Special and Abbreviated 510(k)s & Add-to files

Office of In Vitro Diagnostics (OIVD)
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Doug Rheinheimer
Division of Chemistry and Toxicology Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

Topics

- What to do when modifying an existing device
- What is a **special** 510(k) and when can it be used?
  - What to submit for a special 510(k)
- What is an **abbreviated** 510(k)?
  - What to submit for an abbreviated 510(k)
- What are some advantages and disadvantages of special and abbreviated 510(k)s?
- When to use add-to file submission

Modifying an existing device

Start with our revised (July 2011) Guidance – **510(k) Device Modifications: Deciding When to Submit a 510(k) for a Change to an Existing Device**

FDA developed this draft document to provide guidance to manufacturers on when to submit a premarket notification submission (510(k)) for changes or modifications you made to your previously cleared medical device.

In other words, you have a device in commercial distribution but a modification may significantly affect safety or effectiveness, thus requiring a 510(k) submission.

Revised Guidance (cont)

- The revised guidance has been updated to provide greater clarity about changes that do ***not*** trigger the need for a new premarket submission.

- This guidance uses examples of modifications to devices involving such technologies to illustrate changes that require a new 510(k), and changes that may simply be documented in accordance with a manufacturer's existing Quality System without prompting the need for a new 510(k) submission.

Revised Guidance (cont)

FDA regulations (21 CFR 807.81(a)(3)) state that a 510(k) must be submitted when: The device is one that the person currently has in commercial distribution or is reintroducing into commercial distribution, but that is about to be significantly changed or modified in design, components, method of manufacture, or intended use. The following constitute significant changes that require a premarket notification:

- A change or modification in the device that ***could significantly affect*** the safety or effectiveness of the device, e.g., a significant change or modification in design, material, chemical composition, energy source, or manufacturing process.

- ***A major change or modification in the intended use*** of the device.

Revised Guidance (cont)

The types of modifications addressed in this draft guidance include:

1. Manufacturing process changes
2. Labeling changes
3. Technology or performance specification changes
4. Materials changes

Revised Guidance (cont)

The question and answer section of the guidance is provided to help you in determining whether a new 510(k) is necessary for a change or modification to an existing device. You make the initial determination of whether a device modification requires a new 510(k), while FDA staff may review these decisions during post-market inspections. ***These questions should not be considered to be all-inclusive, as it is not possible for a single document to cover all possible device changes.***

Basic Principles

To determine whether a device modification is significant and thus requires a new 510(k), you should:

- Compare the modified device to the most recently cleared version of that device and decide whether the modification could significantly affect the safety or effectiveness of the device.

  → It also follows from this basic principle that a number of comparisons are **not** relevant to the decision about submitting a new 510(k):

Basic Principles
(comparisons not to make)

1. The modified device should not be compared to multiple devices, only to the most recently cleared version of that device, as described in that 510(k) submission.

Basic Principles

(comparisons not to make)

2. The modified device should not be compared to a version of the device that has not received clearance. In cases where a manufacturer has made several modifications to a device and judged that they do not require submission of a new 510(k), the modified device should be compared to the most recent version of the device that received 510(k) clearance, as it was described in that 510(k) submission.

Basic Principles

(comparisons not to make)

3. The modified device should not be compared to any other device produced by the same manufacturer or another manufacturer, even if the other device could serve as a predicate to the modified device.

For example

A manufacturer produces two legally marketed devices: **Device A** has design A and is made of material A, **Device B** has design B and is made of material B.

- If the manufacturer modifies Device A to be made of material B, it would be inappropriate to assume that because material B is part of a different 510(k)-cleared device the modification does not require a new 510(k).
- It would also be inappropriate to compare the modified Device A with material B to any other legally marketed device to decide whether a new 510(k) is necessary, even if the other marketed device would be an obvious predicate device for purposes of determining substantial equivalence of the modified device.

Other Basic Principles …

Evaluate the changes individually …

You should address those four areas (manufacturing process changes, labeling changes, technology / performance specification changes, and materials changes) for **each individual change** to your device until a decision is made either to submit a 510(k) or to document the change and the basis for concluding that it does not require a 510(k).

… and as a whole.

