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United in Medtech.
United by MRA.

A CONSORTIUM OF INDEPENDENT SERVICE PROVIDERS
TO THE MEDICAL TECHNOLOGY INDUSTRY.

510(k) Pathway Med-tech Industry Survey

Study conducted August 2012

A Survey of 199 Med-tech Executives

Conducted by Introworks for MRA

Conducted and prepared by Bob Freytag, President of Introworks

With Support from Mark DuVal, DuVal & Associates, P.A.

Agenda

- Review of Study Objectives and Methodology
- Key Learning and Analysis
- Summary

Objectives

Measure perceptions of…

- 510(k) Pathway
- FDA's performance
- FDA's consistency

Participant Summary

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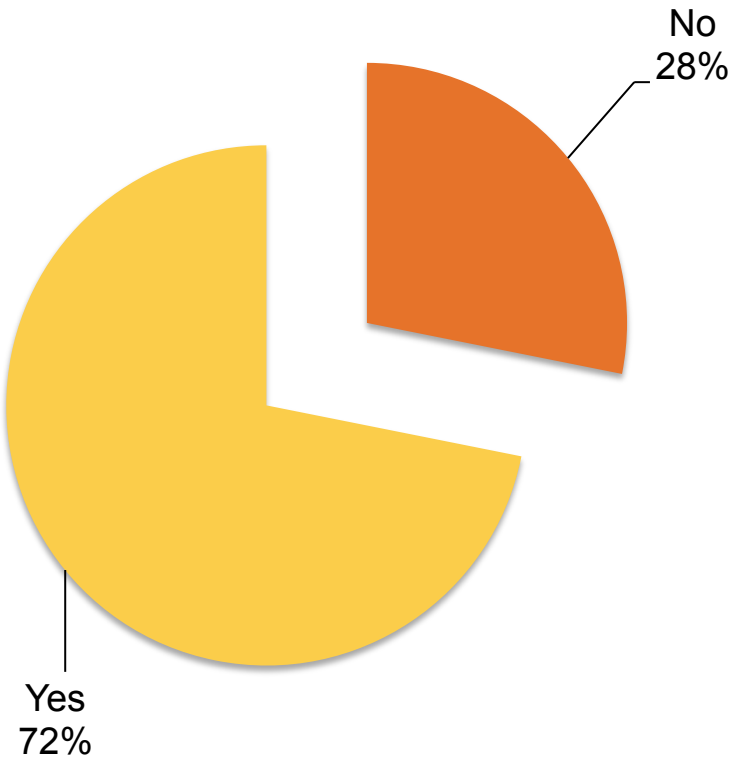
Participant summary

- 2707 invited to respond
- 199 Answered
  - 165 Completes
  - 34 Partials
- 10 Declined

- 6.1% response rate for completes

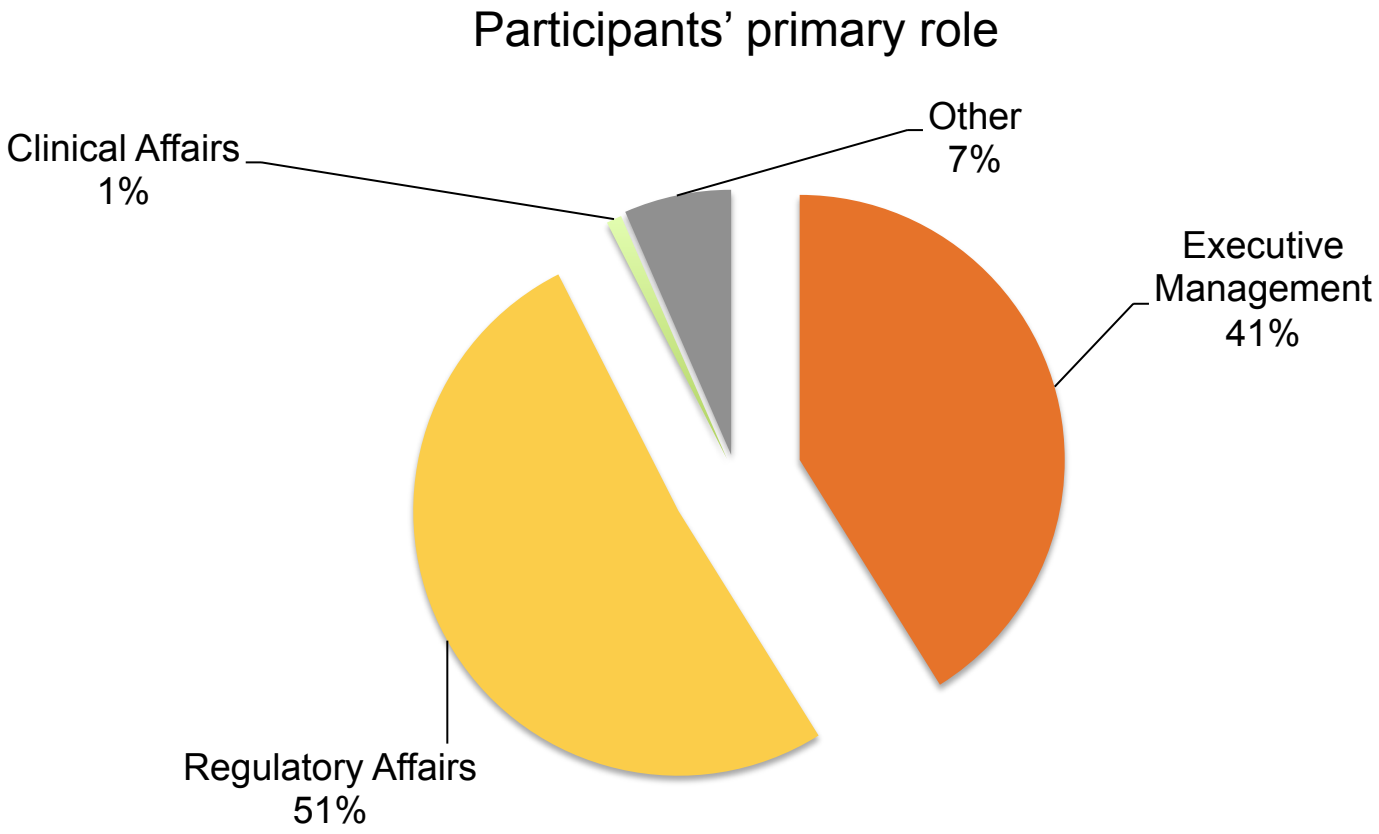
Participant summary

Over the last three and one-half (3-1/2) years, has your company submitted a medical device to the FDA using the 510(k) pathway?



