

# Welcome To Today's Webinar

Thanks for joining us!

We'll get started in a few minutes

**Today's Topic:**

**Postmarket Mandated Studies Programs: Overview and Final Guidance  
Updates**

**December 6, 2022**

# Postmarket Mandated Studies Programs: Overview and Final Guidance Updates

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**Center for Devices and Radiological Health**  
**U.S. Food and Drug Administration**

# Final Guidance Documents

## Procedures for Handling Post-Approval Studies Imposed by Premarket Approval Application Order

### Guidance for Industry and Food and Drug Administration Staff

Document issued on October 7, 2022.

The draft of this document was issued on May 27, 2021.

For questions about this document, contact OPEQ: Office of Product Evaluation and Quality / OCEA: Office of Clinical Evidence and Analysis / Division of Clinical Science and Quality via email at [MandatedStudiesPrograms@fda.hhs.gov](mailto:MandatedStudiesPrograms@fda.hhs.gov).

**This guidance supersedes “Procedures for Handling Post-Approval Studies Imposed by PMA Order,” issued on June 15, 2009.**



U.S. Department of Health and Human Services  
Food and Drug Administration  
Center for Devices and Radiological Health

## Postmarket Surveillance Under Section 522 of the Federal Food, Drug, and Cosmetic Act

### Guidance for Industry and Food and Drug Administration Staff

Document issued October 7, 2022.

The draft of this document was issued on May 27, 2021.

**This document supersedes “Postmarket Surveillance Under Section 522 of the Federal Food, Drug, and Cosmetic Act”, issued on May 16, 2016.**

For questions about this document, contact OPEQ: Office of Product Evaluation and Quality / OCEA: Office of Clinical Evidence and Analysis / Division of Clinical Science and Quality via email at [MandatedStudiesPrograms@fda.hhs.gov](mailto:MandatedStudiesPrograms@fda.hhs.gov).



U.S. Department of Health and Human Services  
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[www.fda.gov/regulatory-information/search-fda-guidance-documents/procedures-handling-post-approval-studies-imposed-pma-order](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/procedures-handling-post-approval-studies-imposed-pma-order)

[www.fda.gov/regulatory-information/search-fda-guidance-documents/postmarket-surveillance-under-section-522-federal-food-drug-and-cosmetic-act](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/postmarket-surveillance-under-section-522-federal-food-drug-and-cosmetic-act)

# Learning Objectives

- Provide background information on the Postmarket Mandated Studies Programs
- Discuss major stakeholder comments on the draft Post-Approval Studies (PAS) and Postmarket Surveillance (522 studies) guidance documents
- Outline the purpose and scope of the PAS and 522 studies final guidance documents
- Identify updates included in the PAS and 522 studies final guidance documents

# BACKGROUND

# Medical Device Safety



*“[Our goal for safety is] ...ensuring that the FDA is consistently first among the world’s regulatory agencies to identify and act upon safety signals related to medical devices...”*