Individual changes that do not require a new 510(k) may require one when evaluated collectively if those changes, **taken as a whole**, could significantly affect safety or effectiveness. After assessing each change individually, manufacturers should assess all changes made since the last 510(k) clearance collectively to determine whether the collective sum of all changes triggers the requirement for a new 510(k) submission.

You should have a process in place

You should have a mechanism or standard operating procedures in place for evaluating whether a proposed change meets the regulatory threshold for a new 510(k). Once you have fully considered the device modifications:

Scenario A

If there are multiple changes and analysis of any one of the changes results in a determination that submission of a new 510(k) is required, then you should submit a 510(k) that:

- Incorporates all of the planned changes as well as a comparison of the changed device to the device as it was described in the most recently cleared 510(k).
- Includes all changes to the device since its most recent 510(k) clearance should be identified, even those that did not trigger the need for a new 510(k); the specific change(s) that triggered the 510(k) should be distinguished.

→A table is often helpful for such comparisons.

Scenario B

If you determine that your device modification(s) could not significantly affect safety or effectiveness and therefore decide not to submit a new 510(k), you should:

- Document the basis for concluding that it does not require a 510(k).
- You should scientifically justify their conclusions that modifications, individually and collectively, could not affect safety or effectiveness.
- A copy of this documentation should be maintained.