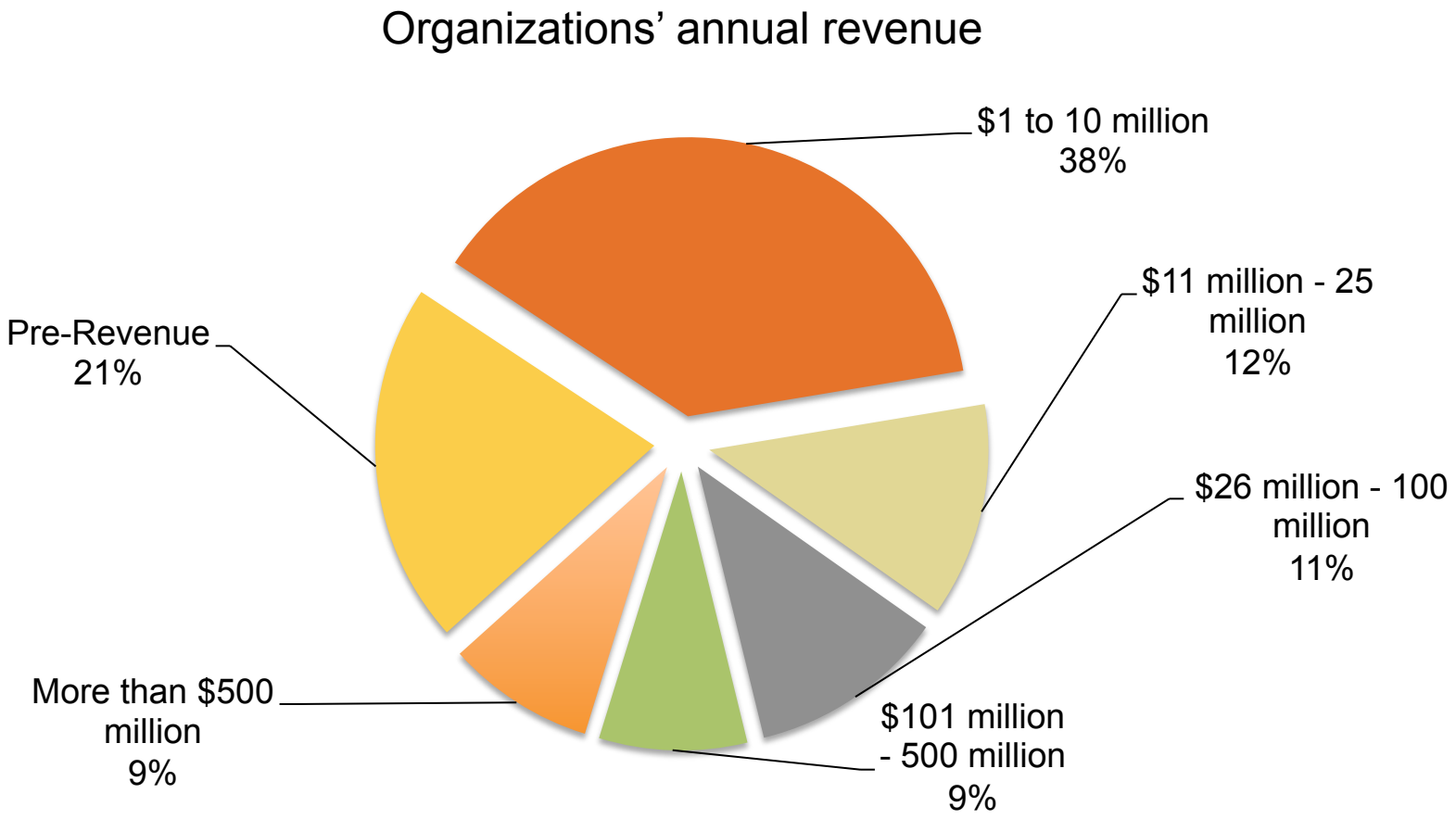
199 Participants answered

Participant summary



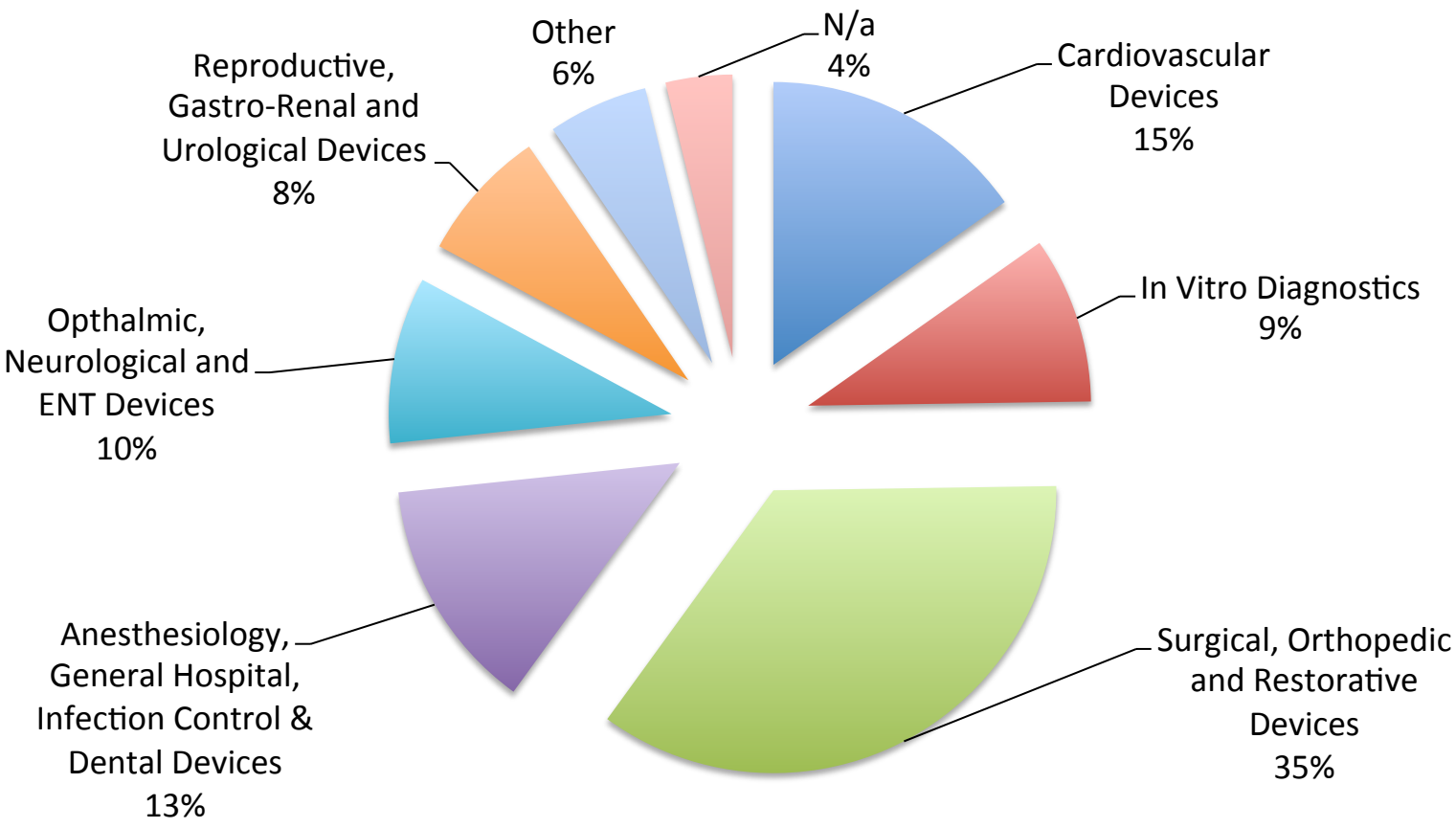
107 Participants answered

Participant summary



105 Participants answered

FDA Office



105 Participants answered

FDA Office

Other

- Dental
- Multiple
- Radiological Devices
- Several different ones

105 Participants answered

Satisfaction with 510(k) Process

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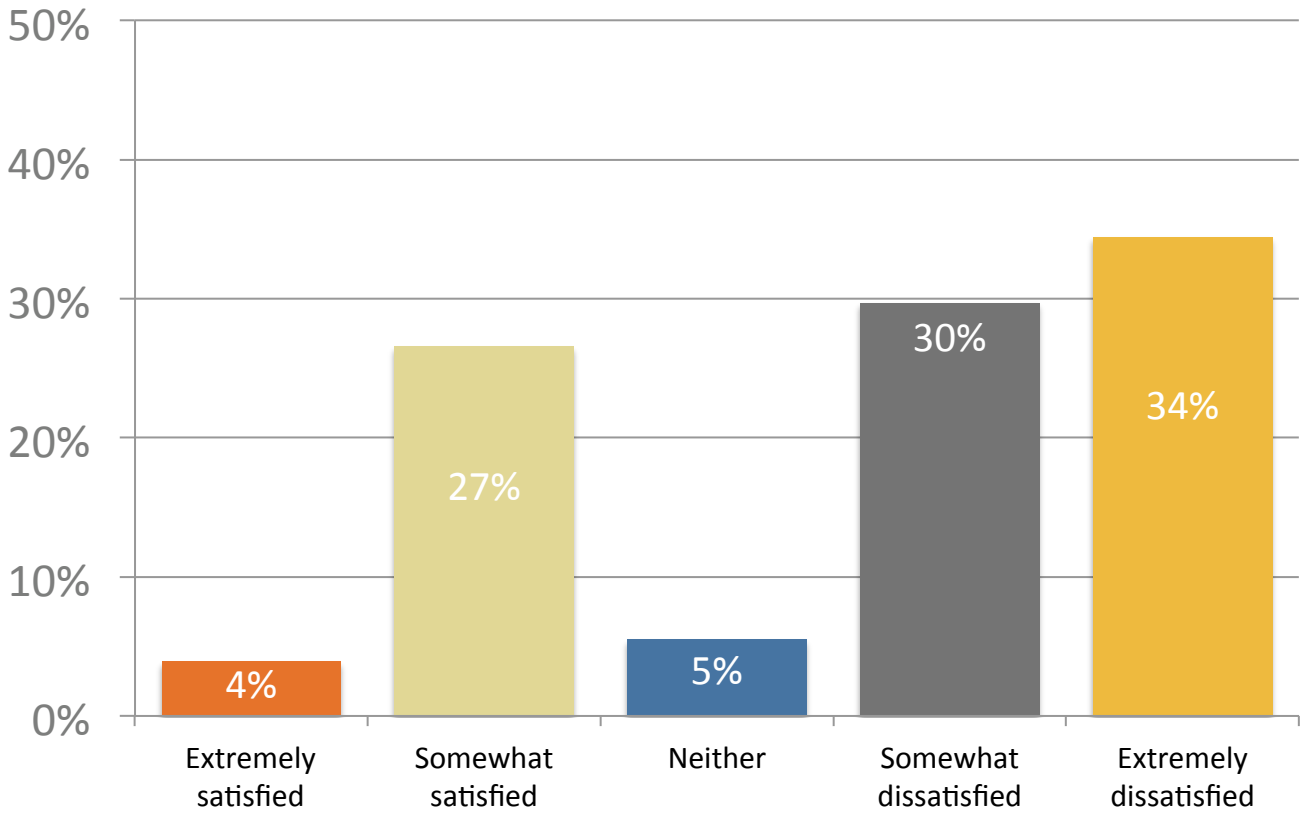
How satisfied are you with the FDAs management of the 510(k) pathway?

64%

Dissatisfied



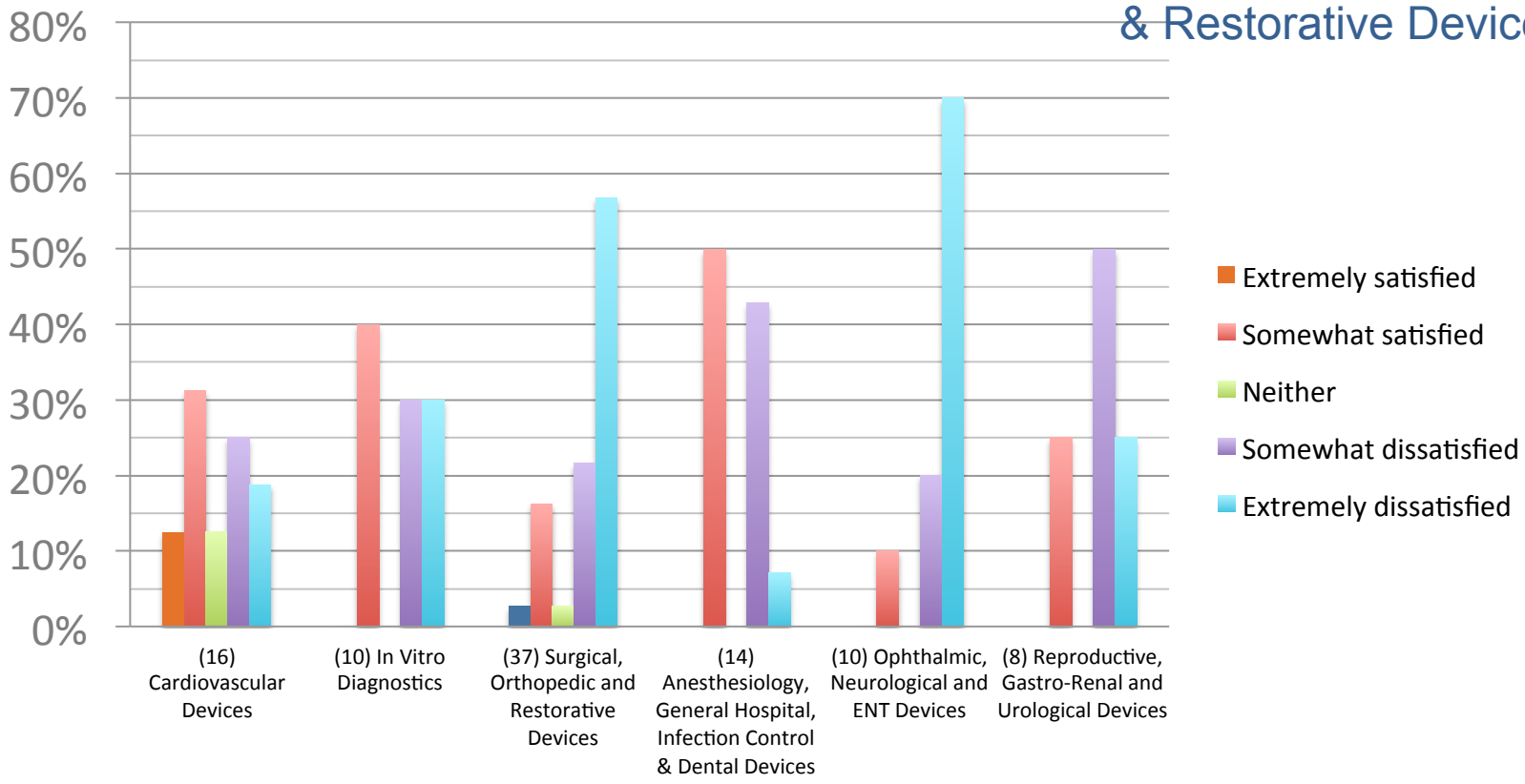
128 Participants answered

How satisfied are you with the FDAs management of the 510(k) pathway?

Highest Dissatisfaction

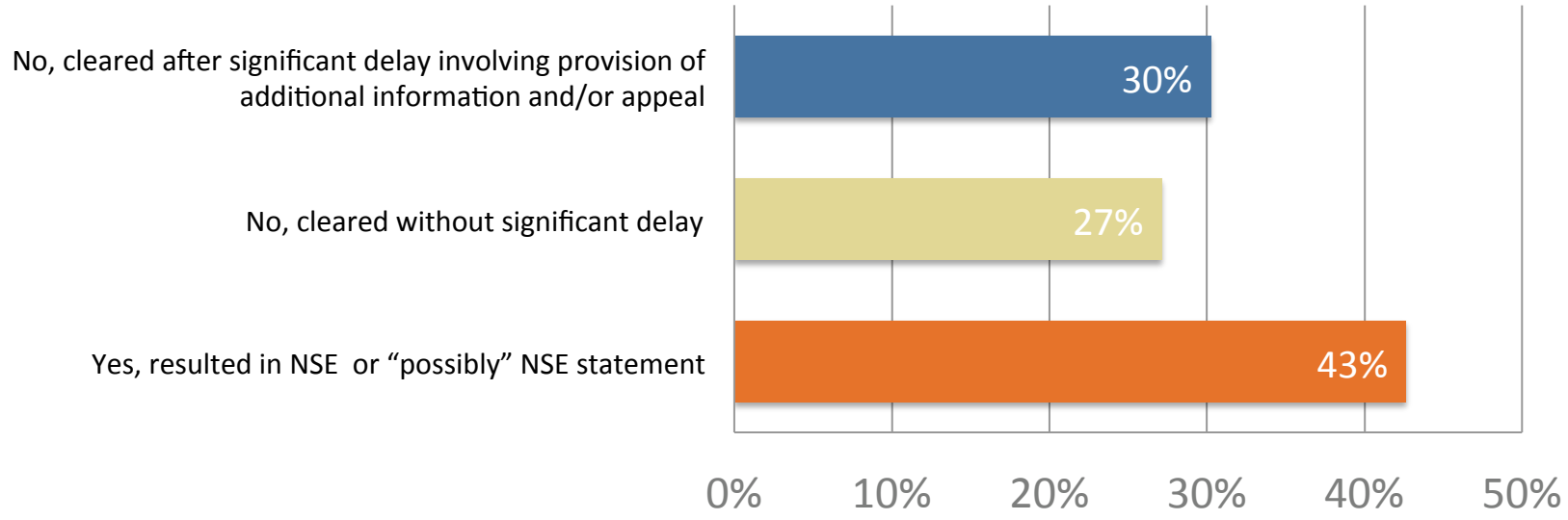
90% for Ophthalmic, Neurological & ENT Devices

78% for Surgical, Orthopedic & Restorative Devices



95 Participants answered

In your experience with recent 510(k) submissions, has your company been notified that the Agency rejected or paused its review of your device after a "stage-gated" review of the legal/ regulatory issues (i.e. that involved discussion of new intended use, new technological characteristics and/or new questions of safety and effectiveness) where FDA did not look at your performance data?



