FDA Town Hall Meeting Part 1: Goals for 2019/2020
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The US EFS and Breakthrough Devices Programs
FDA Update

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Disclosure Statement of Financial Interest

I, Andrew Farb, DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation

Early Feasibility Studies (EFS) Program Objectives

Investigational Device Exemptions (IDEs) for Early Feasibility Medical Device Clinical Studies, Including Certain First in Human (FIH) Studies

Guidance for Industry and Food and Drug Administration Staff

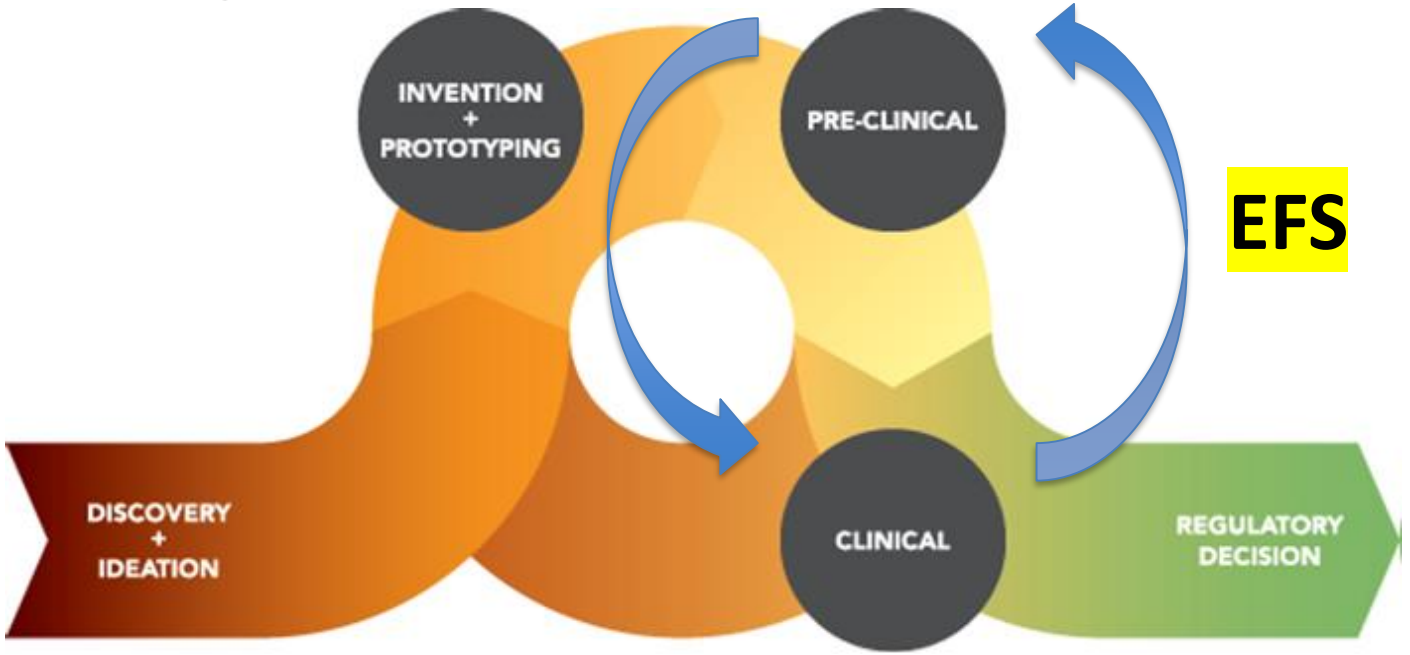
Document issued on: October 1, 2013

The draft of this document was issued on November 10, 2011.

For questions regarding this document, contact CDRH's Andrew Farb, 301-796-6343, Andrew.Farb@fda.hhs.gov or Dorothy Abel, 301-796-6366, Dorothy.Abel@fda.hhs.gov, or CBER's Office of Communication, Outreach and Development at 1-800-835-4709 or 301-827-1800.

