Improving the 510(k) Premarket Review Process – Can Your Review Times be Lowered?

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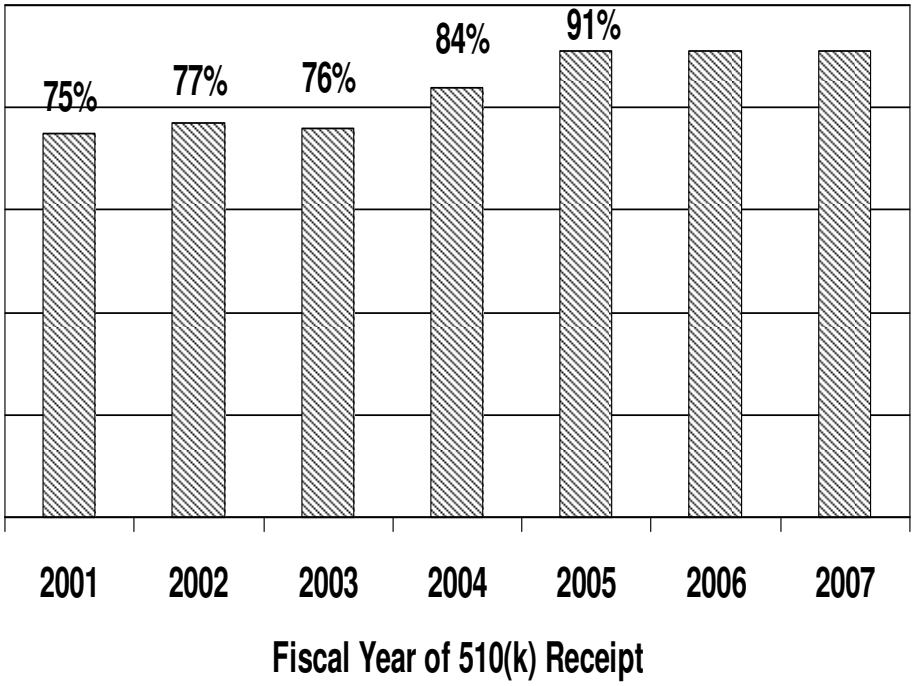
Before 2003, timeliness of FDA medical device reviews was a concern

MDUFA I

- User fees added resources for more review staff to improve review timeliness
- FDA agreed to meet specific performance goals

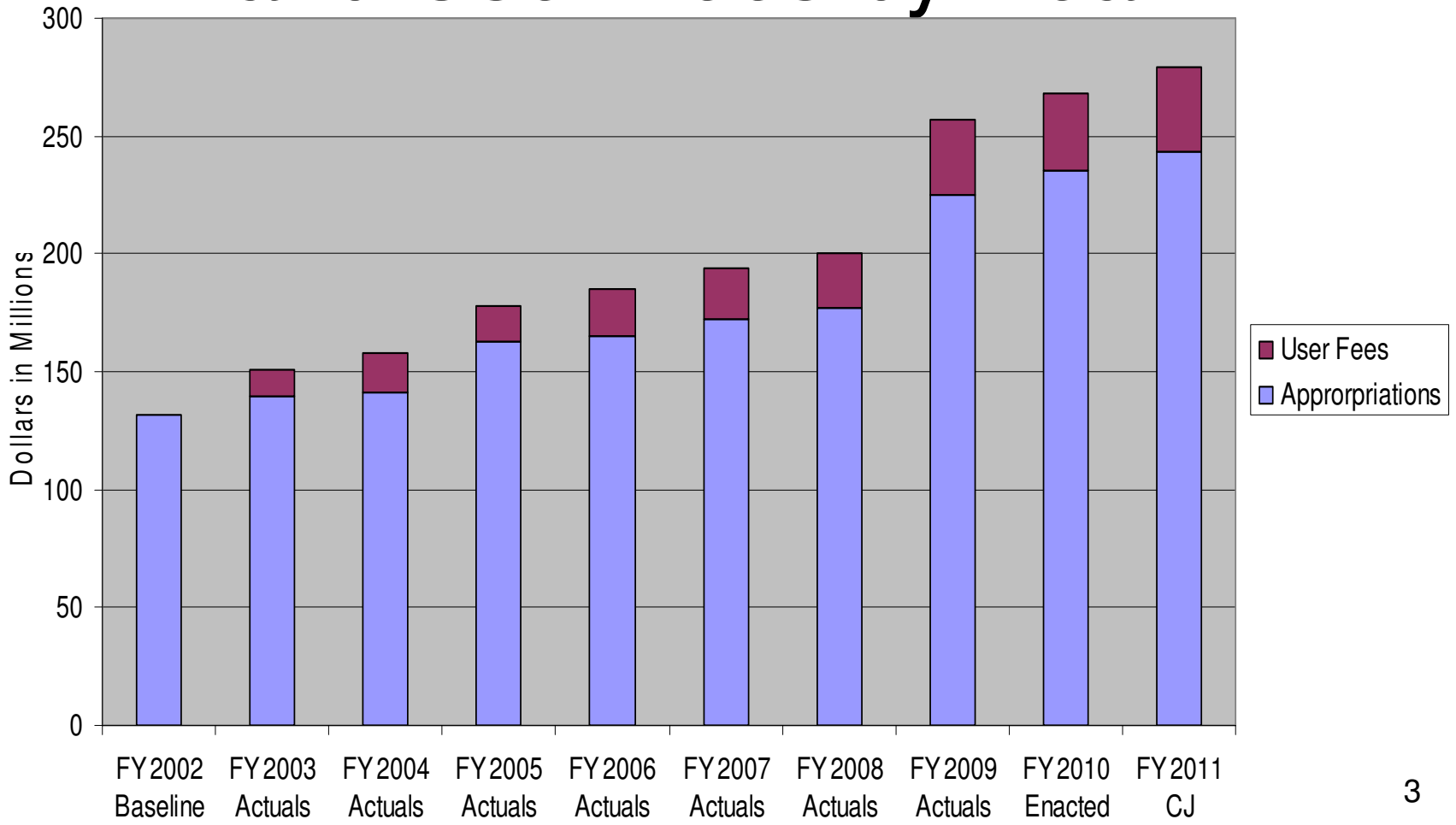
Result

- More predictable and streamlined process
- Reduced review and clearance times for 510(k)s