**Statement from FDA Commissioner Scott Gottlieb, M.D.  
and Jeff Shuren, M.D., November 2018**

# Overall Goal

Recommendations on the format, content, and review of PAS and 522 submissions

Clear sponsor expectations for study timelines

Timely FDA review of postmarket information

# Guidance Timeline



Draft PAS/522  
Guidances



Drafts published  
May 27, 2021



Public comments received  
(July 26, 2021), incorporated  
into final guidance



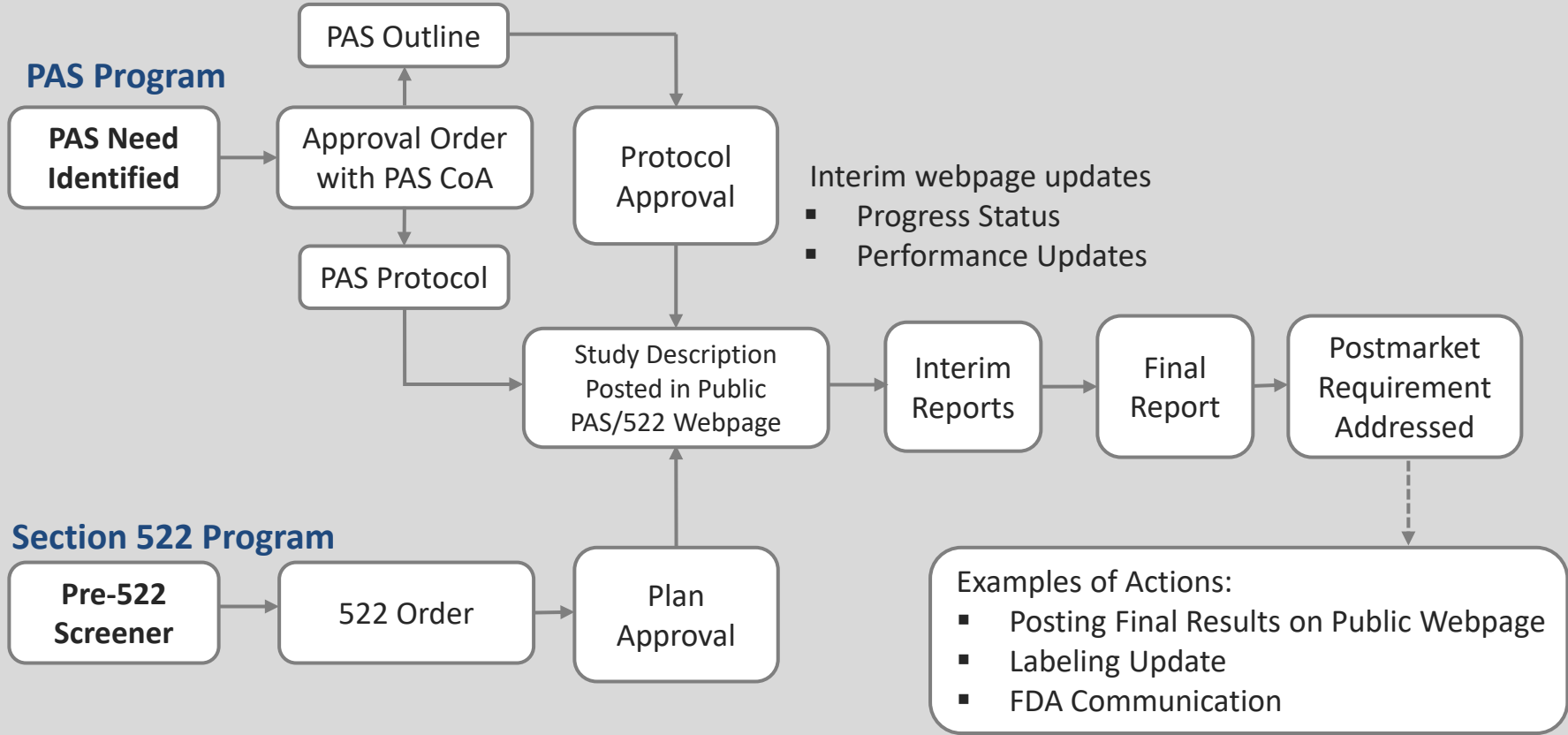
**Final guidances issued**  
**October 7, 2022**



PAS/522  
Guidance Webinar  
December 6, 2022



# Postmarket Mandated Studies Programs Overview



# **STAKEHOLDER COMMENTS ON DRAFT GUIDANCES DOCUMENTS**

# Stakeholder Comments

## Timelines

- Enrollment milestones are too prescriptive and depend on the study design
  - These are recommended enrollment milestones based on FDA's experience with mandated studies
- The timeline for sponsor submission of protocols/plans and final reports is insufficient
  - The recommended timeline to submit final reports is consistent with previous guidance document(s)