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

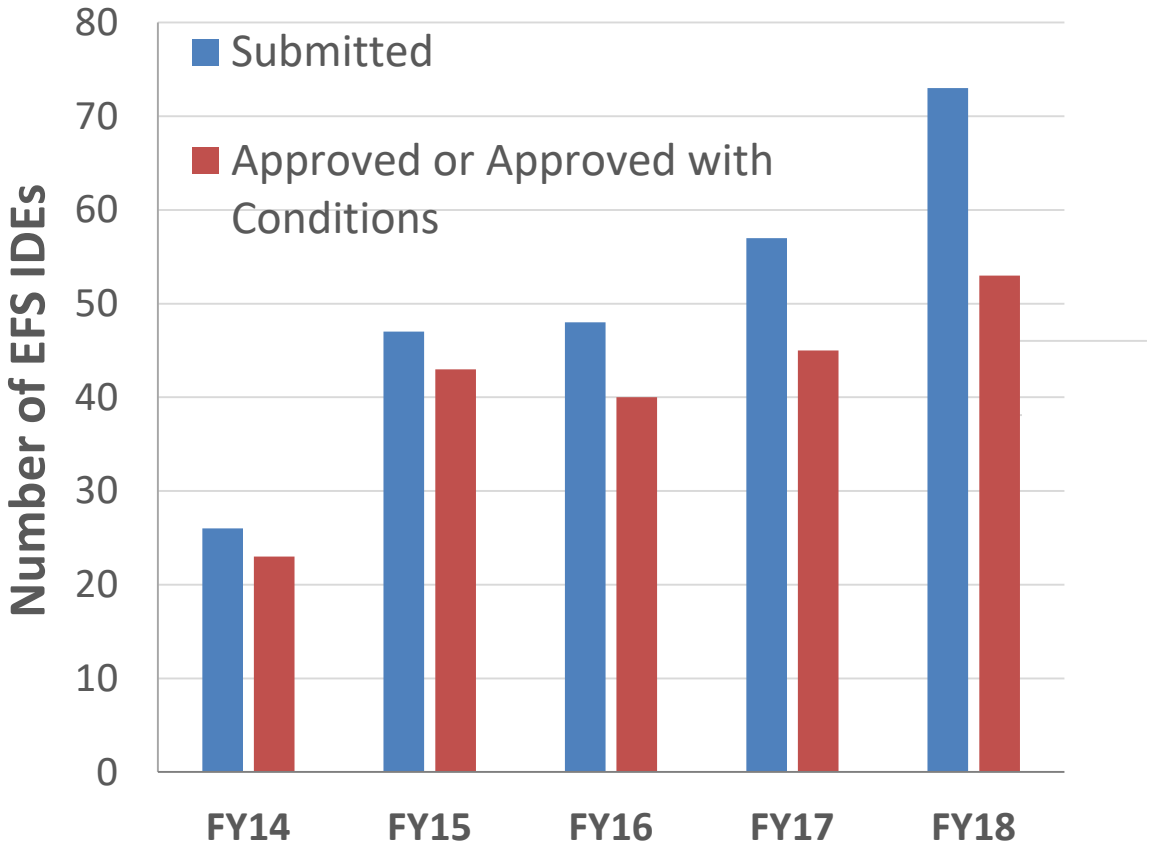
- Increase early patient access to potentially beneficial medical devices in the US
- Re-establish or increase US participation in the early clinical evaluation of innovative medical devices
- Enhance collaboration among developers, industry, regulators, and investigators
- Utilize the IDE regulations to protect study participants during the EFS