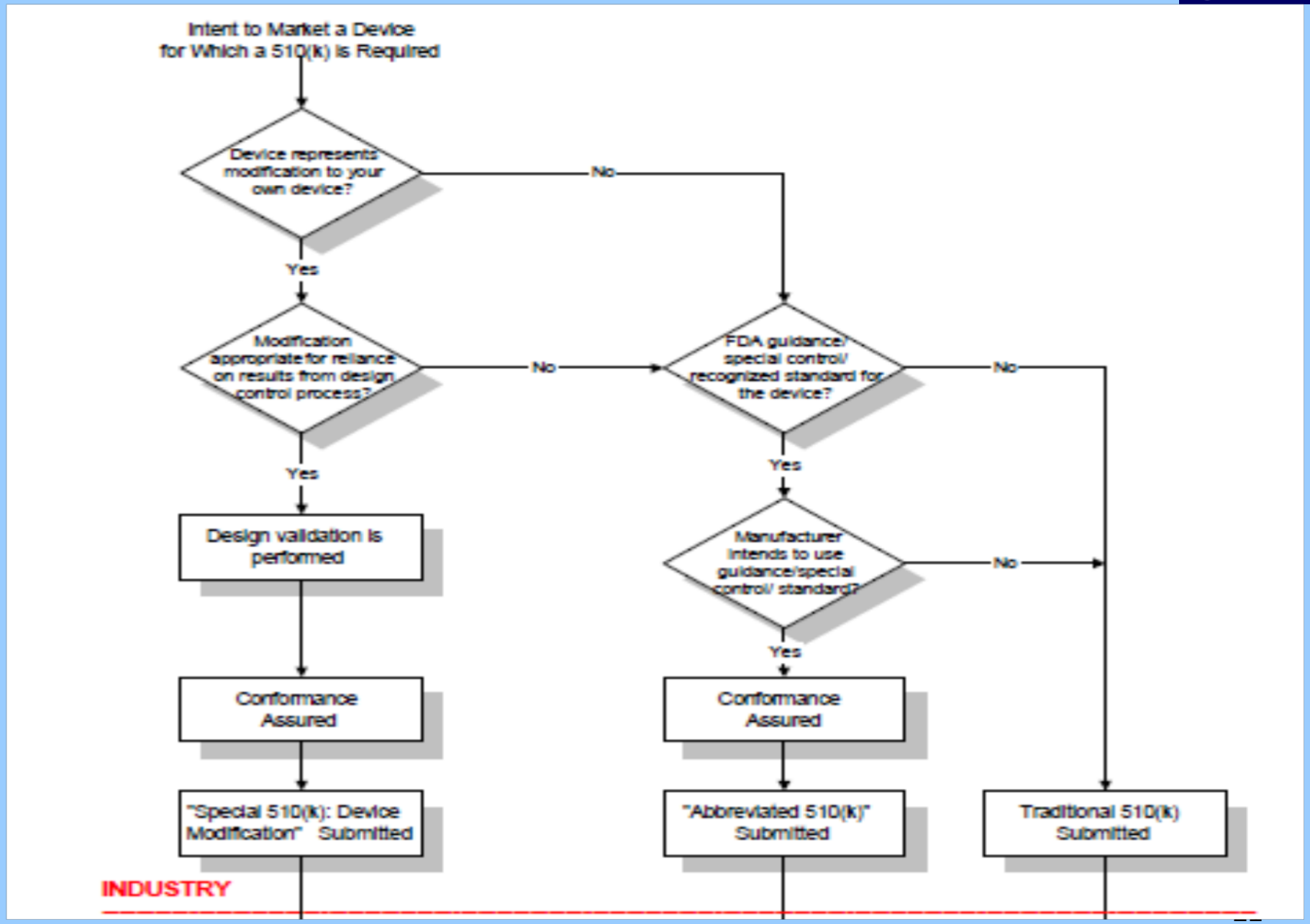
Always follow the QS regulation

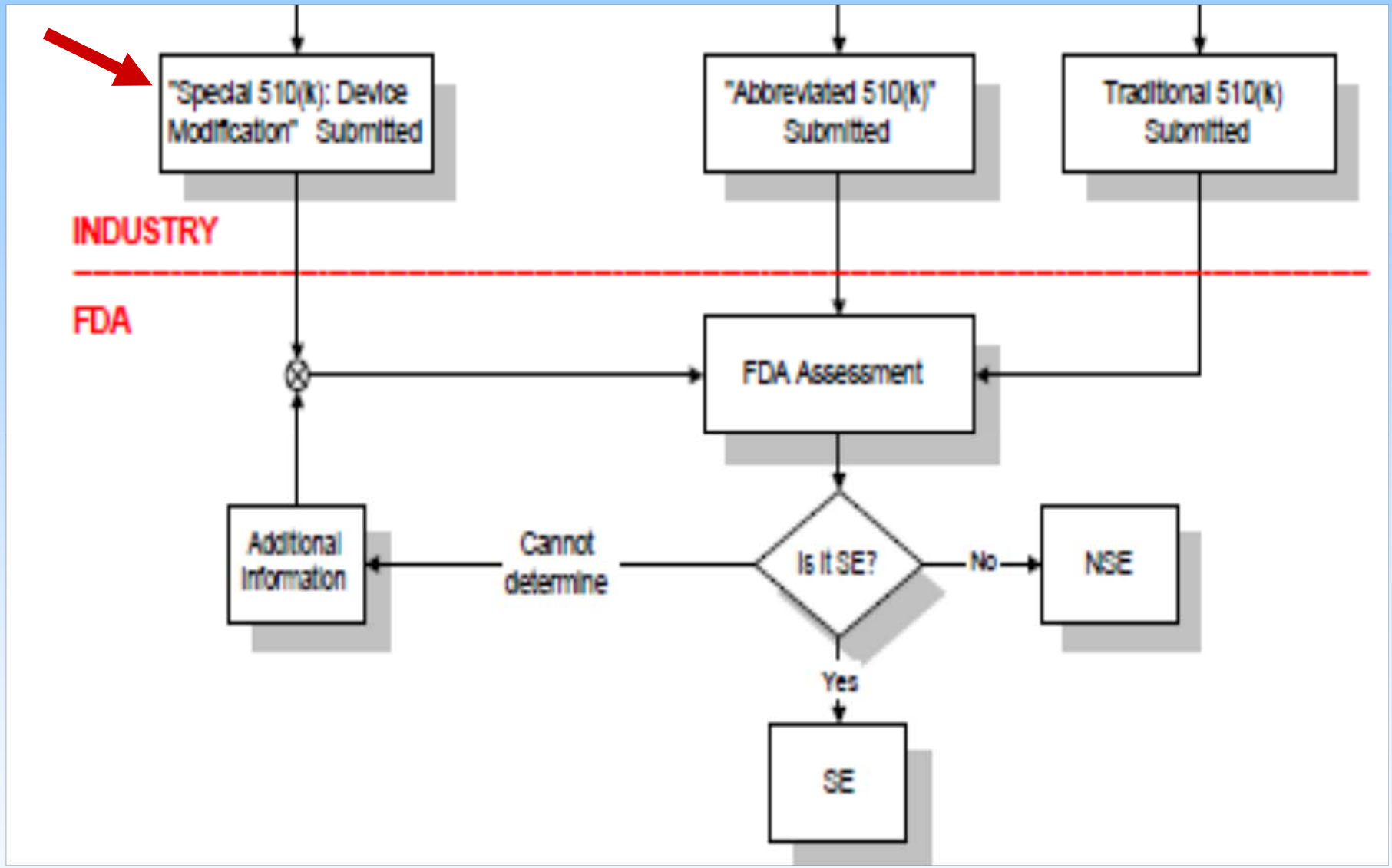
For any modification to your device, you must comply with the Quality System (QS) regulation (21 CFR Part 820) unless the device in question is exempt from the QS regulation. This regulation requires that specification changes be documented, validated or, where appropriate, verified prior to their implementation.