Percent of CDRH 510(k)s With Final Decision* Within 90 FDA Days
- As of March 19, 2010 -

Device Appropriations and User Fees by Year



Performance Goals

- **Quantitative Goals**
  - PMAs
  - Expedited PMAs
  - PMA Modules
  - 180-day PMA supplements
  - Real-time PMA supplements
  - 510(k)s

Performance Goals

- **Qualitative Goals**
  - Interactive review
  - Maintenance of current performance (e.g. IDEs, pre-IDEs, 30-day notices, special 510(k)s)
  - Input in guidance document development
  - Quarterly updates
  - Pre-submission and Day-100 meetings
  - Reviewer Training

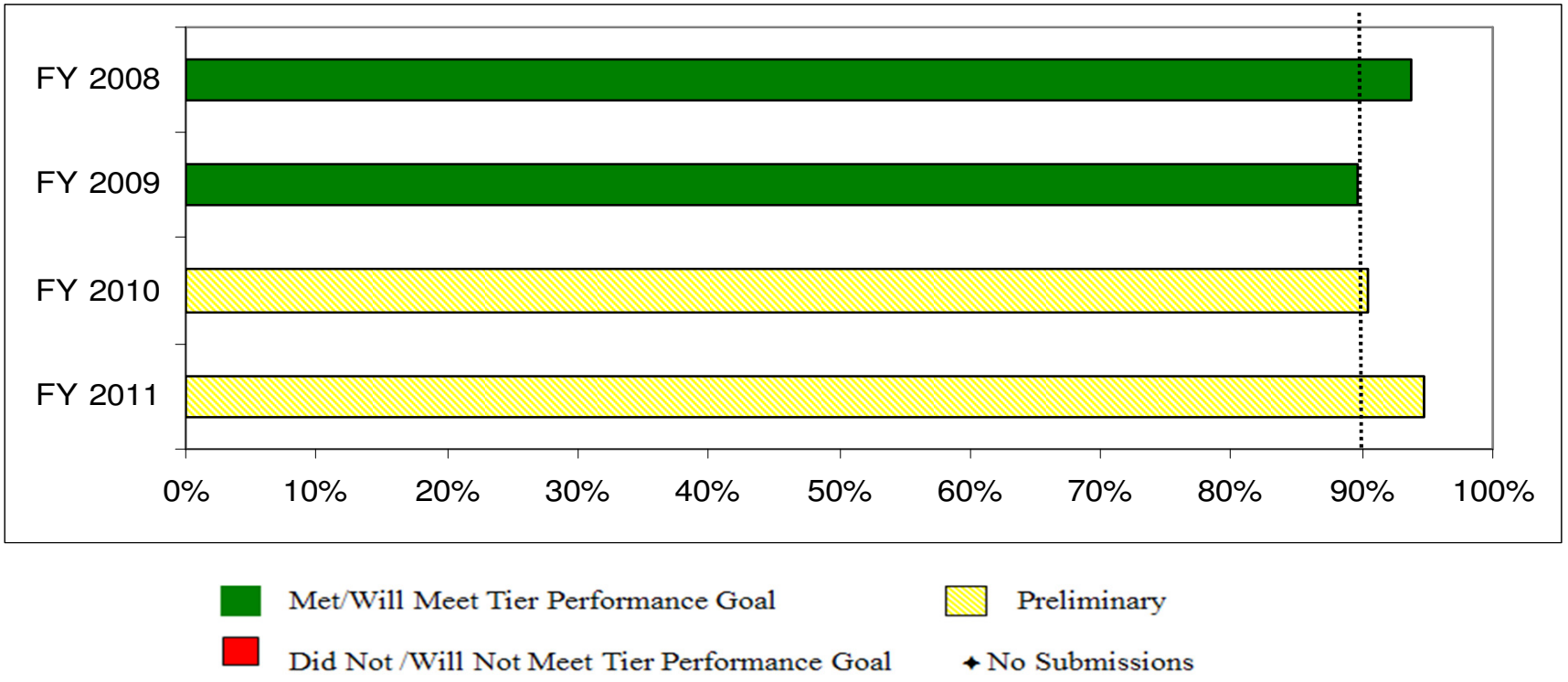
510(k)s Filed FY 2008 to FY 2012 (as of 12/31/2011)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Workload (Received to Date)	3,848	4,103	3,880	3,833	963
MDUFA Cohort	3,259	3,403	3,151	3,479	959
Total FDA Decisions	3,258	3,398	3,129	2,567	151
Tier 1 Goal -- Percent within 90 Days	*90%*	*90%*	*90%*	*90%*	*90%*
Goal Met (yes/no/unknown)	yes	yes	yes	unknown	unknown
Pending Performance -- Best Case	94%	90%	91%	97%	100%
Pending Performance -- Worst Case	94%	90%	90%	71%	16%
Tier 2 Goal -- Percent within 150 days	*98%*	*98%*	*98%*	*98%*	*98%*
Goal Met (yes/no/unknown)	yes	yes	yes	unknown	unknown
Pending Performance -- Best Case	98%	98%	98%	100%	100%
Pending Performance -- Worst Case	98%	98%	98%	73%	16%
Cohort Status	Open	Open	Open	Open	Open