Key Guidance Principles

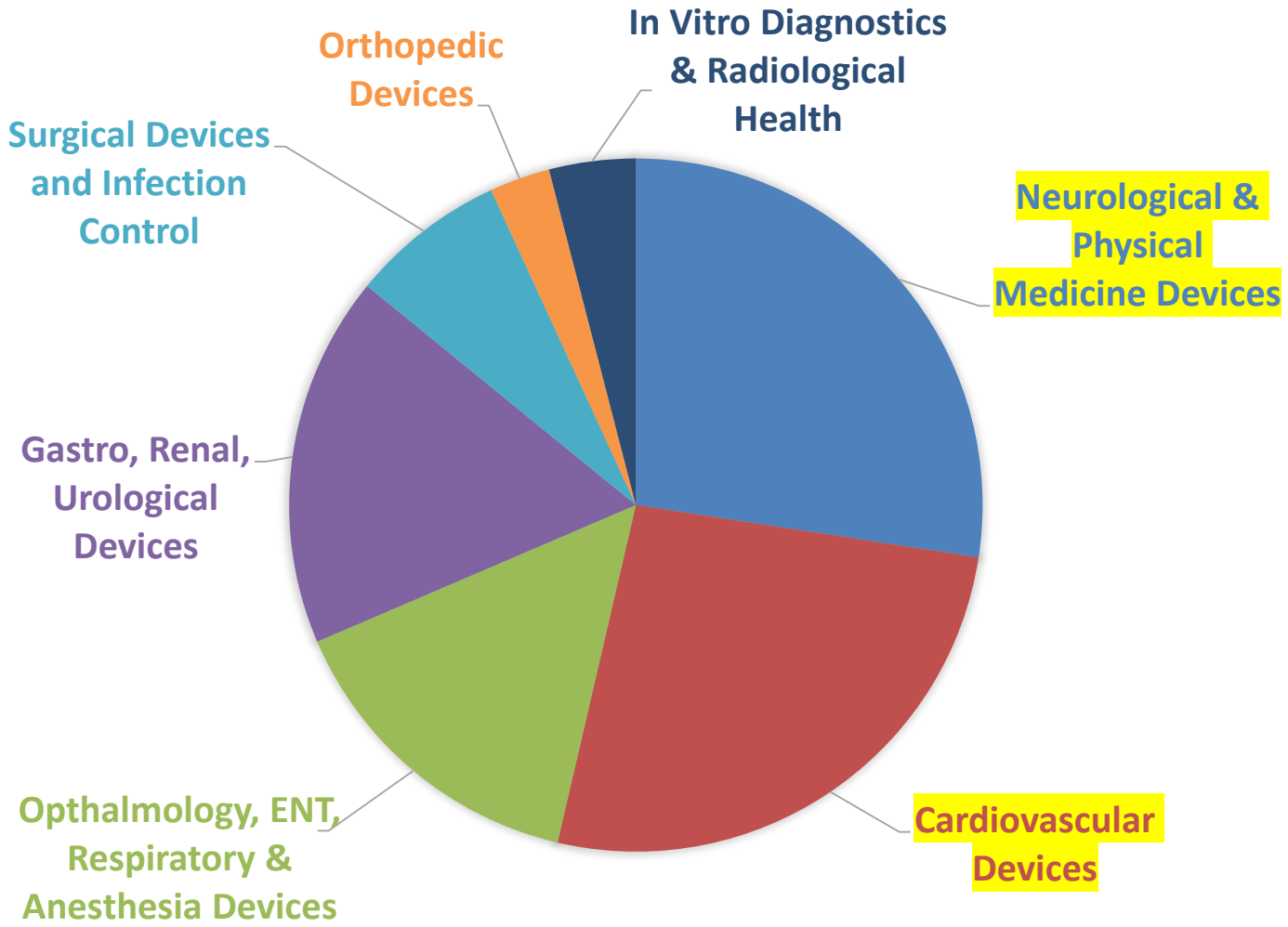
- EFS IDE approval may be based on less *nonclinical* data than would be needed to support a larger clinical study of a more finalized device design.
- Just-In-Time Testing: Doing the right tests at the right time
  - May be acceptable to defer some nonclinical testing until the device design has been finalized for use in a pivotal study
  - Comprehensive testing in early phases of device development may add cost without return

EFS Program Growth



- More than a doubling of IDEs submitted over past 6 years
- Over 200 EFS IDEs have been approved to treat/diagnose >2500 patients
- FY19 on pace to yield similar submission numbers to FY15-FY17
- Over 75% of EFS IDEs get to an approval decision within 2 review cycles

EFS Distribution Across CDRH



- EFS in wide distribution across the Center offices
- Highest utilization in cardiovascular and neurological device areas