# Stakeholder Comments

## Transparency



- Web posting of interim results could result in release of confidential information and misinterpretation of results
  - FDA generally considers the information to be posted on the website to be publicly releasable in accordance with applicable disclosure laws, such as the Freedom of Information Act
  - When sharing information appropriate to protect public health, FDA will consider the benefits of sharing the information, as well as other considerations on the study conduct
- Sponsors requested an opportunity to review information before it is posted
  - Sponsors will have the opportunity to propose summary data for the website in reports

# PURPOSE AND SCOPE

# Procedures for Handling Post-Approval Studies Imposed by Premarket Approval Application Order

[www.fda.gov/regulatory-information/search-fda-guidance-documents/procedures-handling-post-approval-studies-imposed-pma-order](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/procedures-handling-post-approval-studies-imposed-pma-order)

# PAS Regulatory Authority

- Class III devices
- Section 513(a)(3)(C) of the FD&C Act
  - FDA may consider whether postmarket data collection or other conditions might be structured to permit approval subject to those conditions
- 21 CFR 814.82(a)(2) for PMAs
  - Post-Approval studies can be imposed at time of approval to continue evaluation and reporting on the safety, effectiveness, and reliability of the device for its intended use

# PAS Rationale

- FDA may consider it acceptable to collect certain data in the postmarket setting, rather than premarket under certain circumstances when FDA has uncertainty regarding certain benefits or risks of the device, but the degree of uncertainty is acceptable in the context of the overall benefit-risk profile of the device at the time of premarket approval.



# PAS Guidance Structure

- I. Introduction
- II. Background
- III. PAS Requirements in PMA Approval Order
- IV. PAS Protocols
- V. When and How to Submit PAS Reports
- VI. Content and Format of Interim and Final PAS Reports
- VII. Evaluation of Interim PAS Reports
- VIII. Evaluation of Final PAS Reports
- IX. Sponsor's Reporting Status
- X. Study Status
- XI. Failure to Complete a PAS Requirement
- XII. Public Disclosure of PAS Information

# Postmarket Surveillance Under Section 522 of the Federal Food, Drug, and Cosmetic Act

[www.fda.gov/regulatory-information/search-fda-guidance-documents/postmarket-surveillance-under-section-522-federal-food-drug-and-cosmetic-act](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/postmarket-surveillance-under-section-522-federal-food-drug-and-cosmetic-act)

# 522 Regulatory Authority

- Class II and III devices
- Section 522 of the FD&C Act
  - [FDA] may, by order, at the time of approval or clearance of a device or at any time thereafter, require a manufacturer to conduct postmarket surveillance... for a prospective surveillance of up to 36 months\*
  - Surveillance must commence within 15 months of the order
- 21 CFR 822 Postmarket Surveillance
  - “The purpose of this part is to implement our postmarket surveillance authority to maximize the likelihood that postmarket surveillance plans will result in the collection of useful data. These data can reveal unforeseen adverse events, the actual rate of anticipated adverse events, or other information necessary to protect the public health.” (*See 21 CFR 822.2*)

\*Can be longer for devices with expected significant use in pediatrics

# 522 Statutory Criteria

Section 522 of the FD&C Act permits FDA to require postmarket surveillance for class II or III devices that meet any of the statutory criteria:

## Section 522 of the FD&C Act Criteria

- Criterion 1 Failure of the device would be reasonably likely to have a **serious adverse health consequence**.
- Criterion 2 *Expected* to have **significant use** in pediatric populations.
- Criterion 3 Intended to be **implanted in the body for more than one year**.
- Criterion 4 Intended to be a **life-sustaining or life-supporting device used outside of a device user facility**.