510(k) Performance

Tier 1

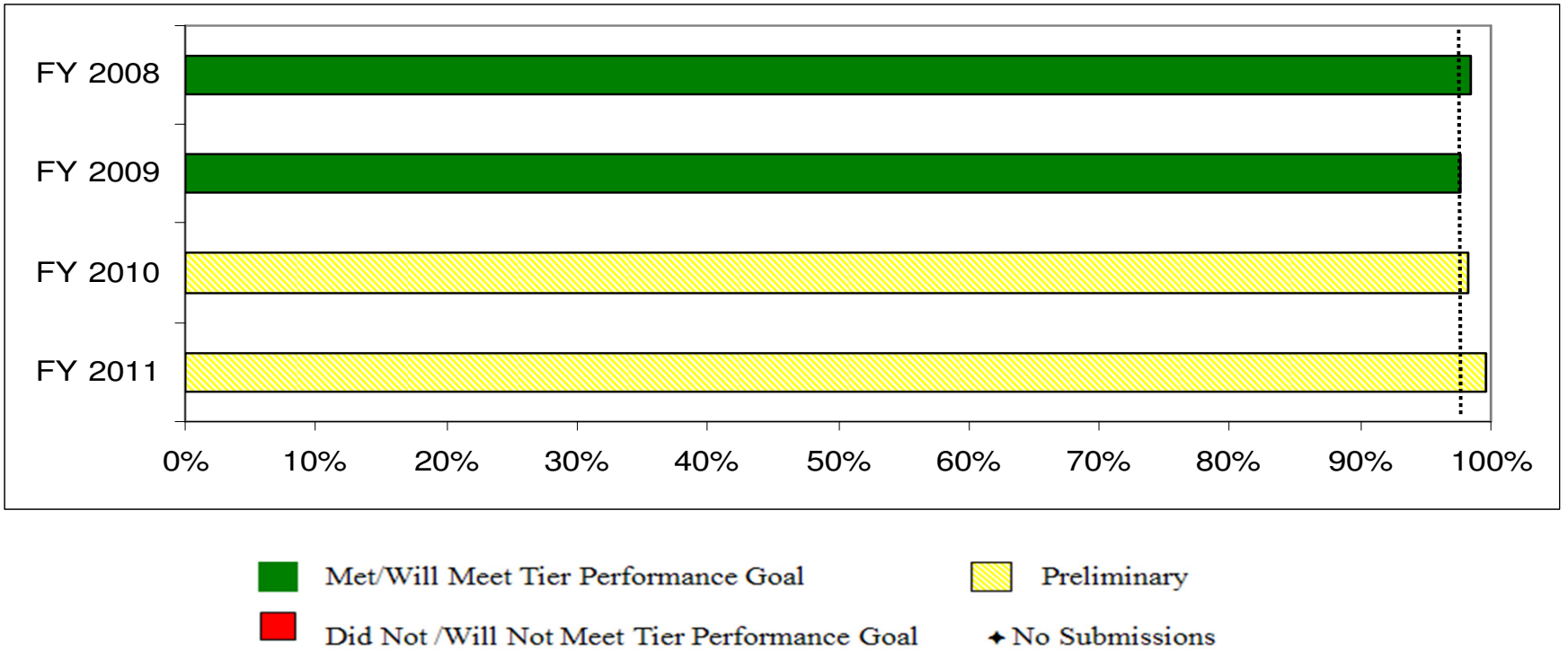
510(k) (Goal: 90% in 90 days)