Number of structural heart EFS IDEs particularly notable

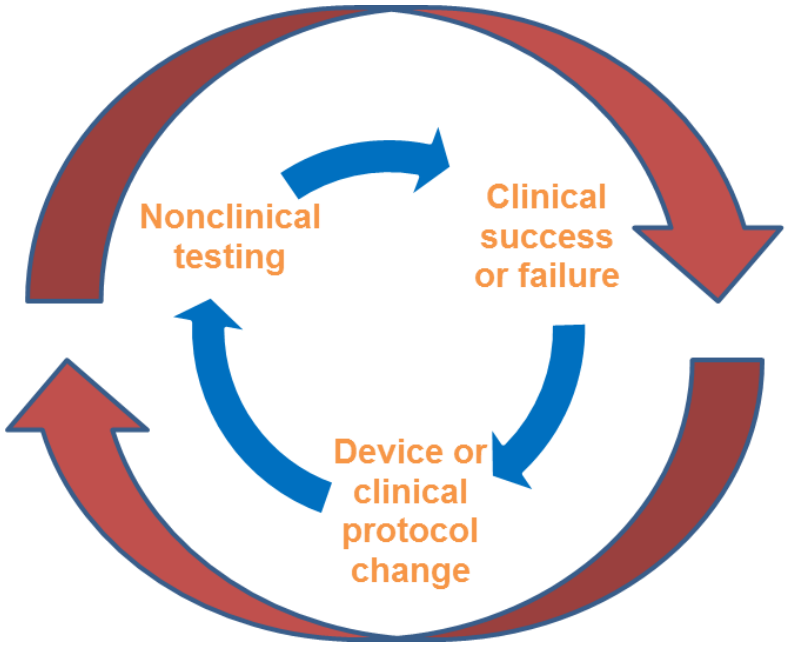
Data from FY14-FY18

Maintaining EFS Program Growth

- Continue refinements and application of EFS principles considering non-clinical test requirements and risk mitigations
- Identify disease and device areas that would be good candidates for targeted FDA outreach
- Identify and enlist the support of local clinical champions
- Boost outreach to sponsors on program benefits and interaction during review to increase EFS submissions:
  - Within the Office of Cardiovascular Devices
  - Across CDRH
- Expand the MDIC EFS CV site consortium pilot beyond cardiovascular devices
- Increase EFS exposure at professional society meetings
- Direct outreach to patient advocacy groups and trade organizations

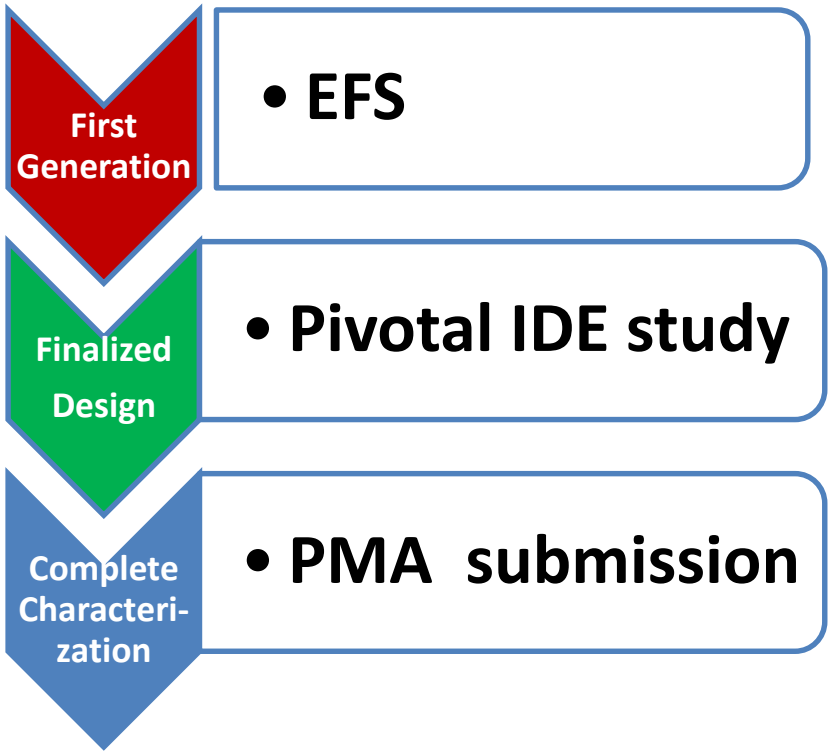
The Path Forward From EFS

- EFS expansion with additional patient enrollment treated with the original EFS device and procedure
  - Bring new sites and investigators onboard
  - Gain further experience
  - Refine safety and effectiveness event rate estimates for future pivotal trial design
- EFS expansion with a modified device and/or procedure
- Transition to a pivotal study



