

# Premarket Approval Application (PMA) Program: Postapproval Requirements

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Approved PMA



*Postapproval*  
**Requirements**

# Learning Objectives

- Define PMA
- Understand regulatory controls
- Understand regulatory responsibilities for an approved PMA:
  - Post-approval studies (PAS) and reports
  - Amendments
  - Supplements
  - 30-Day Notices
  - Postapproval periodic reporting (annual reports)

# PMA

([21 CFR 814](#))

- **Marketing application** for a Class III medical device ([21 CFR 814.3\(e\)](#))
- **Class III, highest risk devices**
- **Support or sustain** human life, substantial importance in **preventing impairment** of human health, potential for **unreasonable risk** of illness or injury
- **Unable to solely rely on *general and special controls*** to reasonably assure safety and effectiveness

# What are “Regulatory Controls”

- Apply to a particular device type
- Describe appropriate level of regulatory burden or oversight to ensure safety and effectiveness
- Generally broad, but may be specific

# Regulatory Controls

- Increased risk of device → increased regulatory controls

Class	Risk	Controls
I	low	general
II	moderate	general and special
III	high	general and PMA

- [Regulatory Controls](#) webpage

# Postapproval Controls for Approved PMA Devices

# PMA Postapproval Controls

- Postapproval studies (PAS) and reports
- Amendments
- Supplements
- 30-Day Notices
- Postapproval periodic reporting (annual reports)



# Post-Approval Studies (PAS)

- May be required *at time of approval*, as a condition of approval
- FDA and Applicant agree on general purpose and outline
- Distinct from postmarket surveillance/522 studies, which may be required any time *after* PMA approval
- Resources:
  - Regulation: [21 CFR 814.82](#)
  - Webpage: [Post-Approval Studies](#) and the [PAS FAQs](#)
  - Guidance: “[Procedures for Handling Post-Approval Studies Imposed by PMA Order](#)”
  - Database: [Post-Approval Studies \(PAS\)](#)

# Post-Approval Study Reports

- Study information:
  - Purpose, goals, objectives and endpoints, and patient population being studied
- Summary of study progress:
  - IRB approvals
  - Number of clinical sites
  - Enrollment status
- Summary of safety and/or effectiveness data and an interpretation of study results

# Amendments

- Time-sensitive updates that do not affect safety and effectiveness
- Examples:
  - Change in ownership
  - Change in contact information (e.g., company name, official correspondent, address)
  - Voluntary market withdrawal (cease marketing)
- Resources:
  - Regulation: [21 CFR 814.37](#)
  - Webpage: [PMA Supplements and Amendments](#)

# Supplements

- Changes affecting safety or effectiveness
- Required *prior* to implementing the change(s)
- Examples:
  - New indication for use
  - Changes in design, packaging, or labeling
  - Changes in manufacturing site
- Resources:
  - Regulation: [21 CFR 814.39](#)
  - Webpage: [PMA Supplements and Amendments](#)

# Supplements

- Types of PMA Supplements
  - Panel-Track supplement
  - 180-Day supplement
  - Real-Time supplement
  - Special PMA supplement - Changes Being Effectuated
  - Manufacturing site change supplement
- Resources:
  - Guidance: [“Modifications to Devices Subject to Premarket Approval \(PMA\) - The PMA Supplement Decision-Making Process”](#)

# Supplements – *Panel Track*

- Significant change requiring **new substantial clinical data**
- Examples:
  - New indication for use
  - Design
  - Performance
  - Change or removal of contraindication
- Resources:
  - Act: [21 U.S.C. 379i\(4\)\(B\)](#)

# Supplements – *Panel Track*

- Case Example:
  - Prosthetic heart valve
  - **New indication for use:** aortic valve to be used in mitral position
  - **No change in design**
  - New environment can impact performance → **new clinical data needed**
  - Appropriate for Panel Track supplement

# Supplements – *180-Day*

- Significant change requiring **new preclinical test data**
- Original clinical data are still applicable
- May include limited, confirmatory clinical data
- Examples:
  - Design, Software, Labeling, Trade name change
- Resources:
  - Act: [21 U.S.C. 379i\(4\)\(C\)](#)



# Supplements – *180-Day*

- Case Example:
  - Ventricular assist device (VAD)
  - **New design** for the lead
  - **No change to indication for use** or patient population
  - Mechanical testing, only
  - **No new clinical data** needed
  - 180-Day supplement appropriate

# Supplements – *Real-Time*

- **Minor changes** supported by pre-clinical or animal testing, with **no new clinical data**
- Involve review within a **single scientific discipline**, rather than multidisciplinary review
- Meeting, or similar forum, to jointly review and determine status of supplement
- Prior to submitting, must obtain concurrence from FDA review team
- Refer to “Real-Time” guidance (see next slide) for procedure to submit Real-Time supplement; email may be used instead of fax