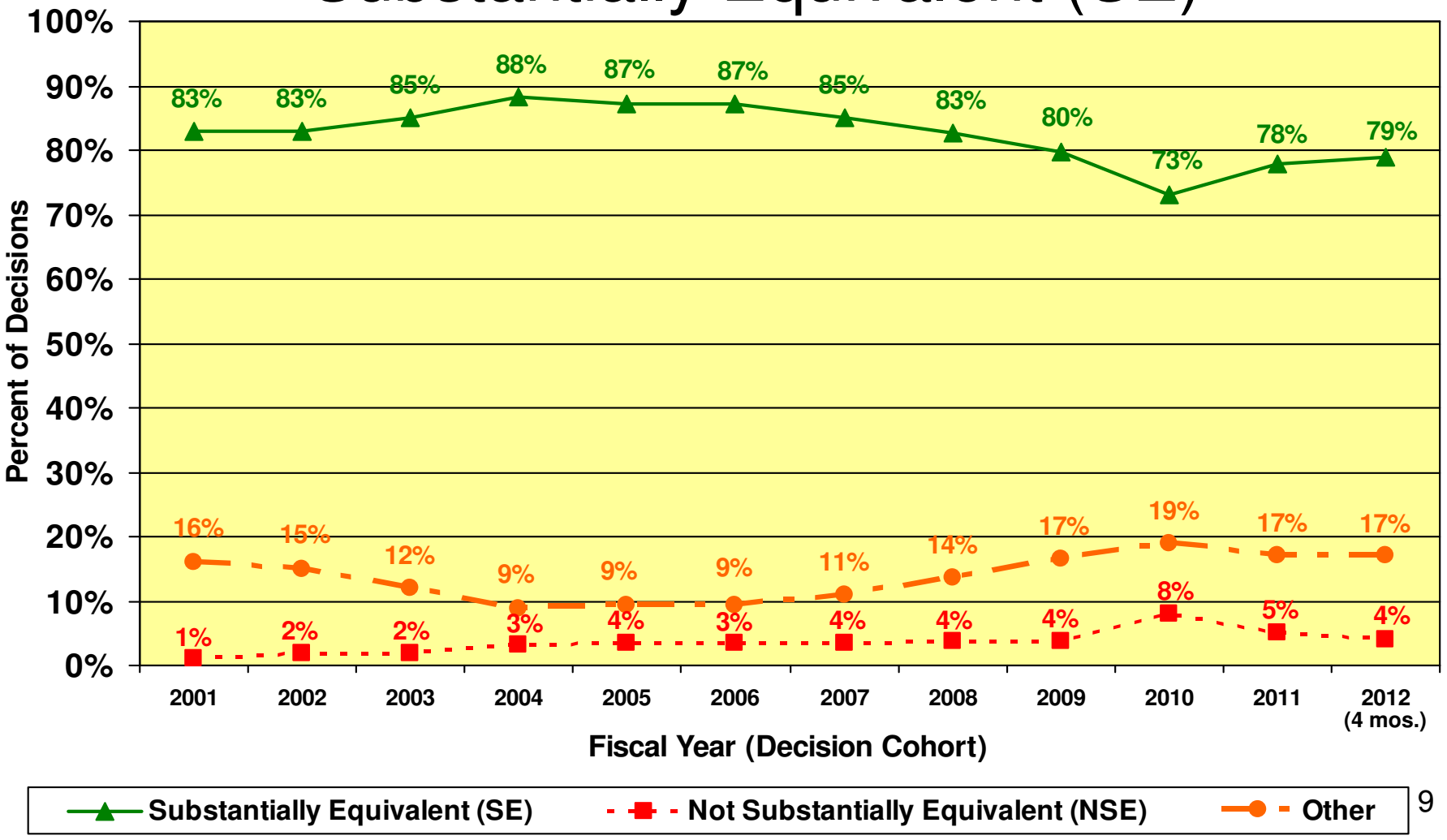
510(k) Performance

Tier 2

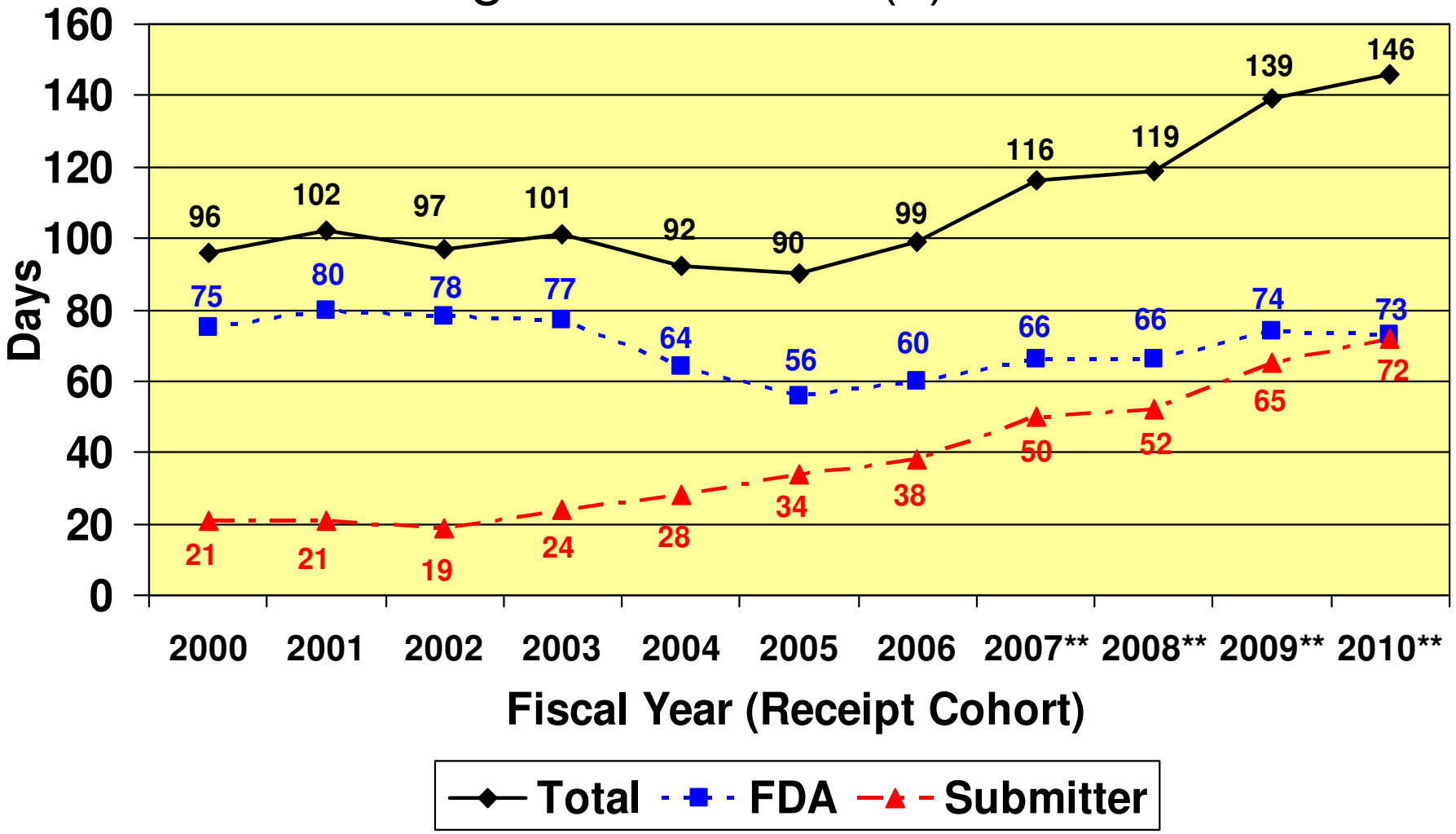
510(k) (Goal: 98% in 150 days)



Percent of 510(k)s Determined to be Substantially Equivalent (SE)