New 510(k) required – but which type?

If you follow the guidance and conclude that a new 510(k) is required, then the next question is: do you submit a special, traditional or abbreviated 510(k)?

There's a guidance for that – **The New 510(k) Paradigm - Alternate Approaches to Demonstrating Substantial Equivalence in Premarket Notifications**


Intent to Market a Device for Which a 510(k) is Required
Device represents modification to your own device?
No
Yes
Modification appropriate for reliance on results from design control process?
No
Yes
FDA guidance/ special control/ recognized standard for the device?
No
Yes
Design validation is performed
Manufacturer intends to use guidance/special control/ standard?
No
Yes
Conformance Assured
Conformance Assured
"Special 510(k): Device Modification" Submitted
"Abbreviated 510(k)" Submitted
Traditional 510(k) Submitted
INDUSTRY


"Special 510(k): Device Modification" Submitted
"Abbreviated 510(k)" Submitted
Traditional 510(k) Submitted
INDUSTRY
FDA
FDA Assessment
Additional Information
Cannot determine
Is It SE?
No
NSE
Yes
SE

What is a special 510(k)?

- A type of submission that utilizes the design control requirement of the Quality System Regulation (21 CFR 820)

- Can only be submitted for a modification to your own device that has been cleared under the 510(k) process

Design Control Requirements

The special 510(k) process you to declare conformance to design controls in place of the raw data typically provided in a traditional 510(k)

Three questions to assess suitability for a special 510(k)

1. Is there a change in intended use or any labeling change that affects intended use?
2. Is there a change in fundamental scientific technology?
3. Is there a change requiring a clinical study to evaluate patient safety and effectiveness?

- If all are no → may be eligible for a special
- If any are yes → traditional or abbreviated 510(k)

Changes typically eligible for a special 510(k)

- Change in reagent formulation (dry to liquid)
- Change in analytical detection limits
- Change in manufacturing to produce reagents that do not need calibration by user
- Adding an additional anticoagulant as an acceptable sample type

Changes typically not eligible for a special 510(k)

- Change in intended/indications for use
  - For example, a change from prescription use to OTC
- Change in derivation of algorithm
- Change in major reactive ingredient that affects patient safety and effectiveness
- Change in cut-off that needs a clinical study to assess patient safety and effectiveness
- Combining two cleared devices to make new

What to submit for a special 510(k)

Administratively, there are 11 items:

1. Medical Device User Fee Cover Sheet (Form FDA 3601)
2. CDRH Premarket Review Submission Cover Sheet (Form FDA 3514)
3. Certification of Compliance with ClinicalTrials.gov Data Bank (Form FDA 3674)
4. Cover Letter, identifying the application as a "Special 510(k)" and including applicant name, address, and facility registration number, if available.
5. Table of Contents
6. 510(k) Screening Checklist
7. Statement of Indications for Use (OIVD form)
8. 510(k) Summary [21 CFR 807.92]
9. Standards Data Report for 510(k)s – Form FDA 3654. Submit this form if your 510(k) references a national or international standard.
10. Truthful and Accuracy Statement
11. Declaration of Conformity

What to submit for a special 510(k)

Other critical items:

- Detailed description of modified device (including Indications for Use)
  - This includes *any and all* differences between modified and cleared device, however minor
- A statement that there is no change in fundamental technology and no change in intended use
- Proposed labeling with all changes from predicate highlighted or prominently identified
- Summary of design control activities

→Please see next slide

Summary of Design Control Activities (cont)

- State the risk analysis method you used to assess the impact of the modification(s)
- Provide all verification/validation tests that were performed, ***as required by the risk analysis***
- List the pre-determined acceptance criteria appropriate for the clinical needs of assay and a summary of results showing pre-determined acceptance criteria were met
- Provide a statement that pre-determined acceptance criteria were met

What to submit for a special 510(k)

Two additional required statements:

- All verification activities, as required by the risk analysis, for the modification were performed by the designated individual(s) and the results demonstrated that the predetermined acceptance criteria were met
- The manufacturing facility, *[Company Name]* is in conformance with the design control requirements as specified in 21 CFR 820. 30 and the records are available for review.

