the internet at https://www.youtube.co
date March 8, 2021)

³ This information is for background purposes only and does not should be included in the promotional piece(s) cited in this letter.



Warning Letter to AstraZeneca Pharmaceuticals LP

August 2023

Presentation of Clinical Trial Results

- FDA/OPDP: Efficacy claims contained in an AstraZeneca sales aid for BREZTRI
 AEROSPHERE™ (budesonide, glycopyrrolate, and formoterol fumarate) inhalation aerosol
 (indicated for the maintenance treatment of patients with chronic obstructive pulmonary disease
 (COPD)) regarding a reduction in all-cause mortality and a significant reduction in severe
 exacerbations were not supported by the cited trial data, and therefore created a misleading
 impression regarding the overall benefits a patient may expect as a result of treatment with the
 drug.
- AstraZeneca requested to disseminate truthful, non-misleading, and complete corrective communications.



Adverse Event Reporting

Medical Device Reporting (MDR)

30-day Reports

Deaths or serious injuries

Malfunctions that would likely cause or contribute to death or serious injury if recurred 5-day Reports

To prevent unreasonable risk of substantial harm to public health

Reportable events for which FDA has made a written request

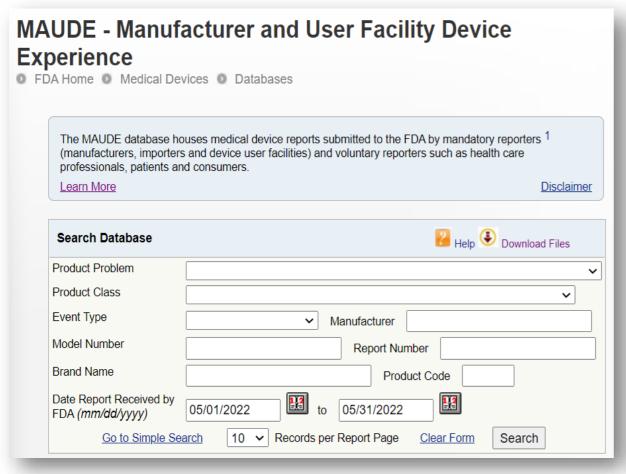
MDR Procedural Requirements

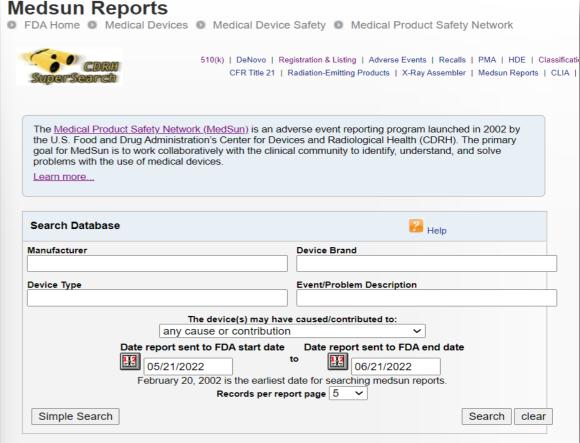
- Manufacturers should maintain and follow procedures to ensure:
 - (1) timely and effective identification, communication, and evaluation of events that may be subject to MDR requirements;
 - (2) a standardized review process or procedure for determining when an event meets the criteria for reporting under this part; and
 - (3) timely transmission of complete medical device reports to FDA (or the manufacturer, if applicable).



For Devices: MAUDE and MedSun

Public Databases with Adverse Event Data on Medical Devices





Drug Safety Reporting Requirements

15-day reports

Both "serious"

and
"unexpected"

adverse events
from all sources

Applies to domestic and foreign adverse events

Periodic Safety Update Reports (PSUR)

Required quarterly for first 3 years after US approval,

After 3 years, sponsor must submit PSUR annually

For Drugs: FDA Adverse Event Reporting System (FAERS)

- FAERS is a computerized database that collects spontaneous adverse event reports, medication error reports and product quality complaints resulting in adverse events that were submitted to FDA.
 - Drug manufacturers are required to submit reports
 - HCPs and consumers may voluntarily submit reports
- The reports in FAERS are evaluated by clinical reviewers in CDER who monitor the safety of products after they are approved by FDA.
- Based on an evaluation of FAERS data, FDA may update a product's labeling information, restrict the use of the drug, communicate new safety information to the public, or, in rare cases, remove a product from the market.



Limitations on Adverse Event Reporting Databases

- "FDA does not require that a causal relationship between a product and event be proven, and reports do not always contain enough detail to properly evaluate an event...There are also duplicate reports... Therefore, FAERS data cannot be used to calculate the incidence of an adverse event or medication error in the U.S. population."
- "In addition, although MDRs are a valuable source of information, this passive surveillance system has limitations. The incidence, prevalence, or cause of an event cannot be determined from this reporting system alone due to under-reporting of events, inaccuracies in reports, lack of verification that the device caused the reported event, and lack of information about frequency of device use."

Questions and Answers on FDA's Adverse Event Reporting System (FAERS) | FDA; About Manufacturer and User Facility Device Experience (MAUDE) | FDA



Thank you