# 522 Guidance Structure

- I. Introduction
- II. Pre-522 Postmarket Surveillance Process
- III. Postmarket Surveillance Plans
- IV. When and How to Submit Postmarket Surveillance Reports
- V. Content and Format of Postmarket Surveillance Reports
- VI. Evaluation of Interim Postmarket Surveillance Reports
- VII. Evaluation of Postmarket Surveillance Final Reports and Possible FDA Actions After 522 Order Completion
- VIII. Manufacturer's Reporting Status
- IX. Postmarket Surveillance Status
- X. Failure to Comply with Postmarket Surveillance Requirements under Section 522 of the FD&C Act
- XI. Public Disclosure of Postmarket Surveillance Plan Information and Reports

Appendix 1: Section 522 Administrative Checklist Review

# GUIDANCE UPDATES

# PAS/522 Guidance Updates

- A. Timely submission and review of PAS protocols/522 plans and reports
- B. Recommendations on study timeline/enrollment milestones
- C. Submission of changes to an approved PAS protocol/522 plan
- D. Study status categories
- E. Transparency of posting interim/final results
- F. Content of PAS protocols/522 plans and reports
  - Minor updates to recommended elements

# A. Timely Submission and Review of PAS Protocols/522 Plans



- Sponsors and FDA should work collaboratively
  - Early interactions (when possible)
- FDA intends to review PAS protocols/522 plans and issue a decision within 60 days of the approval/522 orders

Submission Type	Sponsor Submission Timeline	FDA Review Goal
PAS Protocol	Submit with PMA or w/in 30 days* of order if PAS protocol not approved with PMA	Within 30 days of receipt
522 Plan	Submit within 30 days of order <sup>‡</sup>	Within 30 days of receipt <sup>§</sup>

\* per approval orders

‡ section 522(b)(1) of the FD&C Act and 21 CFR 822.8

§ per 21 CFR 822.17, FDA will review the 522 plan and respond within 60 days of receipt



# Timely Submission and Review of Reports



Report Type*	Studies with New Enrollment	Studies without New Enrollment
Progress	Semiannual until 100% enrolled <sup>†</sup> , annually thereafter	Semiannual in 1 <sup>st</sup> year, annually thereafter
Enrollment	As specified in the approval order or approved 522 plan	
Final	Three months from study completion (i.e., last subject's last follow-up date)	

\* FDA intends to review interim reports and final reports within 30 days and 60 days of receipt, respectively.

† For the first 2 years and annually thereafter for 522 studies.

NOTE: Reporting schedule will be included in the PMA approval order or approved 522 plan  
PAS Reporting from the date of the PMA approval order (or other agreed-upon starting date)  
522 Reporting from the date of the 522 plan approval (or other agreed-upon starting date)

# B. Study Timelines/ Enrollment Milestones



- Recommendations to ensure timely initiation and completion of PAS/522 studies

Subject Enrollment	PAS Timeline*	522 Timeline <sup>†</sup>
1 <sup>st</sup> Subject	6 months	15 months <sup>‡</sup>
20%	12 months	18 months
50%	18 months	21 months
100%	24 months	24 months

\* From study protocol approval date

† From date of issuance of the 522 order

‡ Per section 522(b)(1) of the FD&C Act

# C. Changes to Approved PAS Protocol/522 Plan



- FDA generally does not intend for sponsors to routinely modify the PAS protocols/522 plans
  - FDA will consider changes on a case-by-case basis
  - Example of an appropriate change: When new information indicates that the original study enrollment milestones were impractical at the time of the PMA approval order/approval of 522 plan
- FDA expects, only in limited circumstances, revisions to the original study milestones in the PMA approval order/approved 522 plan
- FDA will determine the study progress and designate study status based on the milestones specified in the PMA approval order/approved 522 plan

# Reporting Study Delays and Mitigation Plans



- Reports should include:
  - the causes for delays in study progress or failure to meet enrollment milestones; and
  - a plan to address challenges and meet established milestones.
- Mitigation efforts may include:
  - current and past enrollment recovery efforts;
  - evaluation of slow enrollment;
  - device availability on the market;
  - measures taken to initiate study sites;
  - measures taken to incentivize study subjects;
  - outreach to study investigators and potential subjects; and
  - plans to remove barriers to site and subject participation.