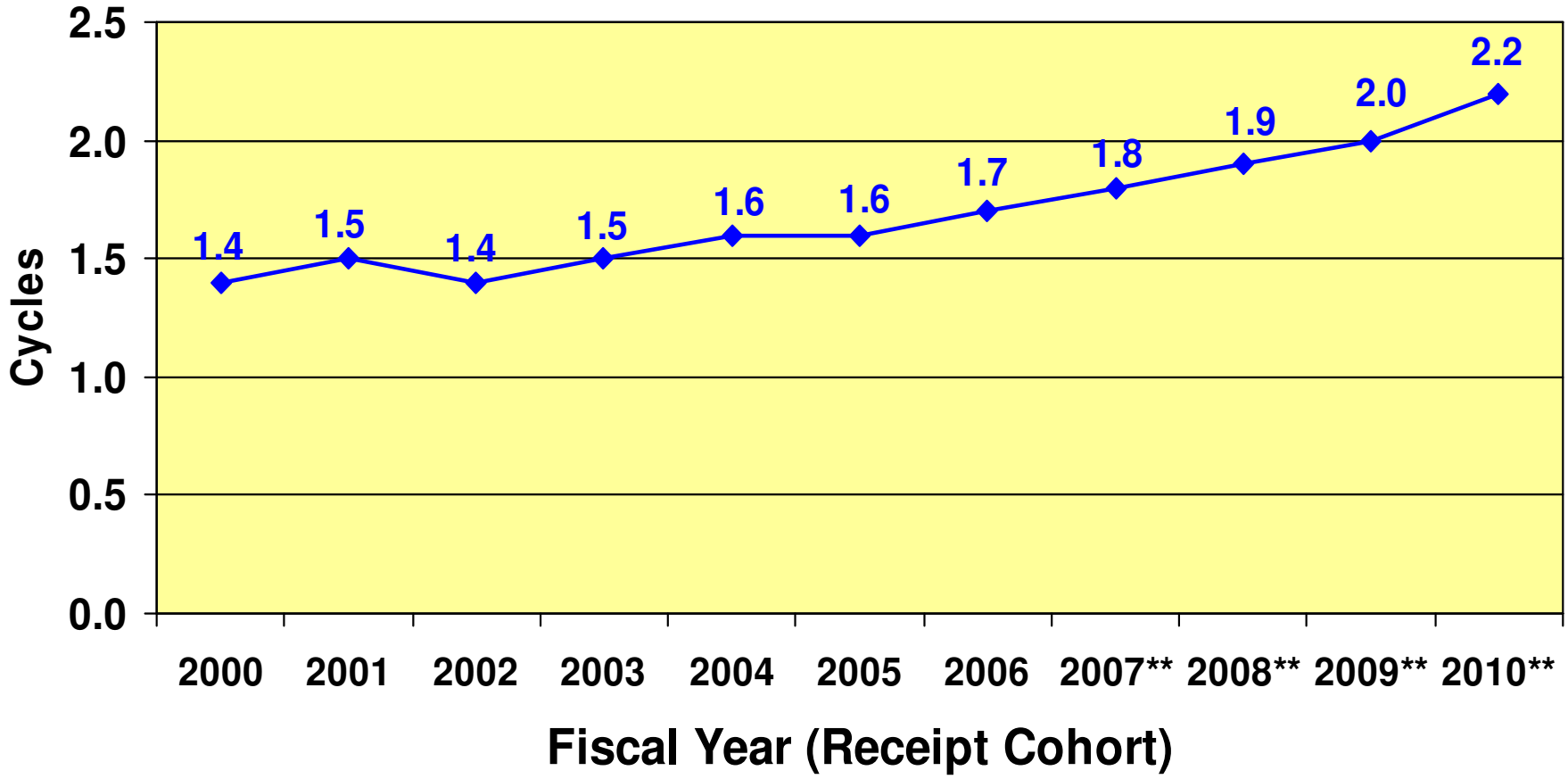


Average Time to 510(k) Decision*



*SE and NSE decisions only; times may not add to total due to rounding
**Cohorts still open as of September 30, 2011, data may change