FDA Reviewer's Expectations for a Special 510(k)

- Validation/verification activities similar to those in traditional 510(k): method comparison, linearity, precision, interference studies, etc.
- Graphs and/or charts of data analyses clearly showing acceptance criteria were met and verification/validation activities are complete

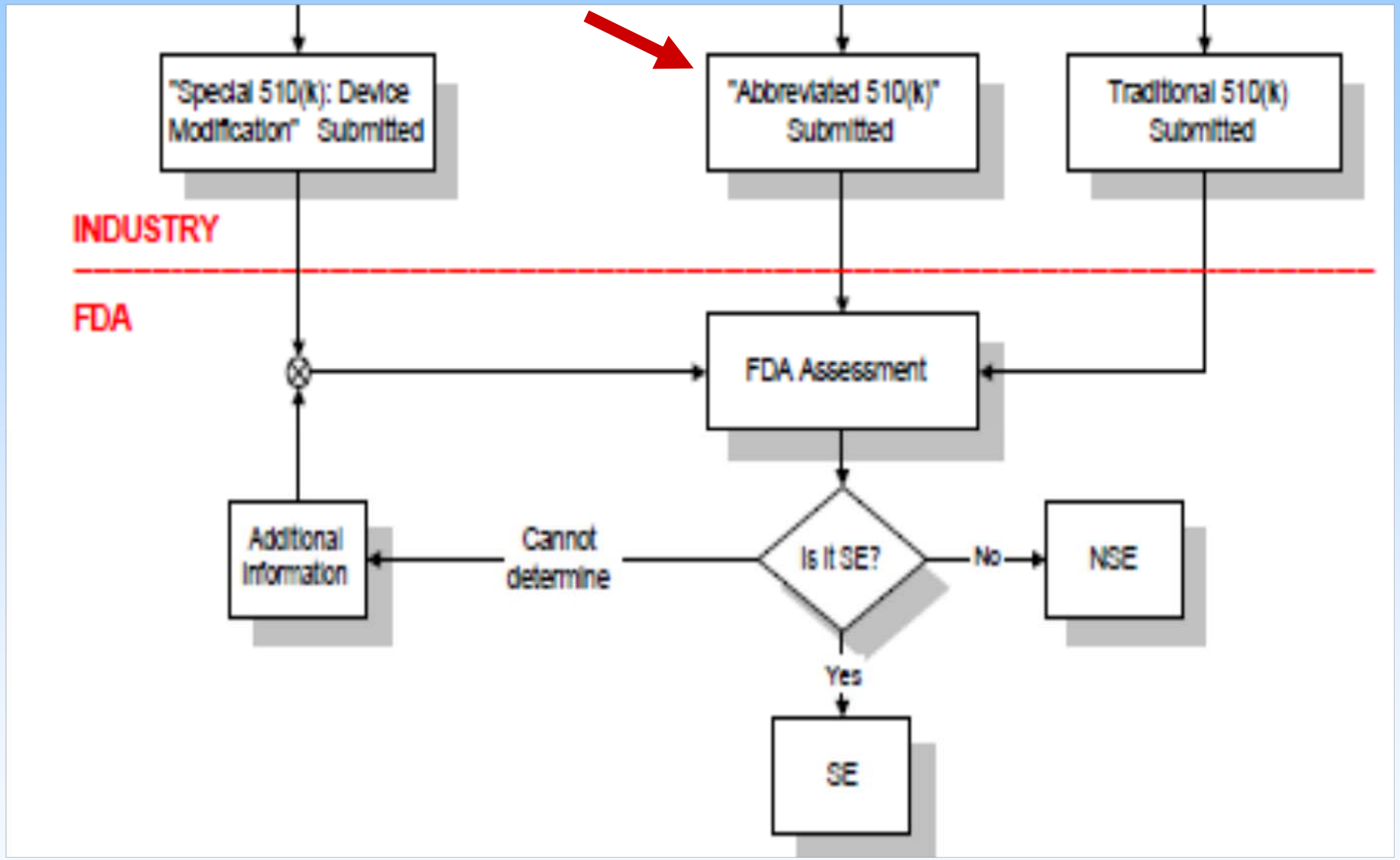
Advantage of a Special 510(k)