# D. Updated Study Status Categories



Previous Study Status Category	Updated Study Status Category
Progress Adequate	<b>Ongoing:</b> Study proceeding according to, or is ahead of, the study timelines in the approval order or the 522 plan.
Progress Inadequate	<b>Delayed:</b> Study behind the study timelines in the approval order or 522 plan.
Revised/Replaced*	<b>Redesigned/Replaced:</b> Study requirement cannot be fulfilled as originally designed and FDA has agreed to redesign or replace the PAS protocol/ 522 plan to fulfill the requirement.
Other	<b>Hold:</b> Study has been placed on a hold temporarily, for example, because the device is no longer sold but the premarket submission associated with the requirement has not been withdrawn.

\*Revised/Replaced was previously only included in the 522 Guidance.

# Updated Study Status Categories

- New study status categories apply to new submissions received after publication of the final guidance documents (**October 7, 2022**)
- For any submission received prior to **October 7, 2022**, the former study status categories will be used
- During a transition period, the Programs webpages will include both former and current study status categories until all study requirements receive a submission and FDA issues a decision on that submission




# E. PAS Database

[www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma\\_pas.cfm](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma_pas.cfm)

Home
Food
Drugs
Medical Devices
Radiation-Emitting Products
Vaccines, Blood & Biologics
Animal & Veterinary
Cosmetics
Tobacco Products

## Post-Approval Studies (PAS) Database

[FDA Home](#) > [Medical Devices](#) > [Databases](#)


The FDA has the authority to require sponsors to perform a post-approval study (or studies) at the time of approval of a premarket approval (PMA), humanitarian device exemption (HDE), or product development protocol (PDP) application. Post-approval studies can provide patients, health care professionals, the device industry, the FDA and other stakeholders information on the continued safety and effectiveness (or continued probable benefit, in the case of an HDE) of approved medical devices. This database allows you to search Post-Approval Study information by applicant or device information.

[Learn more...](#)

Active Orders
Inactive Orders
All Orders

249 orders

Active Orders

[Suggest Enhancement / Report Issue](#) |  [Export to Excel](#)

<span style="color: blue;">↑</span> Application Number <span style="color: blue;">↓</span>	<span style="color: blue;">↑</span> Applicant <span style="color: blue;">↓</span>	<span style="color: blue;">↑</span>	Device Name <span style="color: blue;">↓</span>	<span style="color: blue;">↑</span> Medical Specialty <span style="color: blue;">↓</span>	<span style="color: blue;">↑</span> Date PMA Approved <span style="color: blue;">↓</span>	Study Name	Study Status
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# E. 522 Studies Database

[www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pss.cfm](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pss.cfm)

Home	Food	Drugs	Medical Devices	Radiation-Emitting Products	Vaccines, Blood & Biologics	Animal & Veterinary	Cosmetics	Tobacco Products
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## 522 Postmarket Surveillance Studies Database

[FDA Home](#)
[Medical Devices](#)
[Databases](#)

The FDA has the authority to require device manufacturers to perform postmarket surveillance under Section 522 of the Food, Drugs and Cosmetics (FD&C) Act, when questions are identified for devices that meet the statutory criteria. This database contains information about 522 Postmarket Surveillance Studies that have been required. This database allows you to search information about the postmarket surveillance requirements by manufacturer or device.

[Learn more...](#)

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To search for Manufacturer beginning with a specific letter, select that letter

20 orders

Active Orders [Suggest Enhancement / Report Issue](#) | [Export to Excel](#)

522 Order Number	Manufacturer	Device Name	Medical Specialty	Date 522 Order	Study Name	Study Status
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# E. PAS/522 Transparency

- FDA intends to post on its website, or otherwise make public, study interim results consistent with the Interim Data Release Plan
  - Consistent with the Interim Data Release Plan; and/or
  - When appropriate to protect public health
- Interim Data Release Plan in the PAS protocol/522 plan
  - Frequency and type of interim analyses, data endpoints to be assessed and posted, and proposed frequency of posting on the FDA's websites
- Sponsors can propose summary data in progress and final reports