129 Participants answered

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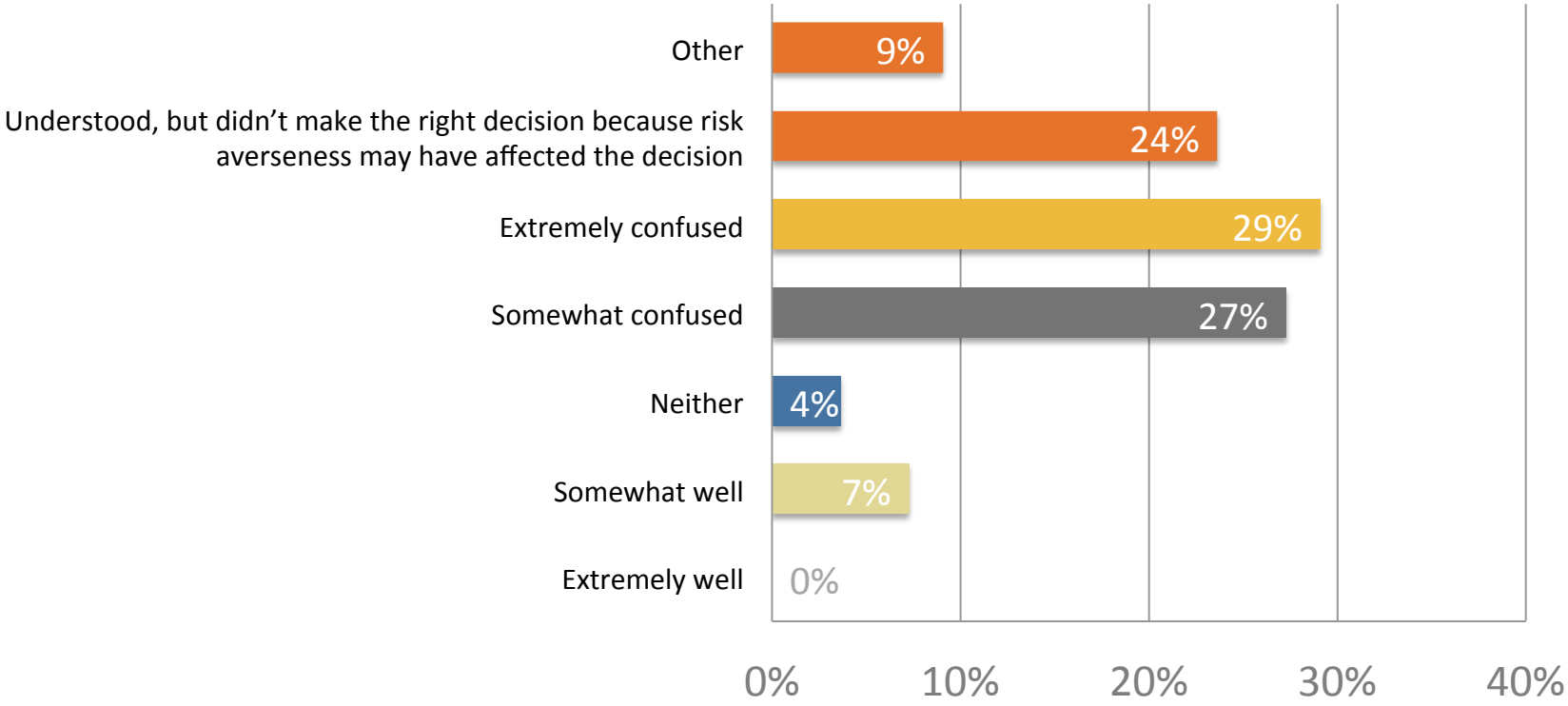
How well did you think FDA's review staff (reviewer, review team and Branch Chief) understood the *scientific issues surrounding your device in the NSE decision?*

7%

of FDA's Staff understand scientific issues



55 Participants answered

How well did you think FDA's review staff (reviewer, review team and Branch Chief) understood the *scientific issues surrounding your device in the NSE decision?*

Other:

- After moved from ODE to OVID moved rather smoothly upon resubmission of new 510k
- Ignored the data
- Not at all; applied device use from a completely different environment to my indications and use environment; not remotely close to the same
- Out of time on 90 day clock
- The agency assigned a clinical reviewer who used the product in a completely different way than that submitted and chose not to have a clinical reviewer familiar with the very common use submitted

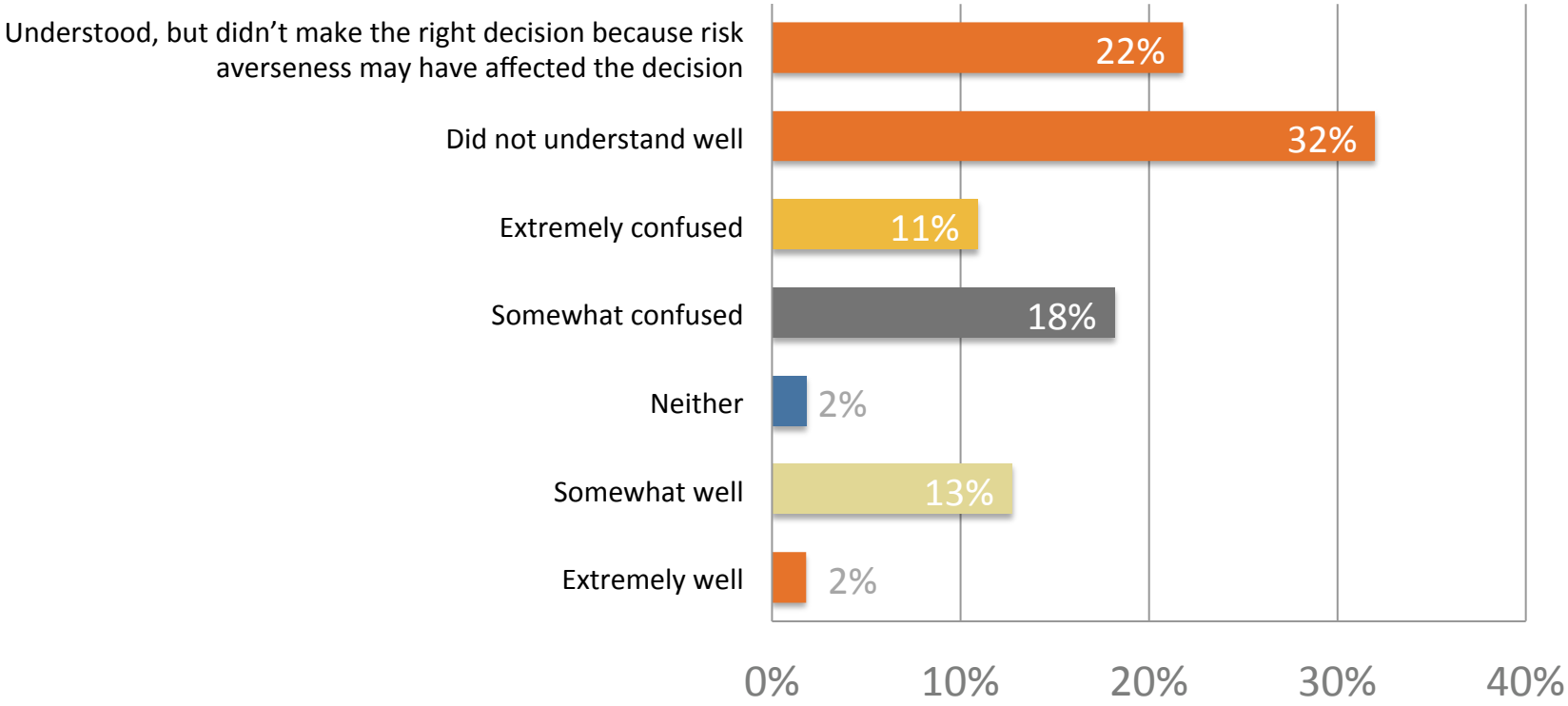
55 Participants answered

MEDTECH RESOURCE ALLIANCE

How well did you think FDA's review staff (reviewer, review team and Branch Chief) understood the *legal/regulatory issues surrounding your device in the NSE decision?*

61%

Don't understand legal issues



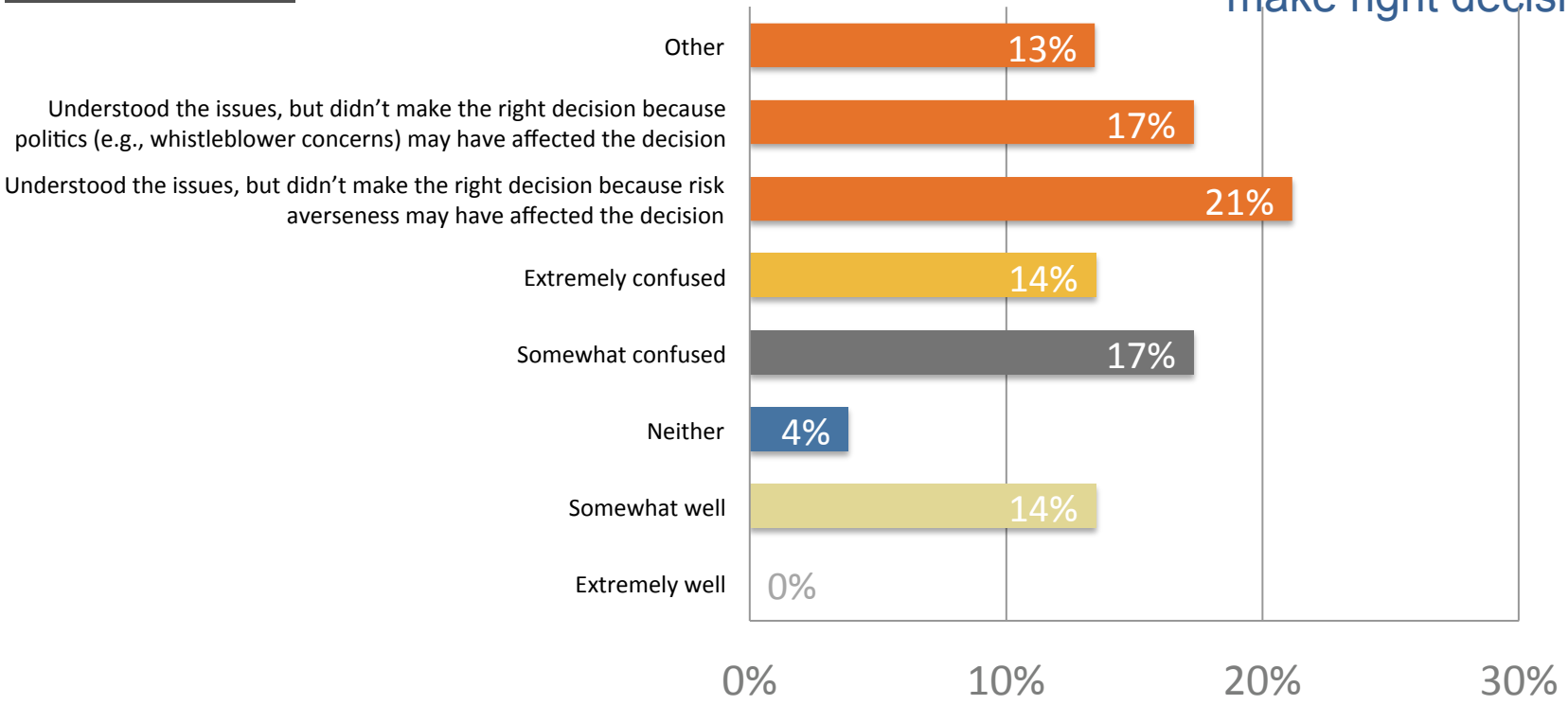
55 Participants answered

MEDTECH RESOURCE ALLIANCE

How well did you think FDA's management above the Branch (i.e. Division Director, Director of Office of Device Evaluation) understood the *scientific issues surrounding your device in the NSE decision*?

38%

Understood the issues but didn't make right decision



52 Participants answered

How well did you think FDA's management above the Branch (i.e. Division Director, Director of Office of Device Evaluation) understood the *scientific issues surrounding your device in the NSE decision*?