Average Number of FDA Review Cycles From 510(k) Receipt to Final Decision*



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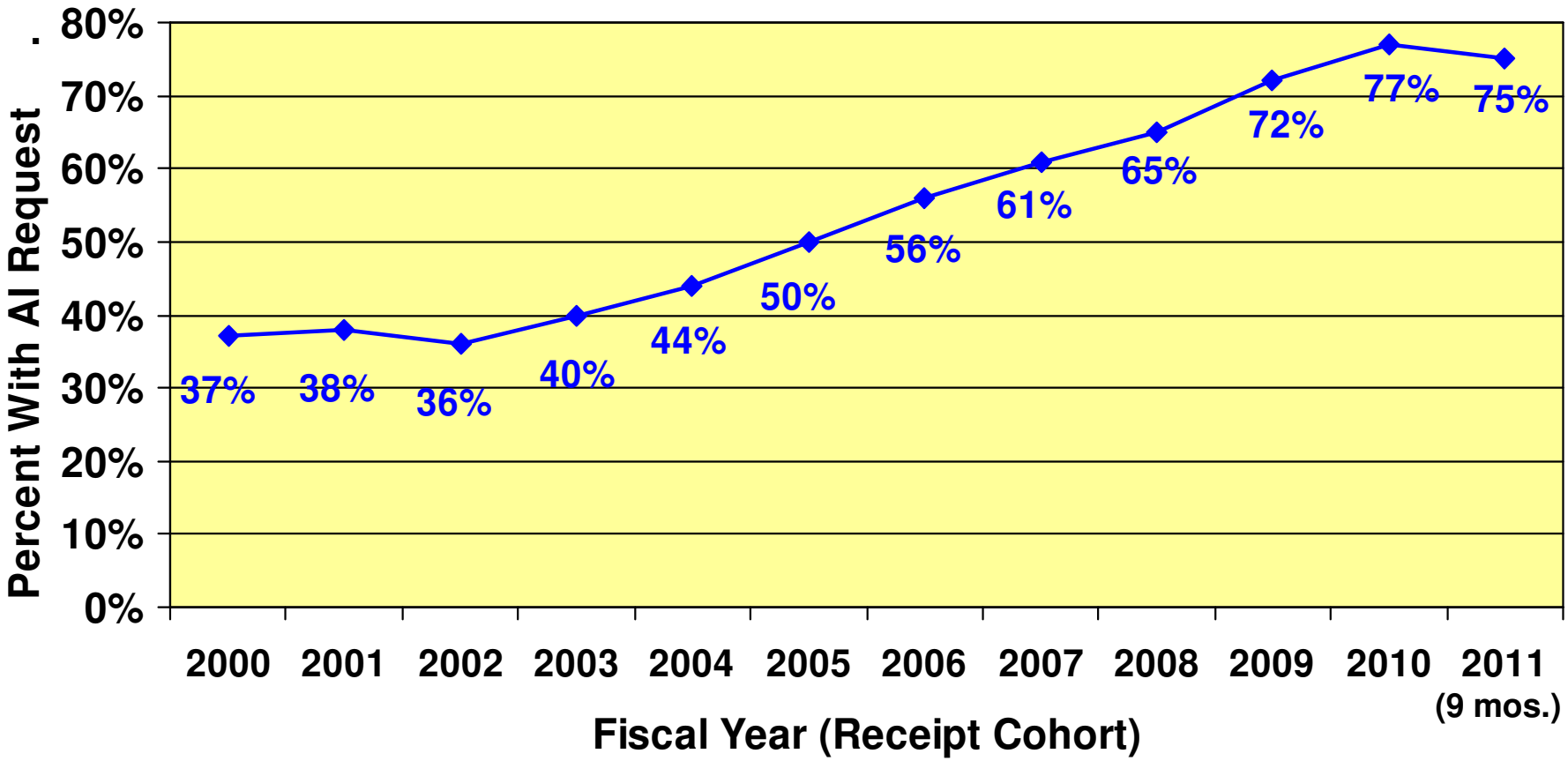
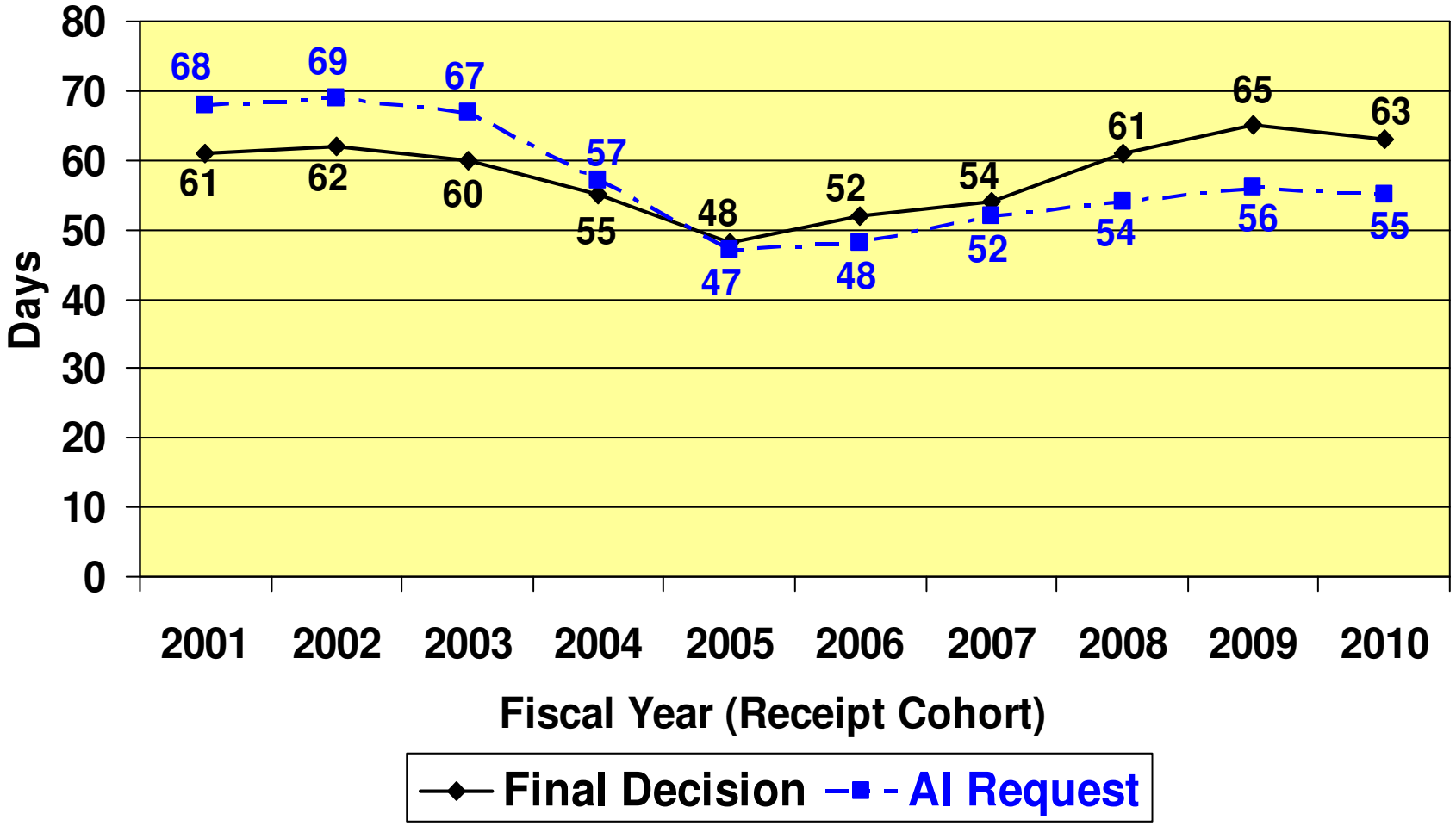
Percent of 510(k)s With Additional Information Request on 1st FDA Review Cycle