Transition from EFS to Pivotal Trials

- Streamlined transition to pivotal → reduced total time to PMA approval
- ~ 10% of approved EFS have transitioned to pivotal studies or are in pre-sub discussions on pivotal study design
- Facilitating pivotal transition:
  - Start discussion early during the EFS
  - Address necessary non-clinical testing to support a pivotal study in parallel with EFS progress
    - Consider a modular approach



Compassionate Use (CU)

- Access to an investigational device under an approved IDE or outside of an IDE (Expanded Access provisions)
- Criteria
  - Serious disease or condition
  - No safe and effective alternative treatment
- FDA and IRB approval required for CU

Shared CU – EFS Considerations

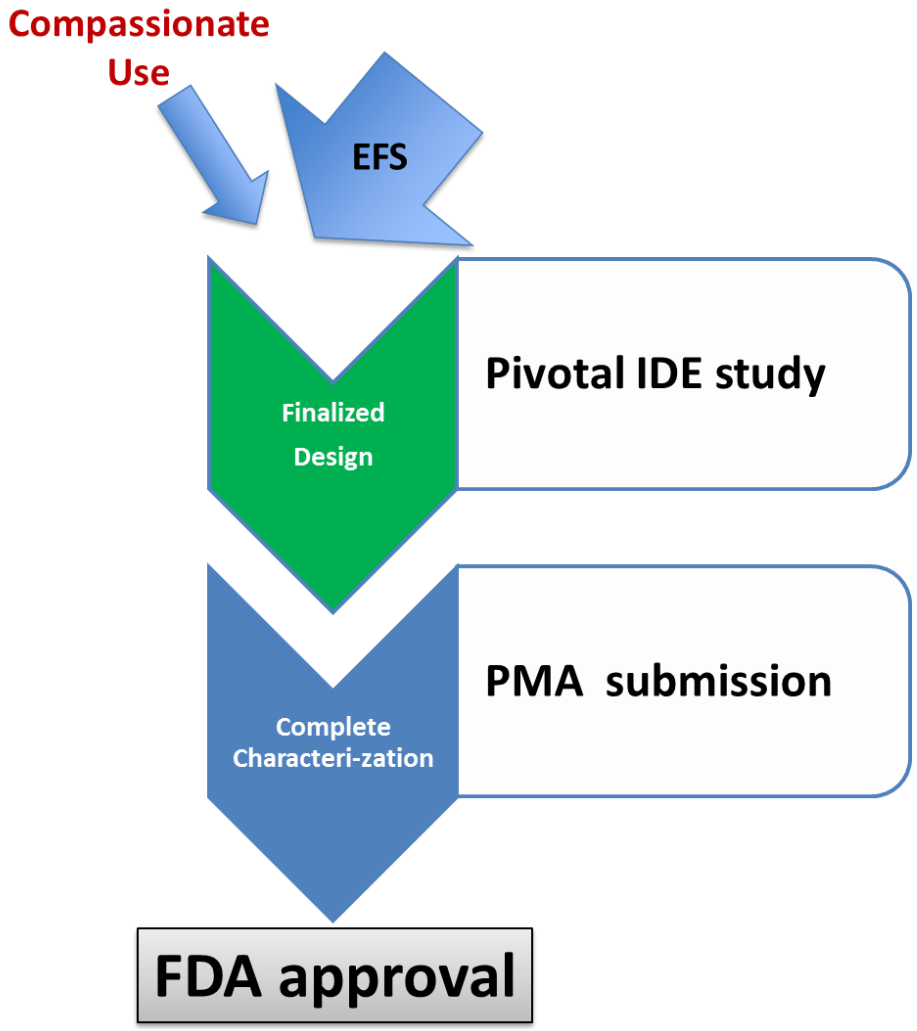
- Like EFS, CU belongs to the continuum of expanded access for a select group of patients to potentially beneficial devices considering:
  - the clinical context;
  - addressing unmet needs; and
  - benefit-risk
- CU incorporates additional patient protection measures as compared to other investigational device uses
  - Similar to the inclusion of enhanced risk mitigation strategies in EFS IDEs

CU – EFS Considerations

- CU represent anecdotal information and lack the rigor of an EFS IDE
- If information is adequate to support CU, there should be evidence to build a case for an EFS IDE