Other:

- Upper management was unaware
- They were not involved with the decision.
- The agency refused to get them involved
- Still in process
- Not at all; closed mind on the subject
- Never went above Branch Level
- Imputed other attributes to data

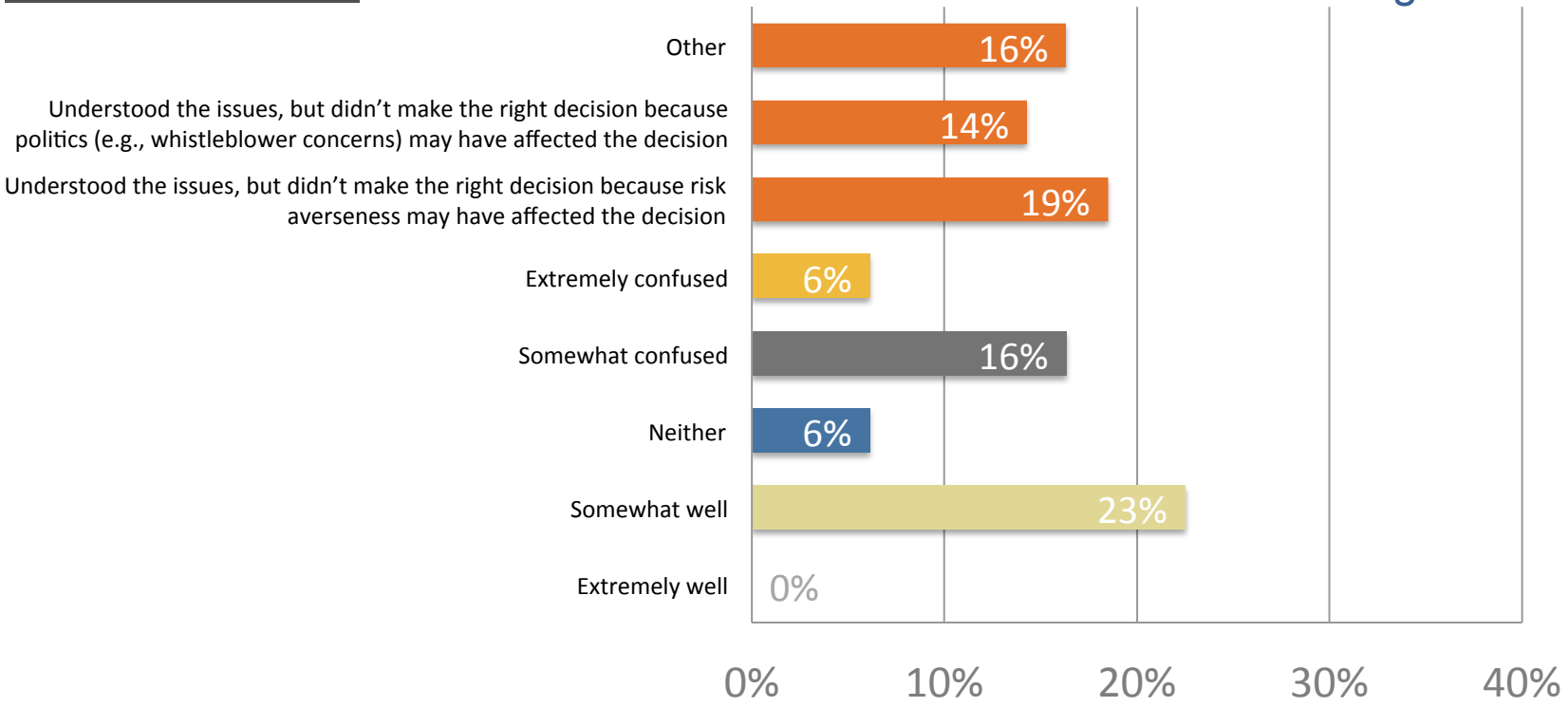
52 Participants answered

MEDTECH RESOURCE ALLIANCE

How well did you think FDA's management above the Branch (i.e. Division Director, Director of Office of Device Evaluation) understood the ***legal/ regulatory issues surrounding your device in the NSE decision?***

33%

Understood the issues but didn't make right decision



49 Participants answered

How well did you think FDA's management above the Branch (i.e. Division Director, Director of Office of Device Evaluation) understood the *legal/regulatory issues surrounding your device in the NSE decision?*

Other:

- 90 day clock was almost up
- Didn't care
- Still in process
- The agency refused to get them involved
- The were not involved in the decision making
- Understood the issues, but didn't care
- Unsure
- Upper management was unaware

49 Participants answered

Reasons

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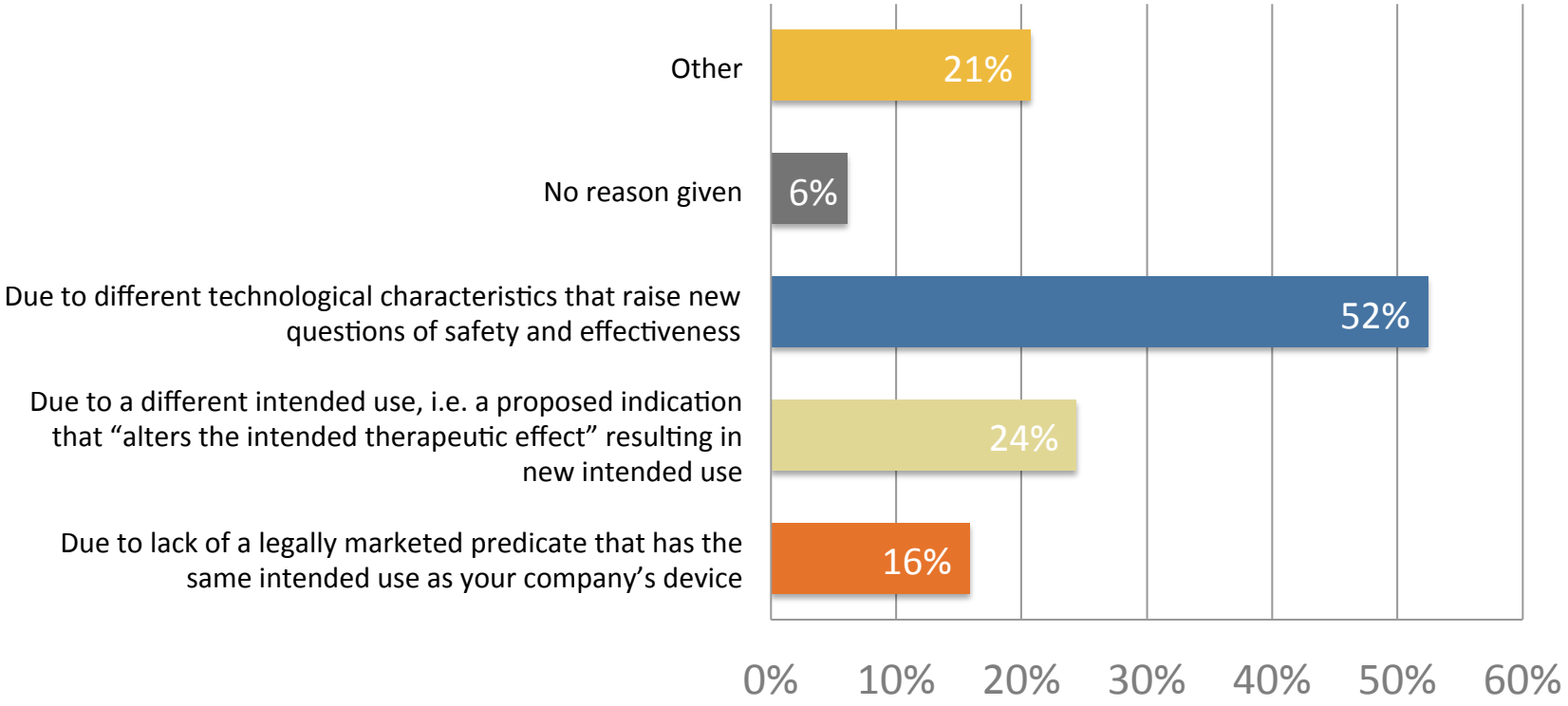
What reason or justification did the FDA provide for the basis of its decision to reject or pause on your review?



***NOTE**: Respondents could select more than one answer.*

82 Participants answered

What reason or justification did the FDA provide for the basis of its decision to reject or pause on your review?

Other:

- Wanted new technical information not requested for our own predicates
- Wanted more performance information
- There is an Rx device and a health/wellness device; they didn't want to bother with an OTC device
- Statistical measure
- Some data contained bmp use, “confused” by results
- Reviewer did not have the training to understand the data submitted, especially dealing with Sterilization and Micro data
- Requested additional information
- Request for information that previously was not required for product type clearance; ex: Patient Brochure

82 Participants answered

What reason or justification did the FDA provide for the basis of its decision to reject or pause on your review?

Other:

- Reason given is tech characteristic but it was totally incorrect as the difference is minimal and reviewer was taking everything literally
- Paused until additional information was provided
- Needed more information
- Needed clinical data
- Executing on requirement that they in the past never requested. E.g. Explanation of symbol, Sterilization detailed information about available equipment. Software validation etc.
- Combination of clarification of scientific data and scientific curiosity by the agency staff
- Combination of 1 and 2 above
- Cleaning validation
- All of the above

82 Participants answered

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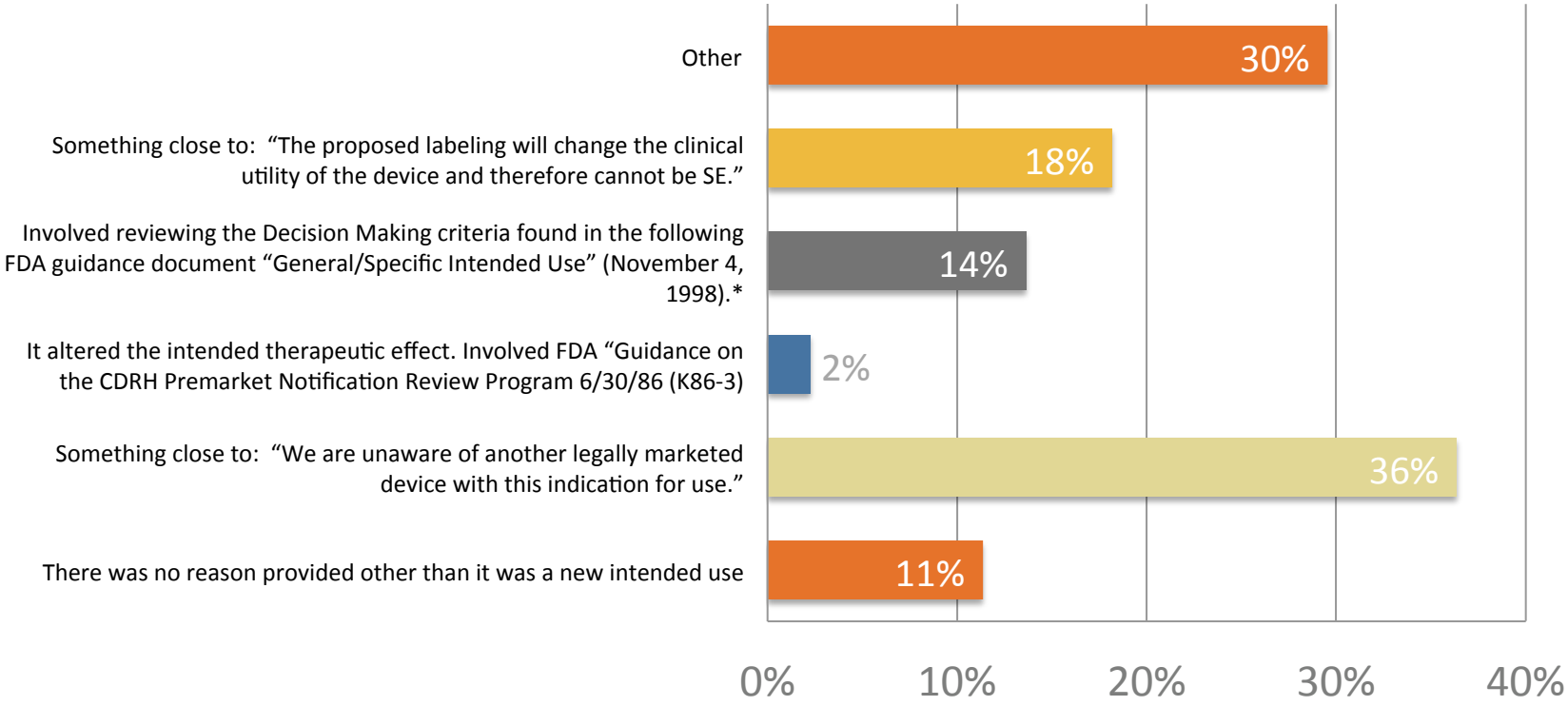
If the reason used by the Agency is, *there is or may be a new intended use*, did the Agency use any of the following reasons.

47%

Received no definitive reason for delay of review



***NOTE**: Respondents could select more than one answer.*

44 Participants answered

If the reason used by the Agency is, *there is or may be a new intended use*, did the Agency use any of the following reasons.

Other:

- Colorant
- It was a technology issue not indications issue
- My answer was “different tech considerations” not about intended use. We had to use 5 predicates to cover method, materials, and indication. We did expect it to be a long dialog....
- NA since they suggested it was new technological characteristics that raise new questions
- Not applicable
- Not related to intended use
- Potential for off label use

44 Participants answered

If the reason used by the Agency is, *there is or may be a new intended use*, did the Agency use any of the following reasons.