FDA has 30 calendar days to make a decision on SE (or to put it on hold) - vs 90 days for a traditional 510(k)

Potential Problems with Special 510(k)s

Most misunderstood type of submission

- The difference between the predicate device and the modified device may not be clearly presented
- FDA does not understand the modifications
- Pre-determined acceptance criteria not clinically relevant or are not met
- Risk analysis and/or verification & validation activities are not relevant to the modification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INDUSTRY
FDA
FDA Assessment
Additional Information
Cannot determine
Is It SE?
No
NSE
Yes
SE

What is an Abbreviated 510(k)?

Device manufacturers may choose to submit an Abbreviated 510(k) when:

1. There is a device-specific guidance document.
2. A special control has been established.
3. FDA has recognized a relevant consensus standard

Abbreviated 510(k)

Need a summary report -

- Describes adherence to the relevant guidance or special control and how they were used during device development and testing
- Declaration of conformity if using standard

What to Submit for an Abbreviated 510(k) – Guidance Documents

1. All the administrative information required for a trad. 510(k)
2. A summary report describing adherence to the relevant guidance document and how the document was used during device development and testing, including the manufacturer's efforts to conform with the guidance document and any deviations
3. A summary report that describes how the guidance document was used to address the risks associated with the particular device type
4. Information on sterilization, biocompatibility, expiration date, etc., if applicable.
5. Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards

What to Submit for an Abbreviated 510(k) – Special Controls

1. All the administrative information required for a trad. 510(k)
2. A summary report that describes adherence to the special control and how the special control(s) was used during device development and testing, including to address a specific risk or issue with the device. The report should include the manufacturer's efforts to conform with the special control and any deviations
3. Information on sterilization, biocompatibility, expiration date, etc., if applicable.
4. Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards

What to Submit for an Abbreviated 510(k) – FDA Recognized Standards

1. All the administrative information required for a trad. 510(k)
2. An Abbreviated 510(k) that relies on a recognized standard must include a Declaration of Conformity to the Recognized Standard.
3. Information on sterilization, biocompatibility, expiration date, etc., if applicable.
4. Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards.

Advantages of Abbreviated 510(k)s

- Suitable for submissions for calibrator or control materials

- Potentially easier to prepare

Challenges of Abbreviated 510(k)s

- One size does not fit all –
- Relatively few guidance documents to cover all aspects of IVD device performance
- No time advantage over traditional (90 FDA review days)

When to submit an add-to file

1. Requesting CLIA categorization after using FDA guidance "Guidance for Industry and FDA Staff; Replacement Reagent and Instrument Family Policy"

2. Requesting CLIA categorization for a name change to a cleared device or change in company name

3. Submitting info for CLIA waiver

- Generally not for informing FDA about changes made to your device

Helpful Websites

Device Advice:

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Overview/default.htm

How to prepare a special 510(k):

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/PremarketNotification510k/ucm134573.htm

How to prepare an abbreviated 510(k):

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/PremarketNotification510k/ucm134574.htm

FDA standards program:

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Standards/default.htm

Guidance Documents

510(k) Device Modifications: Deciding When to Submit a 510(k) for a Change to an Existing Device

http://www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/UCM265349.pdf

Frequently Asked Questions on the New 510(k) Paradigm – October 02, 1998

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm073946.htm

Guidance Documents

Design Control Guidance For Medical Device Manufacturers

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm070627.htm

Guidance for Industry and FDA Staff; Replacement Reagent and Instrument Family Policy

www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm079185.htm

Thank you!

Doug Rheinheimer
Div of Chemistry and Toxicology Devices, OIVD
T: (301) 796-6157
douglas.rheinheimer@fda.hhs.gov