Ideally, efforts to pursue CU for individual patients should be done *in parallel with designing an EFS IDE* that builds a foundation to:

- Serve larger numbers of patients
- Advance device development



Breakthrough Devices Program

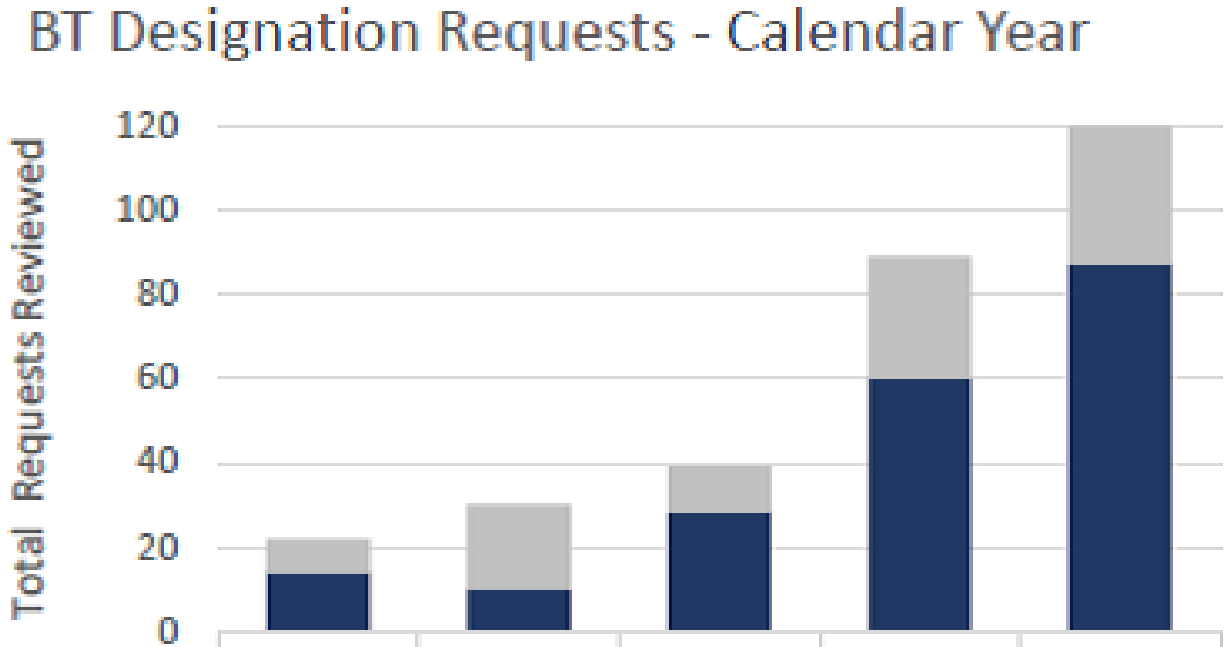
Draft Guidance for Industry and Food and Drug Administration Staff

Document issued on December 18, 2018.

- Established by the 21st Century Cures Act and supersedes the Expedited Access Pathway
- Accelerated pathway for devices that FDA finds could provide more effective treatments or diagnose life-threatening or irreversibly debilitating diseases or conditions, particularly those that address unmet needs
- Applicable to PMA, 510(k), and De Novo products
- Prioritized interactive review
  - Sprint discussions to facilitate agreement between FDA and sponsors on product development on an agreed to time line
  - Regular status update meetings