Other:

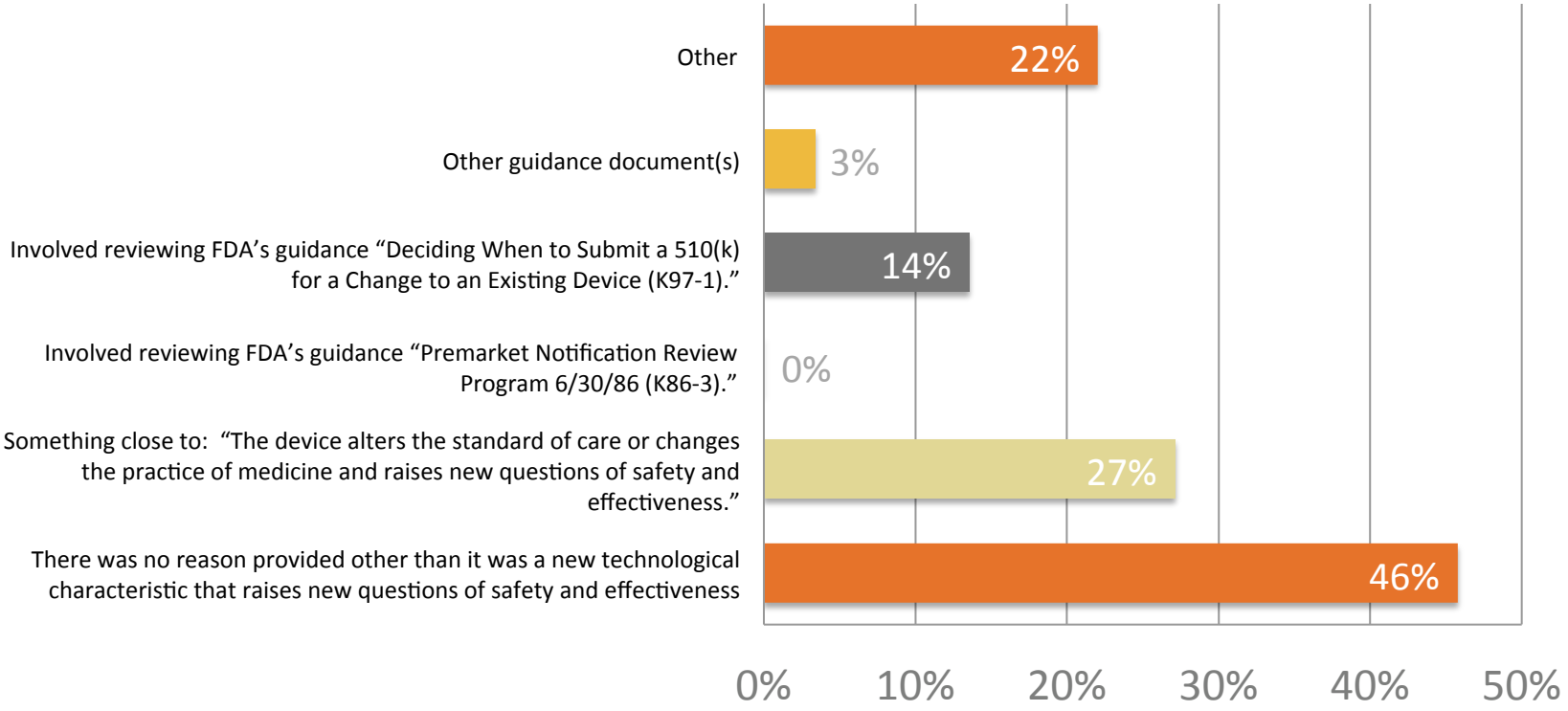
- Required clinical data to prove safety and efficacy
- Requires clinical data
- Subject device raised new safety concerns that were not addressed in the submission
- The clinical reviewer did not understand the use as it was different that what he knew; the clinical reviewer was familiar with only one use and not that submitted, used by other areas of medicine
- They errantly first tried this reason and then moved on to different technological characteristics
- They needed more paper in the file

44 Participants answered

If the reason used by the Agency is, ***there is or may be a new technological characteristic that raised new questions of safety and effectiveness***, what reason or justification did FDA use?

73%

Indicate lack of sufficient detail



NOTE: *Respondents could select more than one answer.*

59 Participants answered

If the reason used by the Agency is, *there is or may be a new technological characteristic that raised new questions of safety and effectiveness*, what reason or justification did FDA use?

Other:

- They falsely stated that no viscoelastic material (ie UHMWPE) had been approved as a hemi-tibial resurfacing device
- Specific issues of safety and effectiveness, with respect to the device, were given
- See previous “Other” comments (The clinical reviewer did not understand the use as it was different that what he knew; the clinical reviewer was familiar with only one use and not that submitted, used by other areas of medicine)
- Potential for off label use
- Not willing to share at this point
- New technology requiring clinical data

59 Participants answered

If the reason used by the Agency is, *there is or may be a new technological characteristic that raised new questions of safety and effectiveness*, what reason or justification did FDA use?

Other:

- New technological characteristic was not thoroughly reviewed since the reviewer appeared to have a bias based on his superficial review and ignoring the technical detail provided
- New product feature raises new questions
- More clinical data or testing Other: in IVDs neonatal=PMA, not so in Cardio Other: expanded info needed on colorants
- Didn't believe TOC users would understand the numbers; health and wellness and Rx users understand, so we were confused on the thinking
- Combined product. Some of the data used BMP Other guidance document(s). Other guidance document(s)

59 Participants answered

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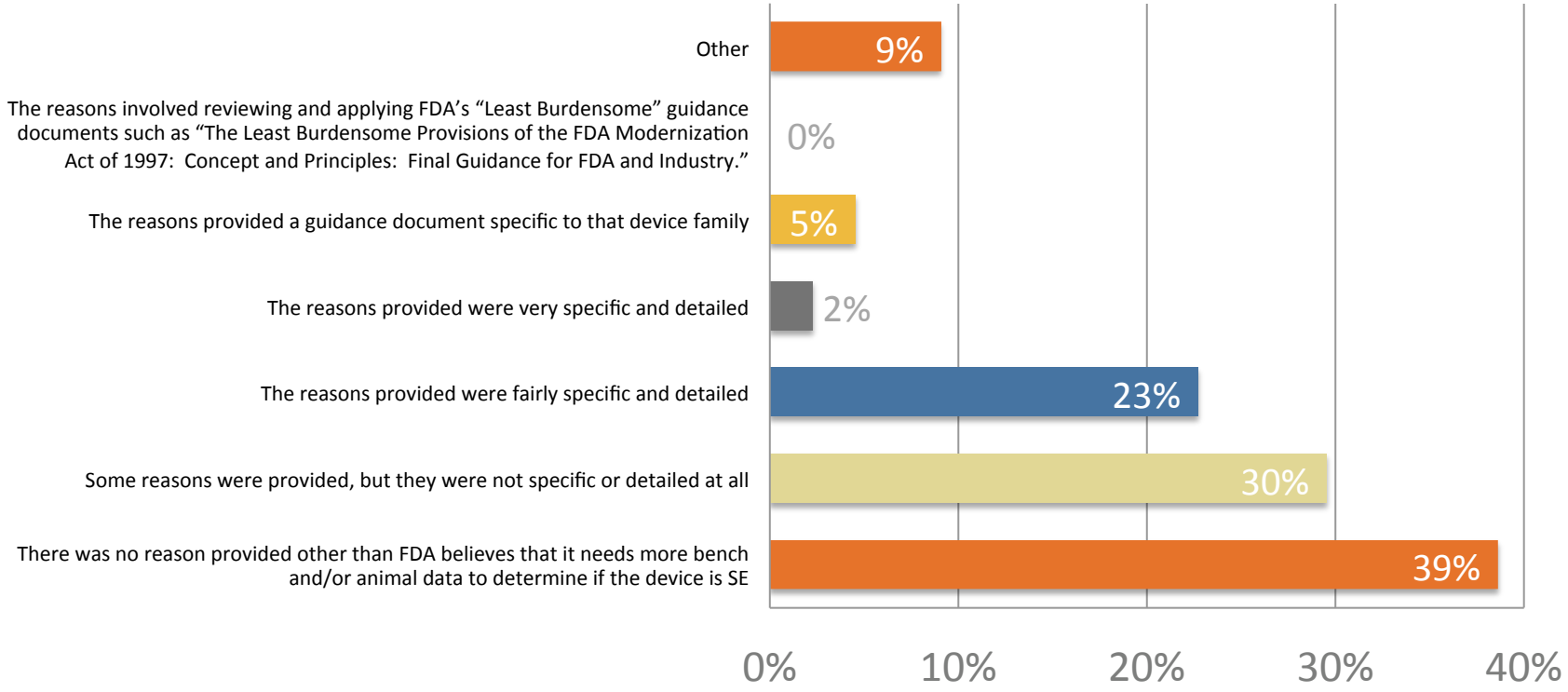
If the reason used by the Agency is, ***there is not or may not be enough non-clinical performance data (bench and/or animal data)***, what reason or justification did FDA use?

69%

Indicate lack of sufficient detail



NOTE: *Respondents could select more than one answer.*

44 Participants answered

If the reason used by the Agency is, *there is not or may not be enough non-clinical performance data (bench and/or animal data)*, what reason or justification did FDA use?

Other:

- Asked for clinical data
- Reasons given in some instances were not justified
- They indicated that clinical data would probably be needed
- They wanted more tests of characteristics we did not think remotely relevant, and additional sensitization in animals despite pass on all cell studies. Mostly it was bogus

44 Participants answered

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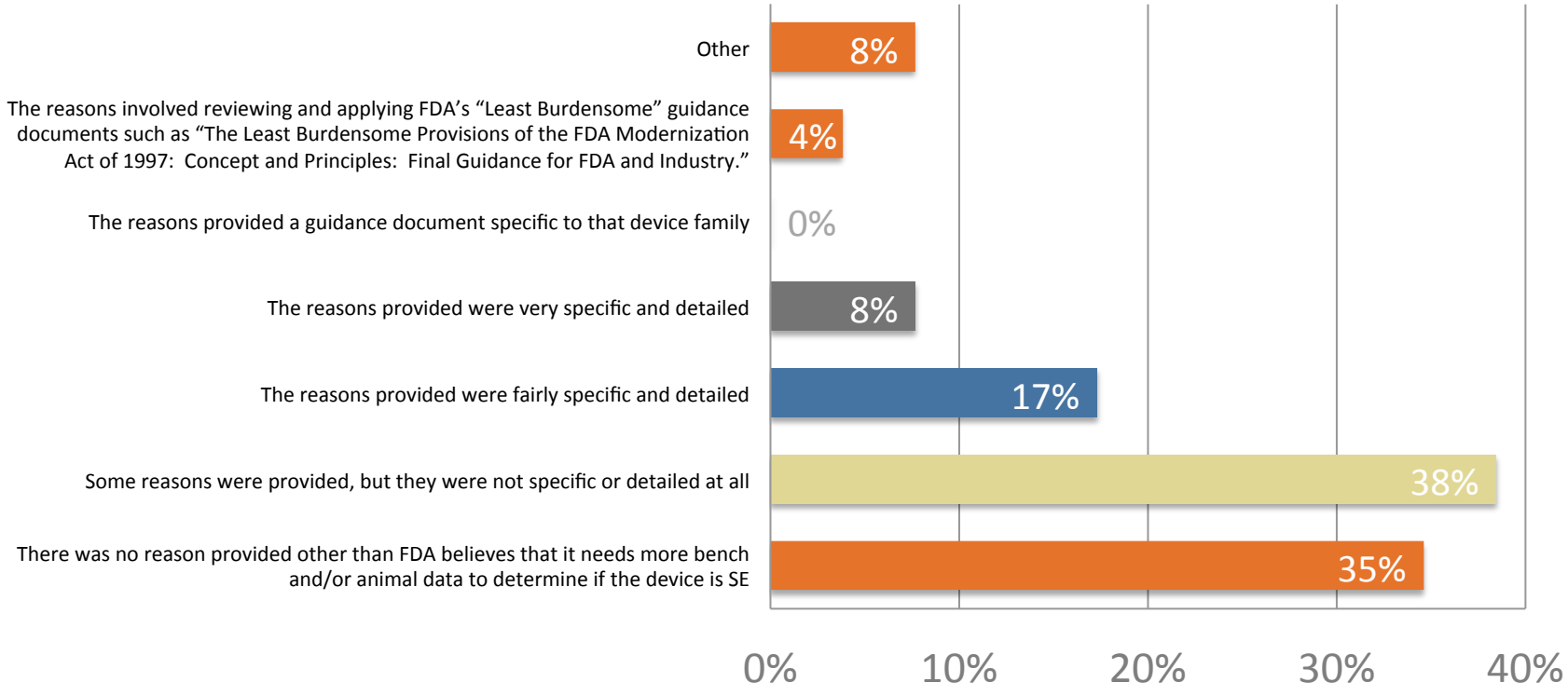
If the reason used by the Agency is, *there is not or may not be enough clinical data*, what reason/ justification did FDA use?