# Supplements – *Real-Time*

- Examples:
  - Design
  - Software
  - Labeling
  - Sterilization and packaging methods
- Resources:
  - Act: [21 U.S.C. 379i\(4\)\(D\)](#)
  - Guidance: [“Real-Time Premarket Approval Application \(PMA\) Supplements”](#)

# Supplements – *Real-Time*

- Case Example:
  - Alternate sterilization method
  - **Previously reviewed and approved** for this device type
  - Validation testing, only
  - **Single discipline** of sterilization
  - Real-Time supplement appropriate

# Supplements – *Special Changes Being Effected*

- Must **enhance safety**
- May include **labeling** and/or **manufacturing** changes
- **No design changes**
- Narrow exception to the general rule of prior FDA *approval* of changes to a PMA

# Supplements – *Special Changes Being Effected*

- Examples:
  - Improved **labeling** (e.g., add/strengthen a contraindication, warning, precaution)
  - Additional **manufacturing** quality assurance step; may not impact effectiveness
  
- Resources:
  - [21 CFR 814.39\(d\)\(1\) and \(d\)\(2\)](#)

# Supplements – *Special Changes Being Effected*

- Case Example:
  - **Improved labeling** instructions
  - **No impact on effectiveness**
  - Special – Changes Being Effective supplement appropriate

# Supplements – *Manufacturing Site Change*

- Use of a different site or moving the manufacturing site → 180-day “site change supplement”
- Supplement must demonstrate compliance with QS regulation ([21 CFR 820](#))
- Preapproval inspection may be necessary
- Resources:
  - Guidance: “[Manufacturing Site Change Supplements: Content and Submission](#)”



# Supplements

Supplement	Clinical Data	Preclinical Data	Single Review Discipline/Area	FDA Review
Panel-Track	✓	x	✓	320
180-Day	x	✓	x	180
Real-Time	x	✓	✓	90
Special	x	x	x	Change may be implemented prior to FDA approval order
Mfg Site Change	x	x	✓	180

✓ applicable  
 x not applicable

# 30-Day Notice

- Written notification of change in manufacturing procedure or method, affecting safety and effectiveness
- May distribute 30 days after notification, unless:
  - FDA notifies applicant of conversion to 135-Day supplement
  - FDA describes further information/action required

# 30-Day Notice

- Examples:
  - Manual to automated process
  - Alternate supplier
  - Modified sterilization process parameters
- Resources:
  - Guidance: [“30-Day Notices, 135-Day Premarket Approval \(PMA\) Supplements and 75-Day Humanitarian Device Exemption \(HDE\) Supplements for Manufacturing Method or Process Changes”](#)

# Postapproval Periodic Reports

- Also known as PMA “annual report”
- Due **annually** from date of approval  
(e.g., if PMA is approved Feb. 1, 2019, then report is due by Feb. 1, 2020, 2021, etc.)
- Requirement will cease only upon PMA withdrawal
- MDUFA\* fee; **invoice is mailed** to applicant  
(no Form FDA 3601 is needed)

\* MDUFA = Medical Device User Fee Amendments

# Postapproval Periodic Reports

- Includes:
  - Changes submitted as supplements, plus other changes, not previously submitted
  - Summary and bibliography of published and unpublished reports
  - Number devices shipped or sold; number implanted (as applicable)
  
- Resources:
  - Regulation: [21 CFR 814.82\(a\)\(7\)](#) and [21 CFR 814.84](#)
  - Webpage: [Postapproval \(Annual\) Reports](#) section of [PMA Postapproval Requirements](#)
  - Guidance: [“Annual Reports for Approved Premarket Approval Applications \(PMA\)”](#)

# Summary

- Class III medical device are subject to PMA controls after approval
- PMA controls feature these types of postapproval submissions:
  - Post-approval studies (PAS) and reports
  - Amendments
  - Supplements
  - 30-Day Notices
  - Postapproval periodic reporting (annual reports)
- Each submission type addresses different aspects of postapproval activity related to the device

# Resources

Slide Number	Cited Resource	URL
4	21 CFR 814	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=814">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=814</a>
4	21 CFR 814.3(e)	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.3">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.3</a>
6	Regulatory Controls (webpage)	<a href="https://www.fda.gov/medical-devices/overview-device-regulation/regulatory-controls">https://www.fda.gov/medical-devices/overview-device-regulation/regulatory-controls</a>
9	21 CFR 814.82	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.82">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.82</a>
9	Post-Approval Studies (webpage)	<a href="https://www.fda.gov/medical-devices/postmarket-requirements-devices/post-approval-studies">https://www.fda.gov/medical-devices/postmarket-requirements-devices/post-approval-studies</a>
9	PAS FAQs (webpage)	<a href="https://www.fda.gov/medical-devices/post-approval-studies/post-approval-studies-pas-frequently-asked-questions-faq">https://www.fda.gov/medical-devices/post-approval-studies/post-approval-studies-pas-frequently-asked-questions-faq</a>
9	<i>“Procedures for Handling Post-Approval Studies Imposed by PMA Order”</i> (guidance)	<a href="https://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</a>
9	Post-Approval Studies (database)	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma_pas.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma_pas.cfm</a>
11	21 CFR 814.37	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.37">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.37</a>
11, 12	PMA Supplements and Amendments (webpage)	<a href="https://www.fda.gov/medical-devices/premarket-approval-pma/pma-supplements-and-amendments">https://www.fda.gov/medical-devices/premarket-approval-pma/pma-supplements-and-amendments</a>