https://www.fda.gov/media/108135/download

Breakthrough Designation Requests
CDRH Office of Product Evaluation and Quality



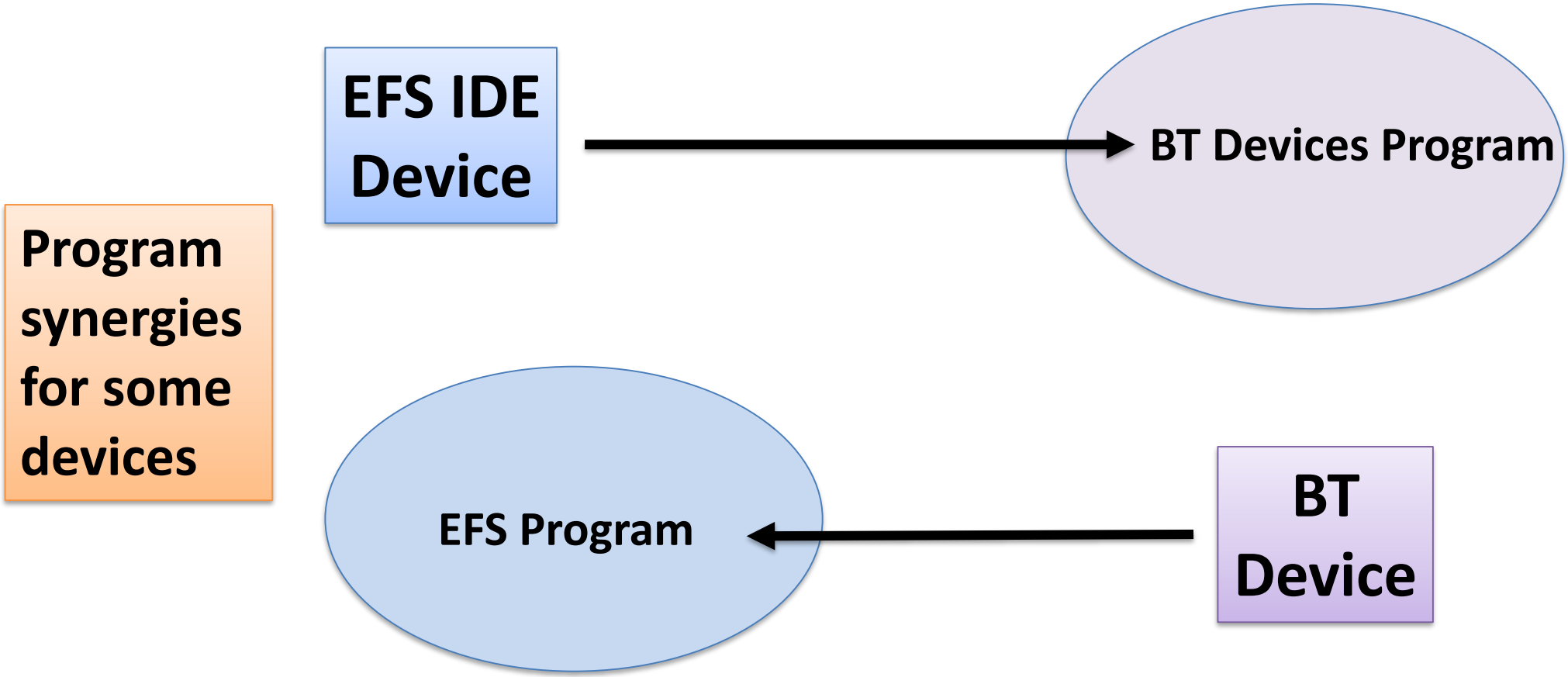
	2015	2016	2017	2018	2019
Not Granted*	8	20	11	29	45
Granted	14	10	28	60	87
% Granted	64%	33%	72%	67%	66%

Marketing Authorizations
- 7 PMAs
- 3 510(k)'s
- 2 De Novos

Office of CV Devices
- 2018: 6 BT designations
- 2019 (through Sept 1): 24 BT designations

*Not granted reflects denials and withdrawn requests; 2019 data current as of Sept 1, 2019

EFS and Breakthrough (BT) Device Programs



A BT designation application can be submitted prior to, concurrent with, or after EFS IDE approval (or during or after completing an EFS)

EFS and Breakthrough (BT) Device Programs

Regulatory strategy

- Priority considerations when contemplating a BT device designation, particularly for highly novel devices or uses:
  - Clinical experience in an EFS IDE showing technical and clinical success, and a potentially more effective treatment, may be needed to support a BT designation application
  - In many cases, focusing on EFS IDE approval is the best way to the meet the key goal of 1st patient enrolled and treated

EFS Program Goals
Looking Ahead

- Increase EFS utilization across CDRH device areas
- Facilitate EFS transitions to pivotal studies
- Work with CMS to assist in EFS coverage considerations
- Advance EFS synergies with the Breakthrough Devices Program
- Build on collaborative efforts with stakeholders to design strategies for sustaining EFS into 2020 and beyond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