73%

Indicate lack of sufficient detail



NOTE: *Respondents could select more than one answer.*

52 Participants answered

If the reason used by the Agency is, *there is not or may not be enough clinical data*, what reason/justification did FDA use?

Other:

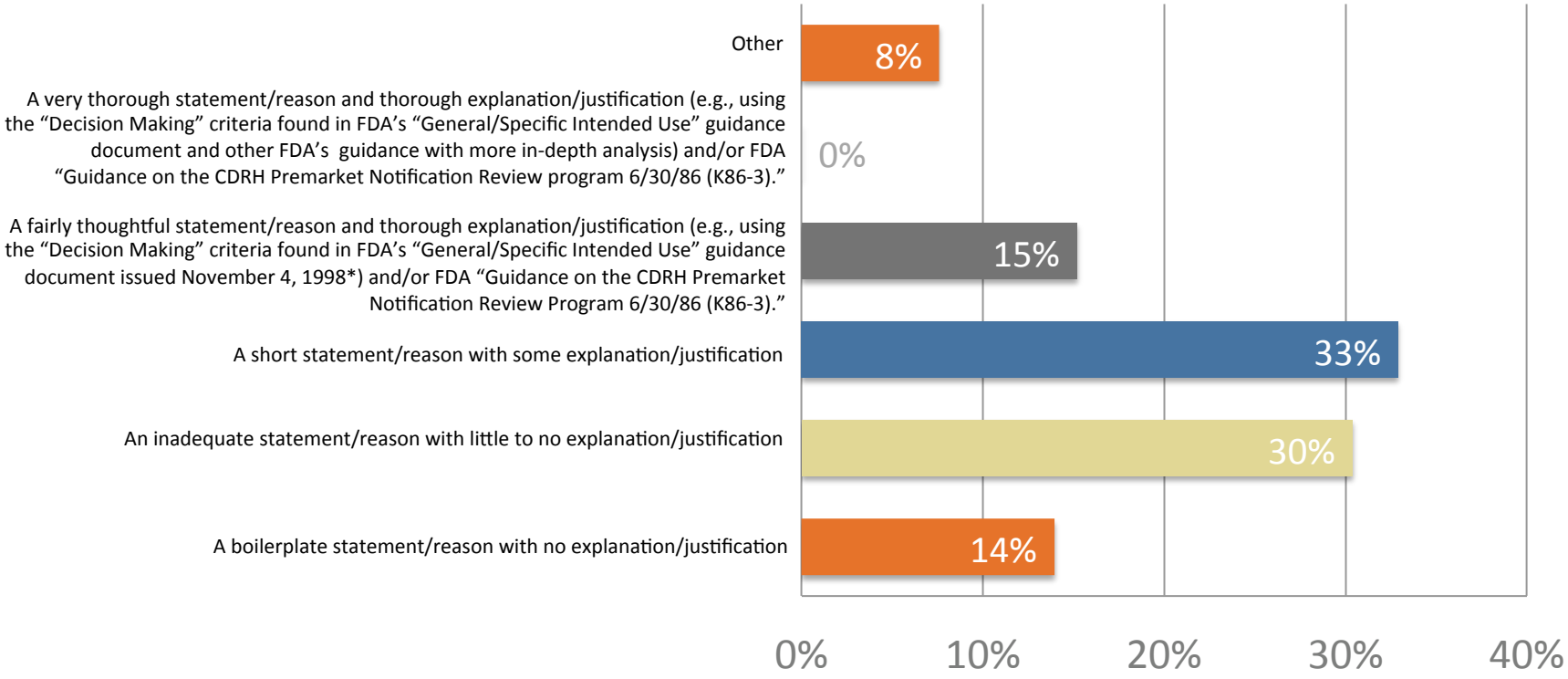
- They always changed their mind on what was adequate
- The devices indication for use was supported by 750 patient study which demonstrated clinical improvement that was significant, no safety issues at all. The study had the approval of 28 IRB's. The FDA would not even look at the study. All patients were followed for 2 years
- Some data contained bmp usage, it "confused" FDA, said it was a combination product
- Combined products are Class III

52 Participants answered

Which one of the following statements best describes the FDA's analysis of your 510(k) submission when it conducted the stage-gated review or provided an NSE letter?

15%

Received a fairly thorough explanation



79 Participants answered

Which one of the following statements best describes the FDA's analysis of your 510(k) submission when it conducted the stage-gated review or provided an NSE letter?

Other:

- An inadequate statement misapplying scientific principals with no consideration for the limited risk of the subject device and total reliance on clinicals which a small innovative company can't afford and forces an excellent product to be marketed world-wide excluding the U.S.
- Boilerplate letter with referral to reasons provided in separate email communication
- I have had experience with both getting a boiler plate response that contained no explanation/justification, and I have had a fairly thoughtful statement with good justification provided for request for additional information. Both were from the same reviewer - I dealt with the reviewer directly on both issues - and neither caused significant delay in processing the premarket notification. None resulted in NSE - however I was not happy to receive the boiler plate statement without discussion prior to issuance - once clarified it was no big deal

79 Participants answered

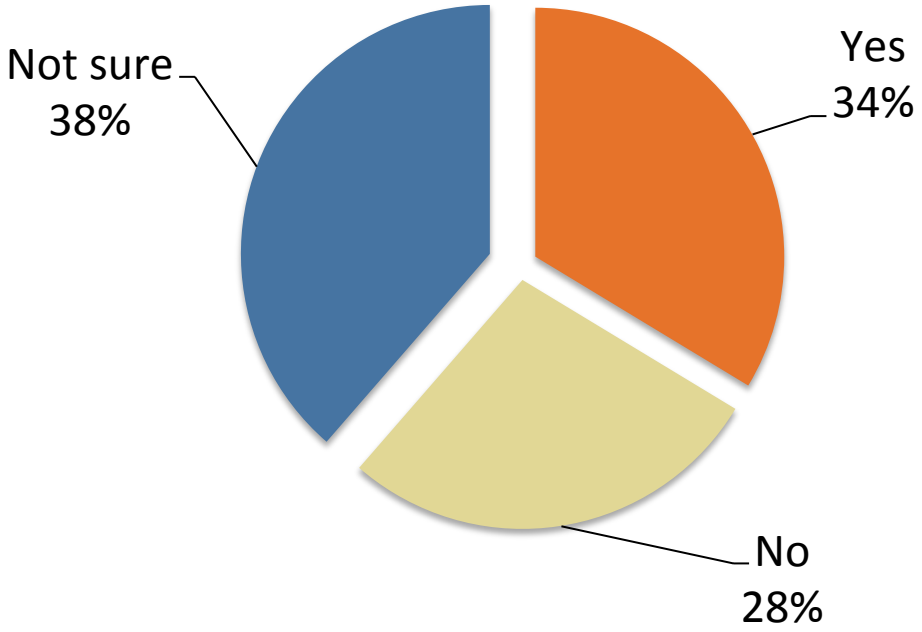
Which one of the following statements best describes the FDA's analysis of your 510(k) submission when it conducted the stage-gated review or provided an NSE letter?

Other:

- No information in writing - but invited us to talk over the phone and explained why they requested what they did - Fair enough, although we don't agree to their conclusions
- See previous "Other" comments (The clinical reviewer did not understand the use as it was different that what he knew; the clinical reviewer was familiar with only one use and not that submitted, used by other areas of medicine)
- Thoughtful statements that were wrong, and since abandoned by Agency

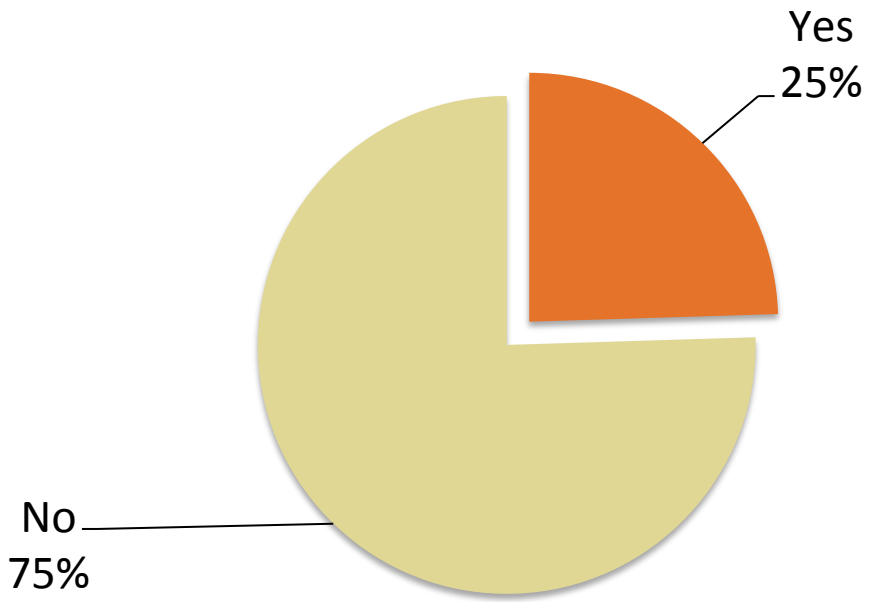
79 Participants answered

Did FDA review and consider your performance and/or clinical data before making a decision of NSE or possibly NSE?



101 Participants answered

Did FDA mention the use of "Least Burdensome" principles in making its decision?

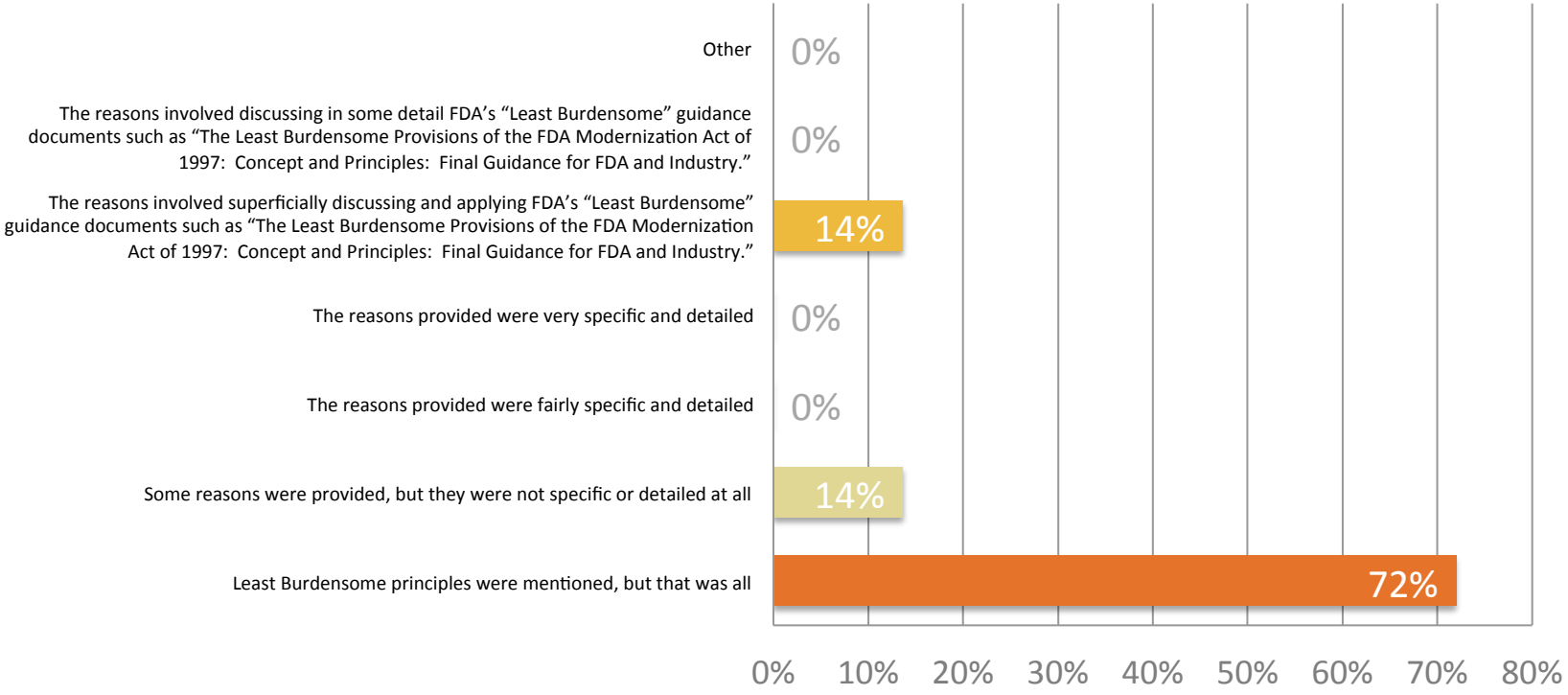


102 Participants answered

How specific was FDA's discussion of the use of "Least Burdensome" principles in making its decision?