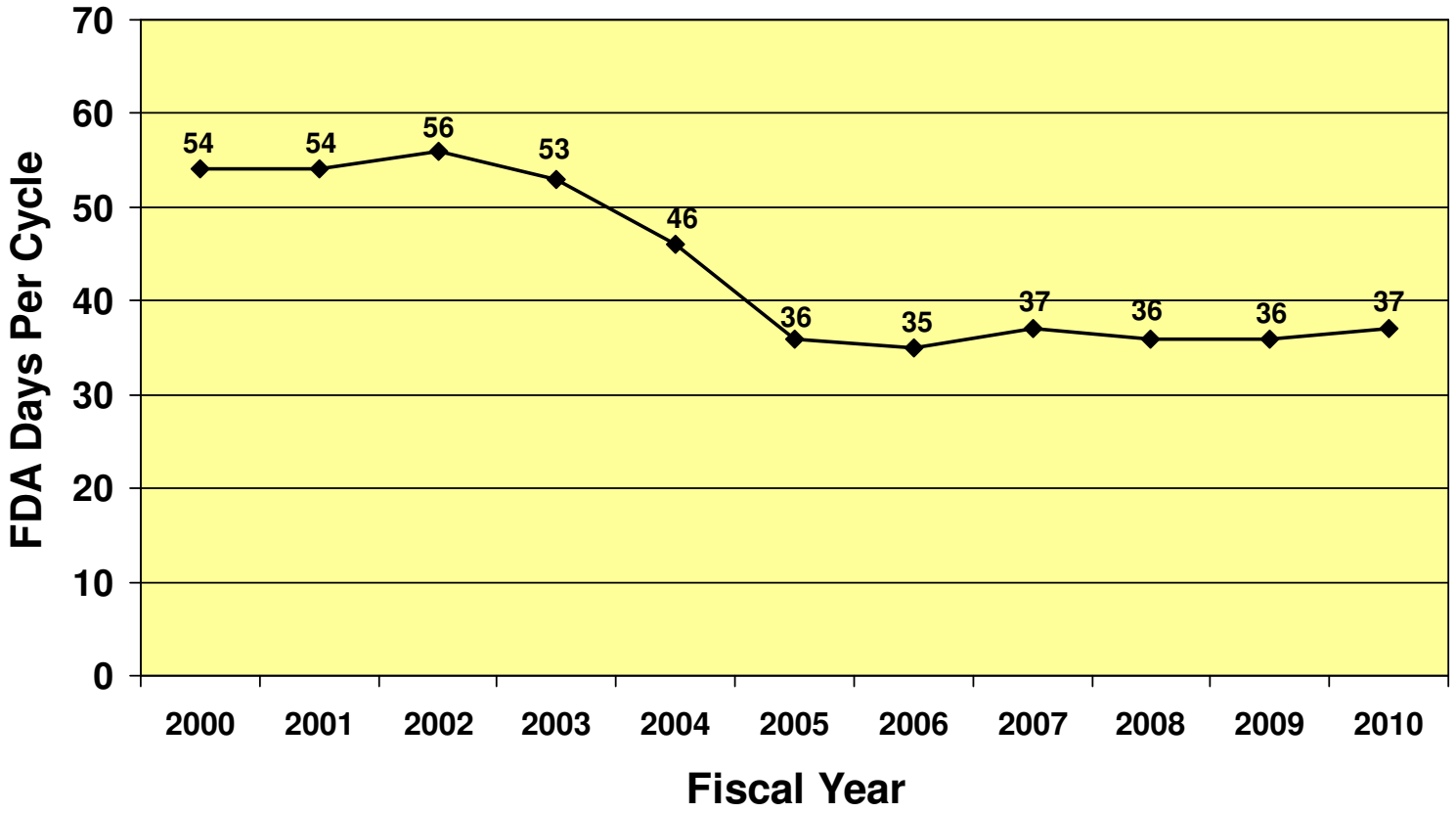


Average Time for First Review Cycle



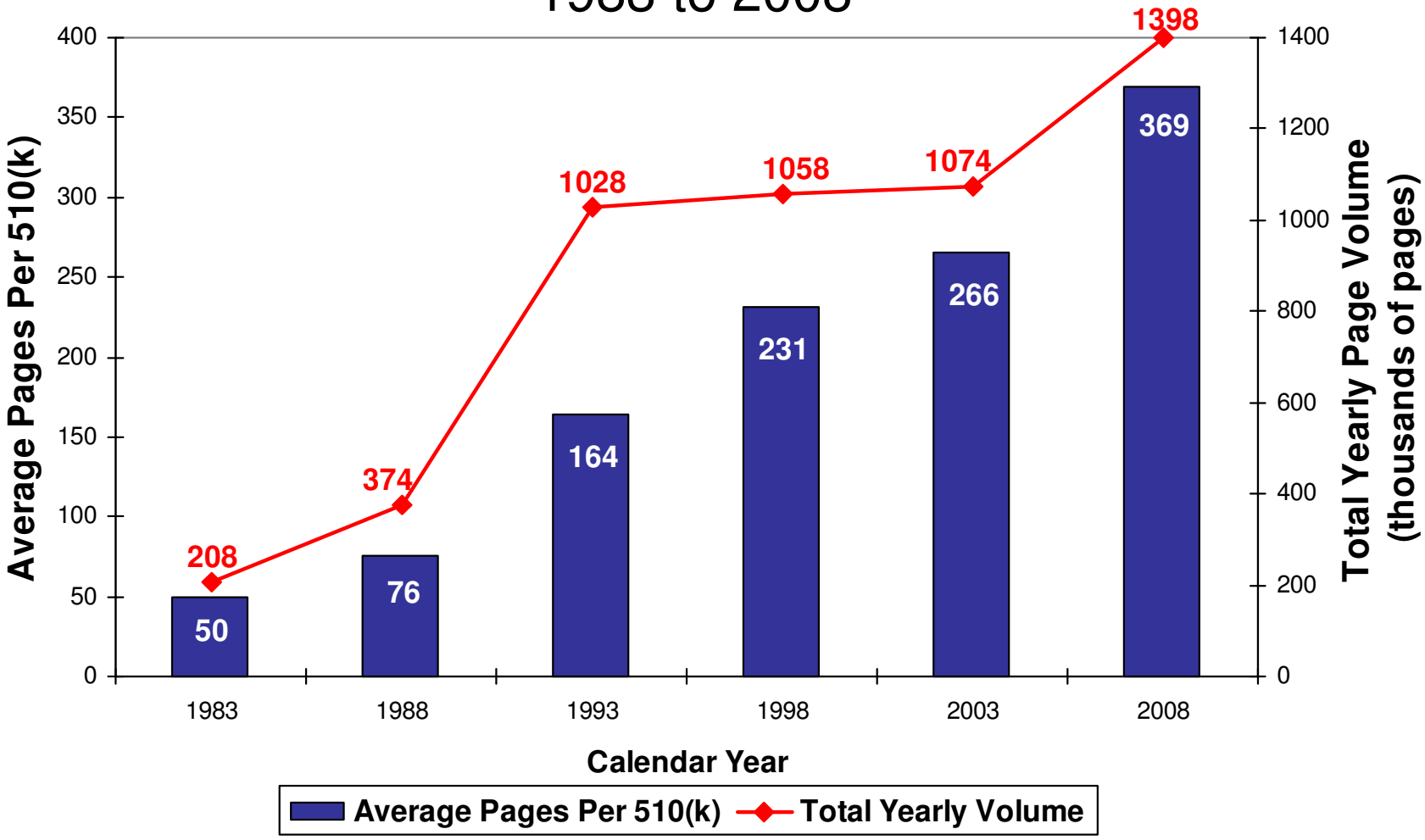
*Excludes 3rd party submissions and Special 510(k)s

Average FDA days to Complete a 510(k) Review Cycle



Pages Per 510(k) and Total Page Volume Received

- 1983 to 2008 -



Source: CDRH internal data on page counts in Documentum storage system; data incomplete for some submissions

Creating a More Approvable Submission to Lower Review Times

Predictability

- What is my submission type?
- What are my data needs?
  - Bench
  - Animal
  - Clinical
- Will my device go to panel?