# Additional Resources

- Program Webpages
  - Post-Approval Studies Program: [www.fda.gov/medical-devices/postmarket-requirements-devices/post-approval-studies-program](http://www.fda.gov/medical-devices/postmarket-requirements-devices/post-approval-studies-program)
  - 522 Postmarket Surveillance Studies Program: [www.fda.gov/medical-devices/postmarket-requirements-devices/522-postmarket-surveillance-studies-program](http://www.fda.gov/medical-devices/postmarket-requirements-devices/522-postmarket-surveillance-studies-program)
  
- Mandated Studies Programs Email
  - [MandatedStudiesPrograms@fda.hhs.gov](mailto:MandatedStudiesPrograms@fda.hhs.gov)

# Summary

- Postmarket mandated studies are important tools to ensure continued device safety and effectiveness
- Guidance document updates focused on activities to address postmarket questions in a timely manner
  - Early and ongoing communication with manufacturers
  - Collaborative establishment of protocol/plan, enrollment milestones, and study completion timelines to ensure that the studies achieve objectives and are completed in a timely manner
  - Timely reporting, review, and public posting of postmarket study information





# Additional Panelists

## **Daniel Caños, PhD, MPH**

Director

Office of Clinical Evidence and Analysis  
Office of Product Evaluation and Quality

## **Minerva Hughes, JD, PhD**

Regulatory Counsel

Office of Clinical Evidence and Analysis  
Office of Product Evaluation and Quality

## **Hina M. Pinto**

Acting Deputy Division Director

Division of Clinical Evidence and Analysis 1  
(Clinical Policy and Quality)

Office of Clinical Evidence and Analysis  
Office of Product Evaluation and Quality

## **Megan Gatski, PhD**

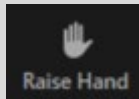
General Health Scientist

Postmarket Programs Staff  
Office of Product Evaluation and Quality

**Center for Devices and Radiological Health  
U.S. Food and Drug Administration**

# Let's Take Your Questions

- **To Ask a Question:**



1. Raise your hand in Zoom
2. Moderator will announce your name and invite you to ask your question
3. Unmute yourself when prompted in Zoom to ask your question

- **When Asking a Question:**

- Ask one question only
- Keep question short
- No questions about specific submissions

- **After Question is Answered:**

- Mute yourself and lower your hand
- If you have more questions - raise your hand again



# Thanks for Joining Today!

- **Presentation and Transcript will be available at CDRH Learn**

- [www.fda.gov/Training/CDRHLearn](http://www.fda.gov/Training/CDRHLearn)



- **Additional questions about today's webinar**

- Email: [DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)

- **Upcoming Webinars**

- [www.fda.gov/CDRHWebinar](http://www.fda.gov/CDRHWebinar)

Start Here/The Basics! - <i>(Updated module 5/13/22)</i> <i>MDUFA Small Business Program, Registration and Listing</i>	▼
<b>How to Study and Market Your Device - <i>(New module 12/23/21)</i></b> <i>510k, De Novo, IDE, PMA, HUD/HDE, Q-Submissions, Standards, Classification</i>	▼
Postmarket Activities - <i>(New modules 9/22/21)</i> <i>Quality System, Exporting, Device Recalls, MDR, Inspection - Global Harmonization</i>	▼
In Vitro Diagnostics - <i>(Updated 11/16/22)</i> <i>IVD Development, CLIA, and Virtual Town Hall Series</i>	▼
Unique Device Identification (UDI) System	▼
Specialty Technical Topics - <i>(Updated module 11/3/22)</i>	▼
Radiation-Emitting Products - <i>(Updated module 7/27/22)</i>	▼
510(k) Third Party Review Program (for Third Party Review Organizations)	▼
Industry Basics Workshop Series	▼

The logo consists of a solid blue square on the left side. Inside this square, the letters 'FDA' are written in white, bold, sans-serif font. The 'F' and 'D' are connected, and the 'A' is slightly separated.

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