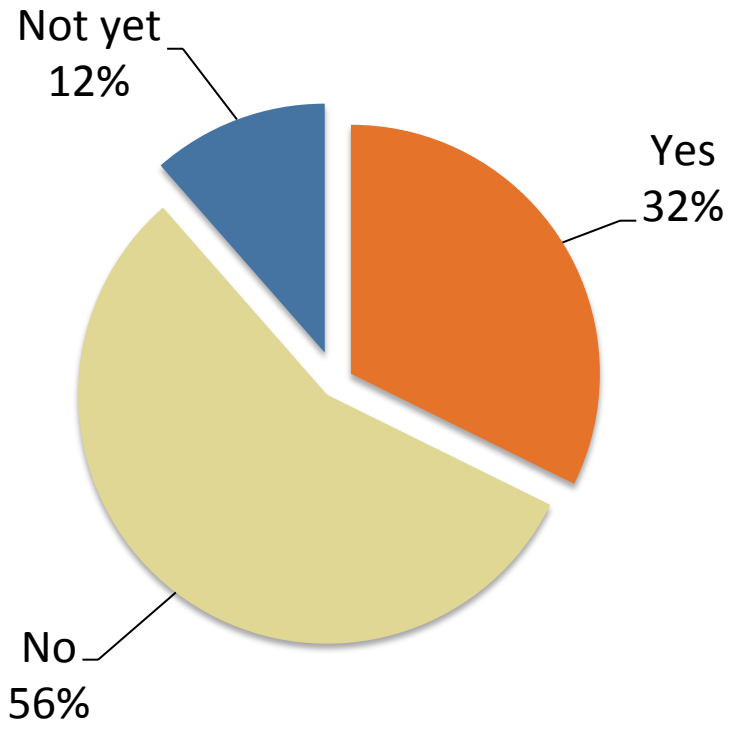
72%

Not specific



22 Participants answered

Did your company appeal FDA's NSE or "possibly NSE" decision?

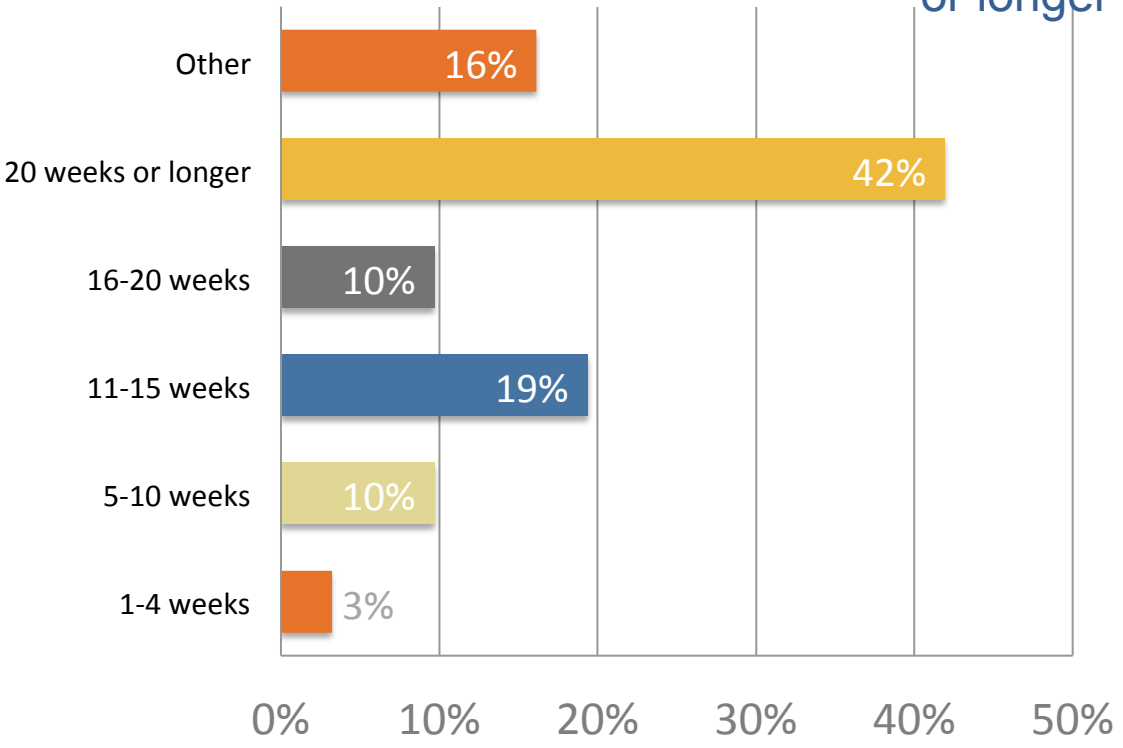


96 Participants answered

How long did the appeal take (including meeting/ hearing/panel and final decision)?

68%

Took 4 months or longer

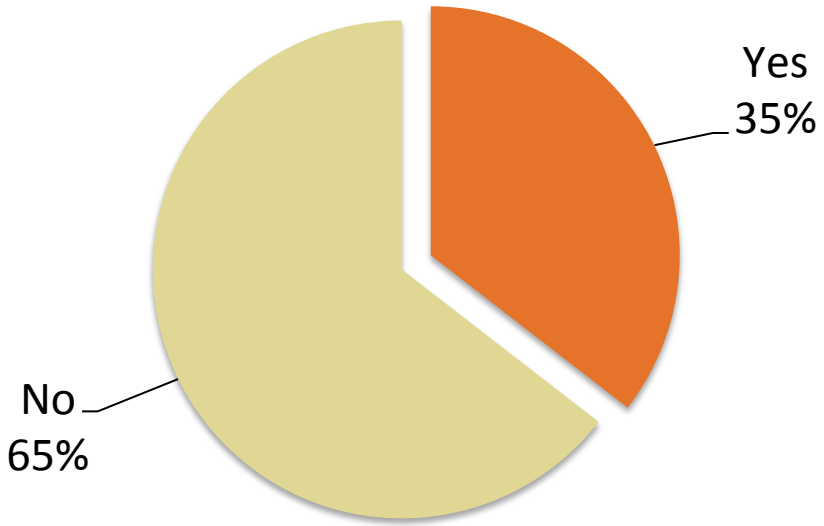


Other:

- Ultimately abandoned appeal
- Ongoing
- In progress
- Almost 2 years and counting!
- Over 6 months and still pending

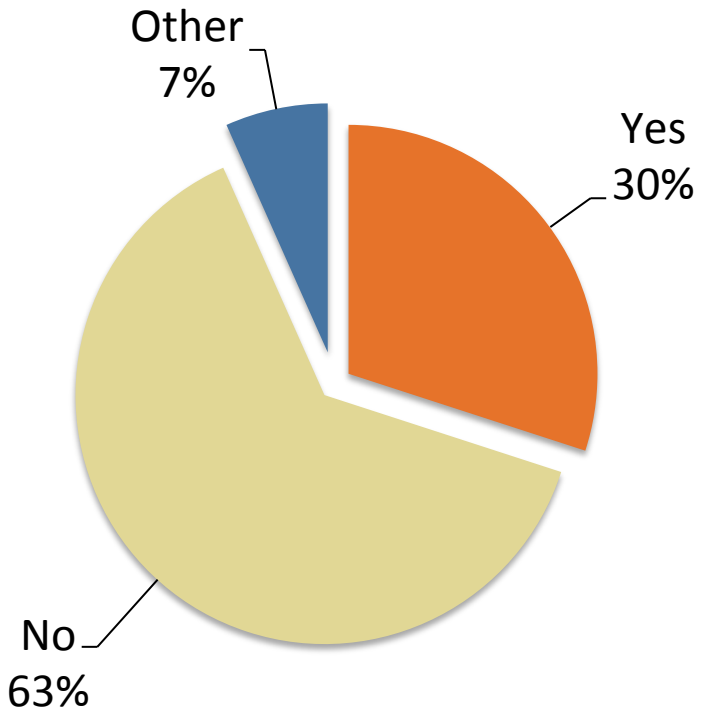
31 Participants answered

Did FDA consider relevant non-clinical performance animal and/ or bench data contained in submission on appeal?



31 Participants answered

Did FDA consider relevant clinical data contained in submission on appeal?

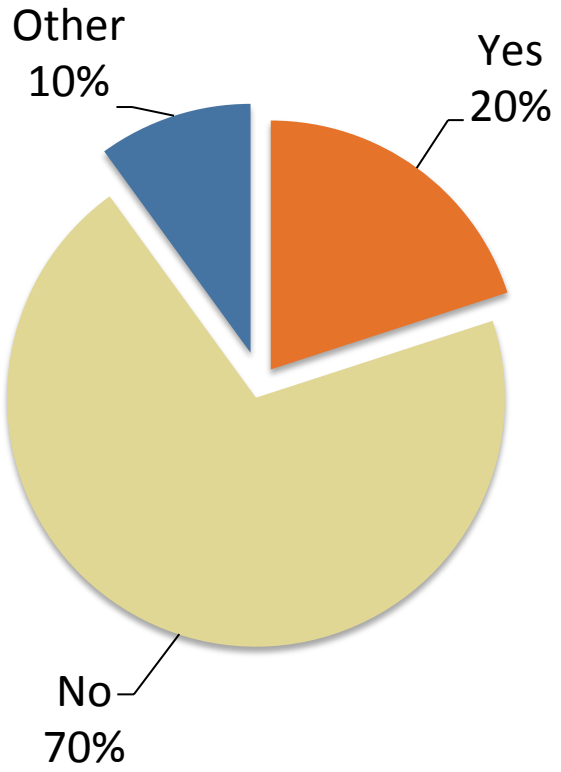


Other:

- No clinical data
- No clinical data was submitted

30 Participants answered

Did FDA recommend the product for consideration via the de novo pathway?

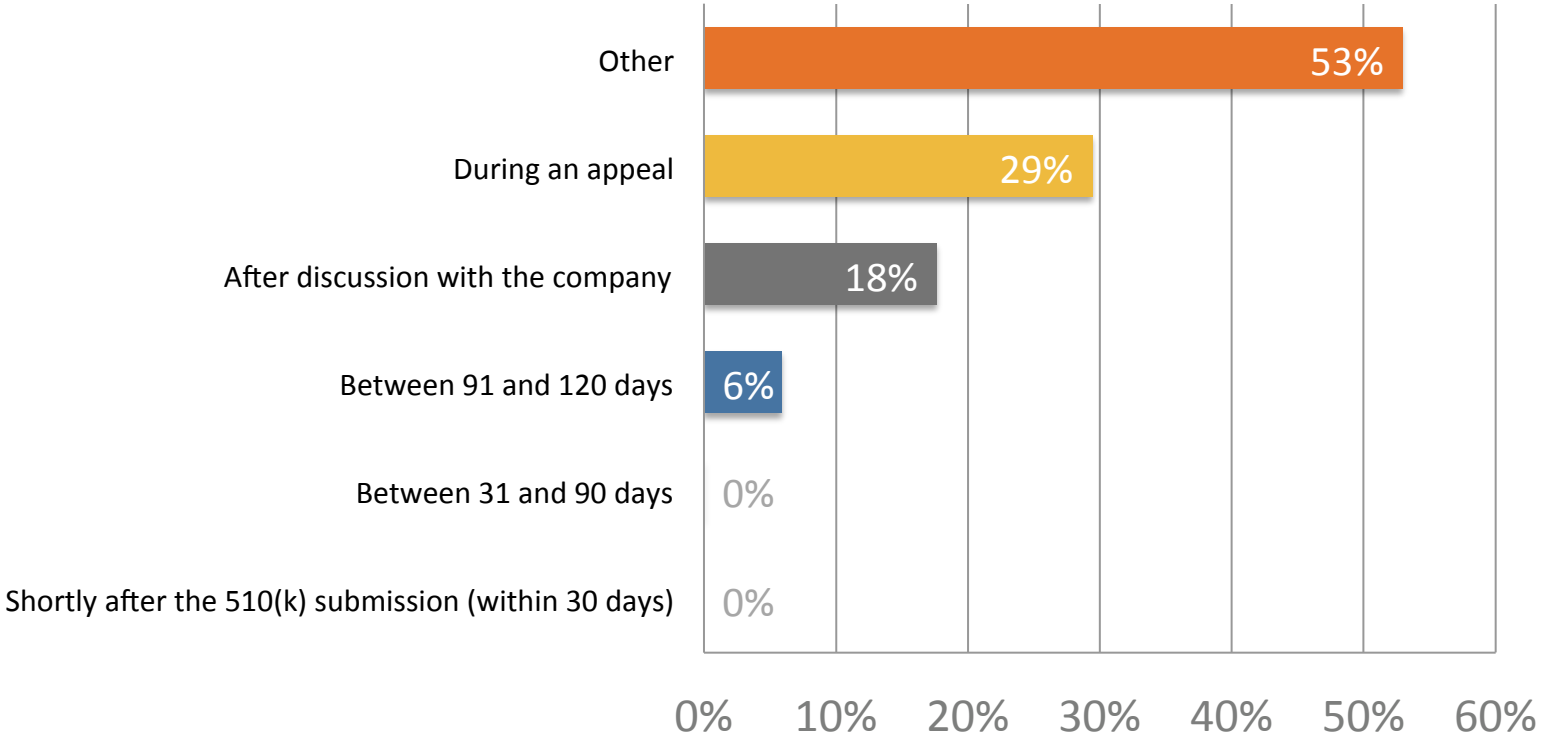


Other:

- A de novo petition was filed, but it was not at the recommendation of FDA
- NSE Letter suggests de novo is not an option; however, phone call with Division Chief suggested something different
- De Novo had already been filed

30 Participants answered

How soon in the process did FDA recommend the de novo pathway?