# Resources (continued)

Slide Number	Cited Resource	URL
12	21 CFR 814.39	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.39">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.39</a>
13	<i>“Modifications to Devices Subject to Premarket Approval (PMA) - The PMA Supplement Decision-Making Process”</i> (guidance)	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/modifications-devices-subject-premarket-approval-pma-pma-supplement-decision-making-process">https://www.fda.gov/regulatory-information/search-fda-guidance-documents/modifications-devices-subject-premarket-approval-pma-pma-supplement-decision-making-process</a>
14	21 U.S.C. 379i(4)(B)	<a href="https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true">https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true</a>
16	21 U.S.C. 379i(4)(C)	<a href="https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true">https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true</a>
19	21 U.S.C. 379i(4)(D)	<a href="https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true">https://uscode.house.gov/view.xhtml?req=(title:21%20section:379i%20edition:prelim)%20OR%20(granuleid:USC-prelim-title21-section379i)&amp;f=treesort&amp;edition=prelim&amp;num=0&amp;jumpTo=true</a>
19	<i>“Real-Time Premarket Approval Application (PMA) Supplements”</i> (guidance)	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/real-time-premarket-approval-application-pma-supplements">https://www.fda.gov/regulatory-information/search-fda-guidance-documents/real-time-premarket-approval-application-pma-supplements</a>
22	21 CFR 814.39(d)(1) and (d)(2)	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.39">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.39</a>
24	21 CFR 820	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=820">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=820</a>



# Resources (continued)

Slide Number	Cited Resource	URL
24	<i>“Manufacturing Site Change Supplements: Content and Submission”</i> (guidance)	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/manufacturing-site-change-supplements-content-and-submission?utm_campaign=Final%20Guidance%20on%20Manufacturing%20Site%20Change%20Supplements">https://www.fda.gov/regulatory-information/search-fda-guidance-documents/manufacturing-site-change-supplements-content-and-submission?utm_campaign=Final%20Guidance%20on%20Manufacturing%20Site%20Change%20Supplements</a>
27	<i>“30-Day Notices, 135-Day Premarket Approval (PMA) Supplements and 75-Day Humanitarian Device Exemption (HDE) Supplements for Manufacturing Method or Process Changes”</i> (guidance)	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/30-day-notices-135-day-premarket-approval-pma-supplements-and-75-day-humanitarian-device-exemption">https://www.fda.gov/regulatory-information/search-fda-guidance-documents/30-day-notices-135-day-premarket-approval-pma-supplements-and-75-day-humanitarian-device-exemption</a>
29	21 CFR 814.82(a)(7)	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.82">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.82</a>
29	21 CFR 814.84	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.84">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=814.84</a>
29	Postapproval (Annual) Reports (section of PMA Postapproval Requirements webpage)	<a href="https://www.fda.gov/medical-devices/premarket-approval-pma/pma-postapproval-requirements#postapproval">https://www.fda.gov/medical-devices/premarket-approval-pma/pma-postapproval-requirements#postapproval</a>
29	PMA Postapproval Requirements (webpage)	<a href="https://www.fda.gov/medical-devices/premarket-approval-pma/pma-postapproval-requirements">https://www.fda.gov/medical-devices/premarket-approval-pma/pma-postapproval-requirements</a>
29	<i>“Annual Reports for Approved Premarket Approval Applications (PMA)”</i> (guidance)	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/annual-reports-approved-premarket-approval-applications-pma">https://www.fda.gov/regulatory-information/search-fda-guidance-documents/annual-reports-approved-premarket-approval-applications-pma</a>

# Your Call to Action

- Review all relevant cited references:
  - Regulations ([Code of Federal Regulations](#))
  - FDA guidance documents
  - [Device Advice](#) webpages
  - [CDRH Learn](#)
- Contact the Division of Industry and Consumer Education

# DICE Contact

- **Phone:** [\(800\) 638-2041](tel:8006382041)
  - Monday – Friday:
  - 9:00 am – 12:30 pm; 1:00 pm - 4:30 pm
  
- **Email:** [dice@fda.hhs.gov](mailto:dice@fda.hhs.gov)
  - respond within 2 business days



[www.fda.gov/DICE](http://www.fda.gov/DICE)

[www.fda.gov/DeviceAdvice](http://www.fda.gov/DeviceAdvice)

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