Know Your Product

- Device
  - What is it? How is it made? What is the primary mechanism of action?
- Indication
  - What is the patient population? What is the clinical benefit to the patient? What claims do you intend to make?
- Based on the proposed device design, development of appropriate nonclinical testing (bench, software, animal)
- Based on the proposed indication, development of an appropriate clinical protocol and statistical analysis plan (if necessary)

How to Prepare

- Do your homework
  - Existing Guidance
  - Recognized Standards
  - Recent Clearance or Approvals
    - 510(K) Summaries or SSEDs
    - Posted Review Memos
      - IVDs, De Novos, 180 day Supplements (2 branches)
  - Recent Panel Transcripts
  - Pre-Submission

Pre-Submissions

- Can be critical for non-significant risk clinical studies or devices that will be supported by OUS data
- Highly recommended for novel technology
- Can be used for feedback on:
  - Bench, animal or clinical study questions
- Not for jurisdiction (RFD) or classification (513(g)) answers

Important Submission Considerations

- Provide complete, quality submission from the start
  - Table of Contents
  - Consecutively numbered pages
  - Divide volumes by review area
  - Include tabs and sections

- Submission organization is extremely important

Important Submission Considerations

- Inadvertent omissions
  - Make sure all tables, figures, appendices are present and accurately numbered
  - Include all referenced test protocols/reports
- Incomplete references to other submissions
  - Provide submission number, volume, page(s)
- Submission should be easy to follow
  - Provide executive summaries, with full reports/data immediately following or clearly referenced to other sections

Important Submission Considerations

- Provide sufficient background and basic information about the device/test method/trial protocol
  - Include discussion of your rationale for each test and relevant test parameters
  - Justify acceptance criteria
- Clearly identify all previous Agency interactions on the topic
  - Explain why any recommendations not incorporated.
- If the reviewers engage in interactive review, please provide timely responses as agreed upon

Streamline the Review Process

- Submit an electronic copy that matches the paper version
- Provide line listing for patient data
- Special data requests for statisticians, BIMO
  - See "Electronic clinical data" at http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/ucm134508.htm

Interactive Review

- MDUFA II encourages more interactions during review process
- Interactive Review Guidance - http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm089402.htm
  - Describes role of FDA reviewers and sponsors
  - Types of interactions
  - Timing of interactions

Interactive Review Considerations

- For success: application should be well organized and complete
- Interactive review for minor deficiencies
- Provide realistic timelines for applicant's responses
- Significant requests for additional information will still be communicated in letter
- Early in review process, major deficiencies may be communicated when appropriate to allow sponsor to begin testing/analysis, etc.
- Interactive review means work for both parties

Timelines

- Be aware of deadlines to provide additional information to formal holds
  - Submissions may be deleted
- Partial responses do not take submissions off of hold status

Meetings

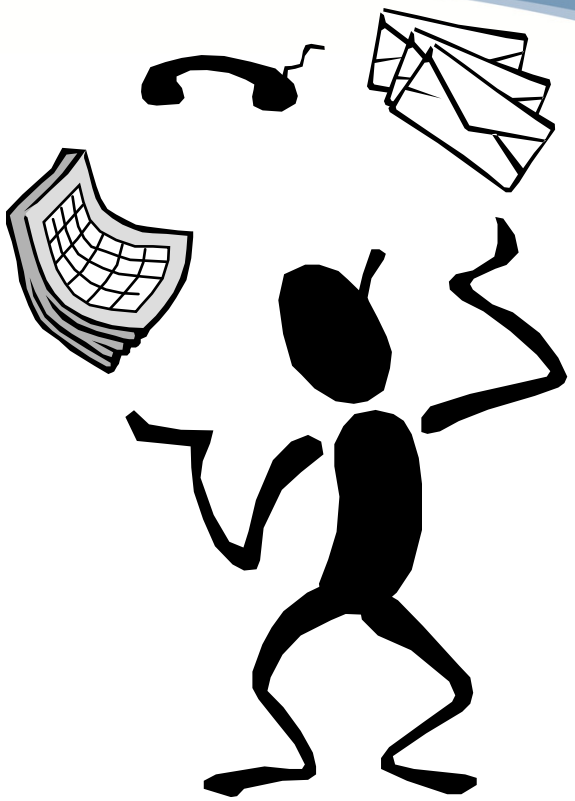
- Plan appropriately
  - Multiple topic areas, consider multiple meetings
  - Include specific questions
- Consider if a teleconference may be sufficient
- Provide multiple dates for availability
- Plan for 1 hour meeting
  - If too much time is spent on background and company history, adequate time may not remain for questions

Meetings

- Set agenda
  - Provide sufficient information regarding your objectives (so we can answer your questions)
  - Focus your presentation on meeting objectives – stick to time allotted
    - We read your materials and will be familiar with the pre-meeting materials
- Have the appropriate scientific experts available for discussion
- Bring hard copies as well as electronic resources

Post Meeting Follow-up

- Review minutes for accuracy and completeness
- Respect FDA feedback
  - Submissions subsequent to meetings should address FDA feedback
    - "ABC company has incorporated FDA's suggestion"
    - "ABC company has considered FDA's suggestion and has proposed an alternative for the following reasons…"
- Please ask if:
  - You don't understand our feedback
  - You want to explore an alternative approach
  - You have new/more information that might change FDA's advice



When in doubt, just ask:

Email, phone or submission

Contact Information
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