NOTE: *Respondents could select more than one answer.*

17 Participants answered

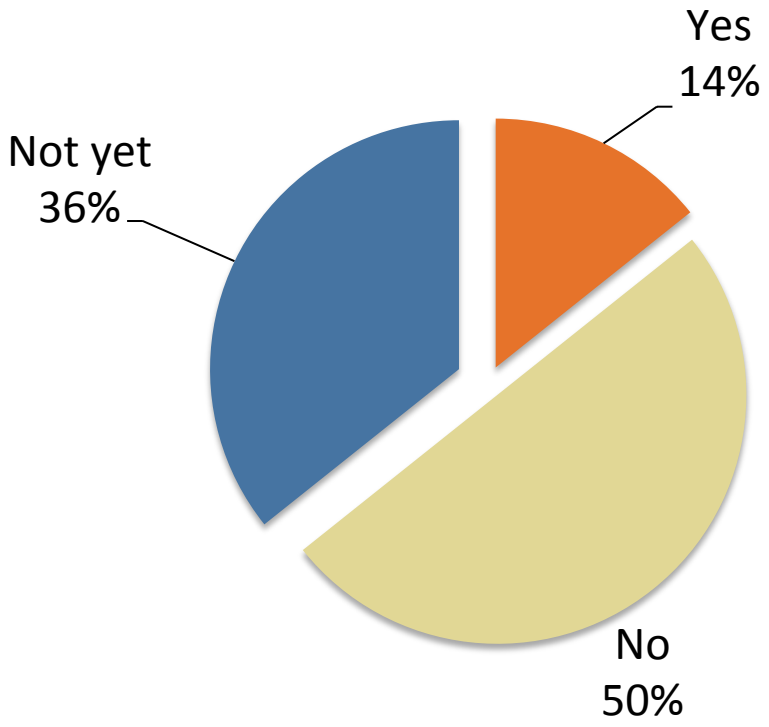
How soon in the process did FDA recommend the de novo pathway?

Other:

- After issuing NSE with language suggesting de novo was not recommended, Division Director suggested de novo as an alternative to another appeal
- De Novo recommended by FDA Ombudsman's Office and by 510(k) office - Division made no such recommendation
- Didn't
- I'm not sure
- Never
- Not recommended by FDA, pursued by us, as a last resort in the 510k process
- Not yet
- They did not recommend De Novo
- We have been in the appeal process for over 9 months

17 Participants answered

Did you pursue the de novo pathway?

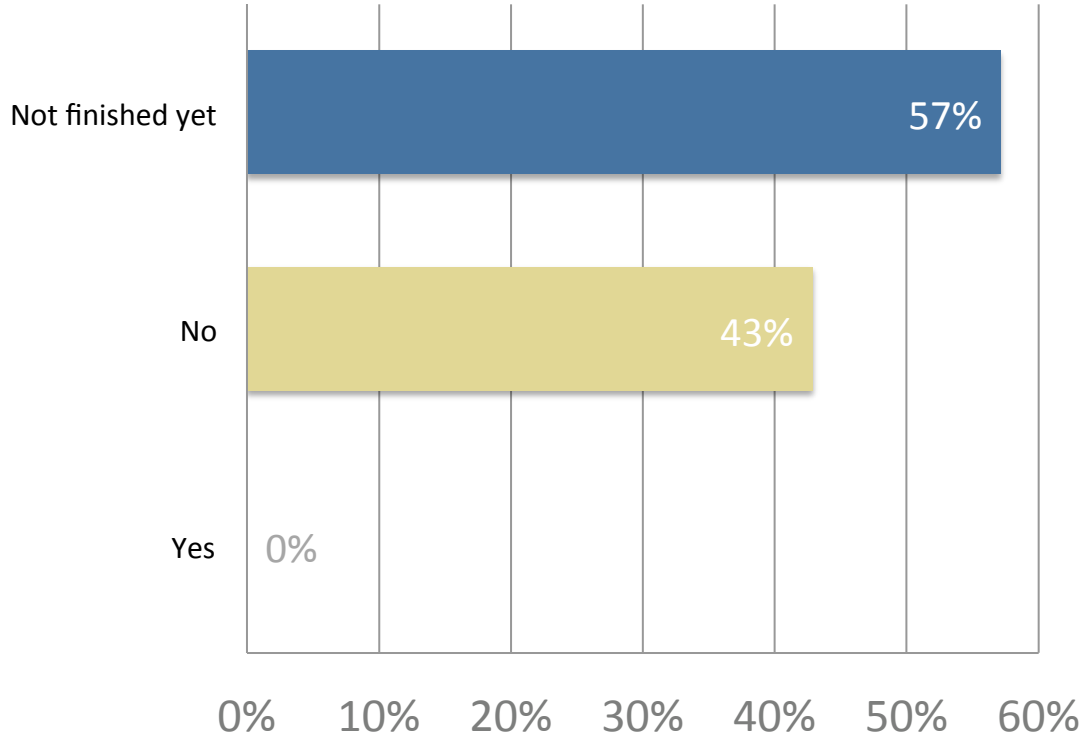


28 Participants answered

Did you obtain approval under the de novo pathway?

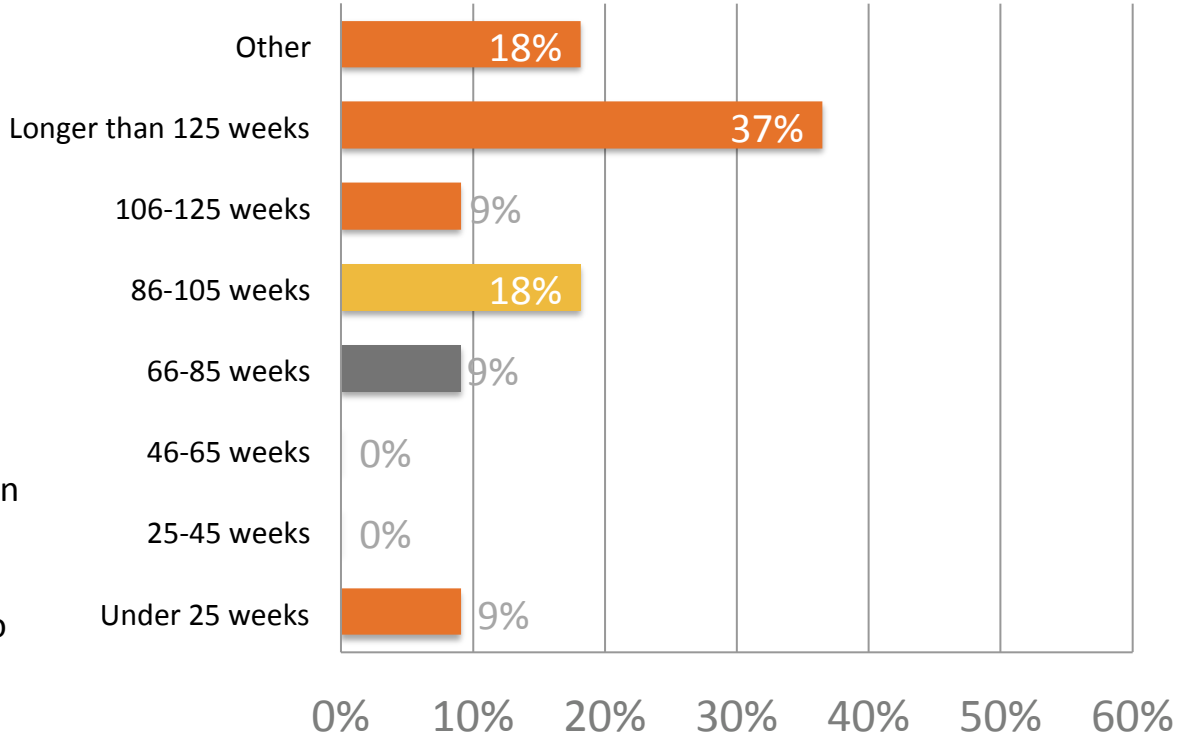
0

Companies have obtained approval



14 Participants answered

If so, how long did it take (including the time elapsed under the 510(k) pathway)?



Other:

- We are 66 weeks into the process, waiting for the decision on our second appeal
- It took 6 weeks for the Division to decide that we needed to do additional clinical study

11 Participants answered

Summary

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Current Experience with 510(k) Pathway

- Satisfaction with FDA's management of the review process is lower than expected at 30%
- Recent submissions are being screened out at a high rate, resulting in NSE decisions without substantive review of the file
  - 43% were Stage-Gated reviews
  - 75% of decision letters made no reference to application of Least Burdensome principles

Current Experience continued

- Difficulties can be defined under three areas of concern:
  - Quality of decisions
    - Degree to which science and technology is understood
    - Appropriate application of regulation and policy
  - Transparency of the decision-making process
  - Time taken to reach a decision or resolution

Areas of Concern: Quality of Decisions

- At Branch level:
  - 56% reported failures in understanding the *scientific* issues while 24% felt that risk averseness outweighed the evaluation of the science

80% received an incorrect or inappropriate decision

  - 61% reported failures in understanding the *legal/regulatory* issues with an additional 22% reporting that risk averseness played a role in the process

83% received an incorrect or inappropriate decision

Resolution of these concerns involves a lengthy appeal process to obtain review at the Division level.

Areas of Concern: Quality of Decisions

- At Division level:
  - 31% reported failure of Management to understand *scientific* issues in addition to 38% of decisions being affected by risk averseness or politics

69% received an incorrect or inappropriate decision

  - 22% reported failure of Management to understand *legal/ regulatory* issues while another 33% reported that the decision was impacted by risk averseness or politics

55% received an incorrect or inappropriate decision

Areas of Concern: Transparency

- Companies are challenged to understand the basis for reviewers' conclusions
  - Conclusions related to Intended Use
    - 47% gave little or no detail
    - 18% cited illegal criteria (change in clinical utility)
  - Conclusions related to technological characteristics
    - 46% included little or no detail
    - 27% cited illegal criteria (alters standard of care/practice of medicine)

Areas of Concern: Transparency

- Requests for Additional Information are often vague
  - When stating that performance data may not be adequate:
    - 39% provided little or no detail
  - When stating that clinical data may not be adequate:
    - 73% included little or no detail
  - In an overall assessment of communication summarizing the review staff conclusion:
    - Only 15% obtained full transparency in the document
  - Asked whether clinical/performance data in the submission had been considered in an NSE decision:
    - 28% of respondents said NO
    - 38% of respondents were NOT SURE

Areas of Concern: Time to Resolution

- Appeal is the usual route to resolution for incorrect decisions or lack of clarity in requests for Additional Information, introducing unnecessary delay
  - More than 50% of appeals took 5 months or longer (one exceeded two years)
- When unable to reach satisfactory resolution through 510(k) review and appeal, de novo may offer a solution
  - 20% of NSE letters suggested a de novo option
- The De Novo process lacks predictability
  - Those who pursued de novo were not yet approved
  - More than 90% of pending de novo applications were more than 65 weeks from the original 510(k) submission date

Thank You.

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