U.S. FOOD & DRUG ADMINISTRATION

Regenerative Medicine Advanced Therapy (RMAT) Designation

International Society for Cellular Therapy (ISCT) Liaison Meeting

January 30, 2018

Wilson W. Bryan, MD

Office of Tissues and Advanced Therapies (OTAT)

December 13, 2016

21st Century Cures Act
Section 3033: Definition of Regenerative Medicine Therapy (RMT)

Includes cell therapy, therapeutic tissue engineering products, human cell and tissue products, and combination products using any such therapies or products, except for those regulated solely under section 361 of the Public Health Service Act …

Section 3033: Regenerative Medicine Advanced Therapy (RMAT) Designation

- Creates program for designation of regenerative medicine advanced therapies
- A drug is eligible for designation if:
  - It is a regenerative medicine therapy
  - The drug is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and
  - Preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such disease or condition

Process for RMAT Designation

- Sponsor can make a request with a new IND submission or as an amendment to an existing IND

- Website with information about administrative process: http://www.fda.gov/BiologicsBloodVaccines/CellularGeneTherapyProducts/ucm537670.htm

Process for RMAT Designation

- Request for designation should describe:
  - How the drug meets the definition of regenerative medicine therapy
  - How the drug meets the criterion that it is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition, and
  - The preliminary clinical evidence that indicates that the drug has the potential to address unmet medical needs for such disease or condition

Process for RMAT Designation

- FDA has 60 calendar days to determine if designation criteria are met
  - FDA will provide written response
  - If not granted, FDA will provide a written description of the rationale

Benefits of RMAT Designation

- Interactions with FDA to expedite development and review of regenerative medicine advanced therapies
  - Benefits available to breakthrough therapies
  - Including early discussions of any potential surrogate or intermediate endpoints to support accelerated approval

Benefits of RMAT Designation (cont'd.)

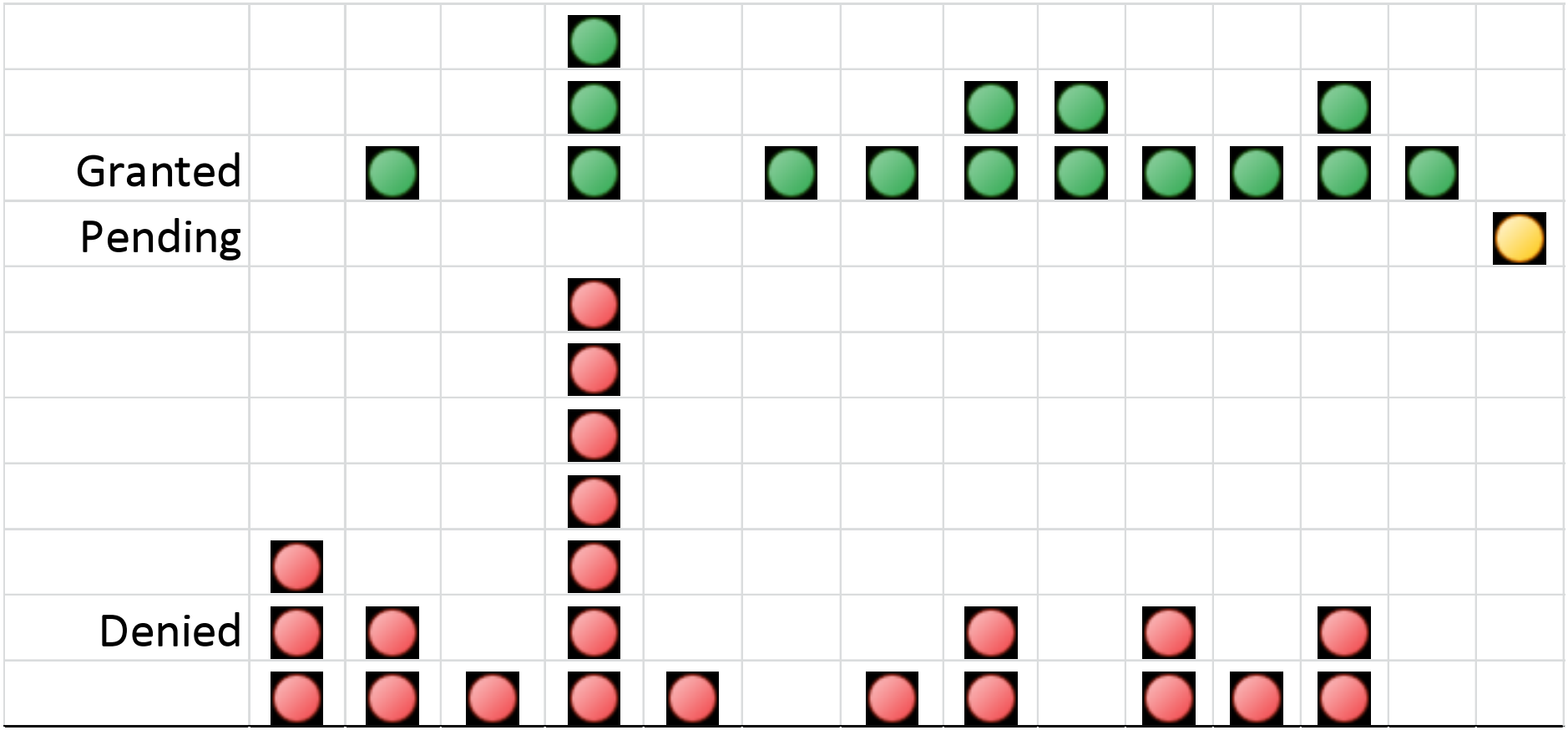
- May be eligible for priority review
- May be eligible for accelerated approval, as agreed upon during product development, based on:
  - Surrogate or intermediate clinical endpoints reasonably likely to predict long-term clinical benefit, or
  - Reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites, as appropriate

Accelerated Approval for RMATs

- If accelerated approval is granted, post-approval requirements may be fulfilled through:
  - Post-approval clinical studies
  - The submission of clinical evidence, clinical studies, patient registries, or other sources of real world evidence such as electronic health records, or
  - The collection of larger confirmatory data sets as agreed upon during product development, or
  - Post-approval monitoring of all patients treated with such therapy prior to approval of the therapy

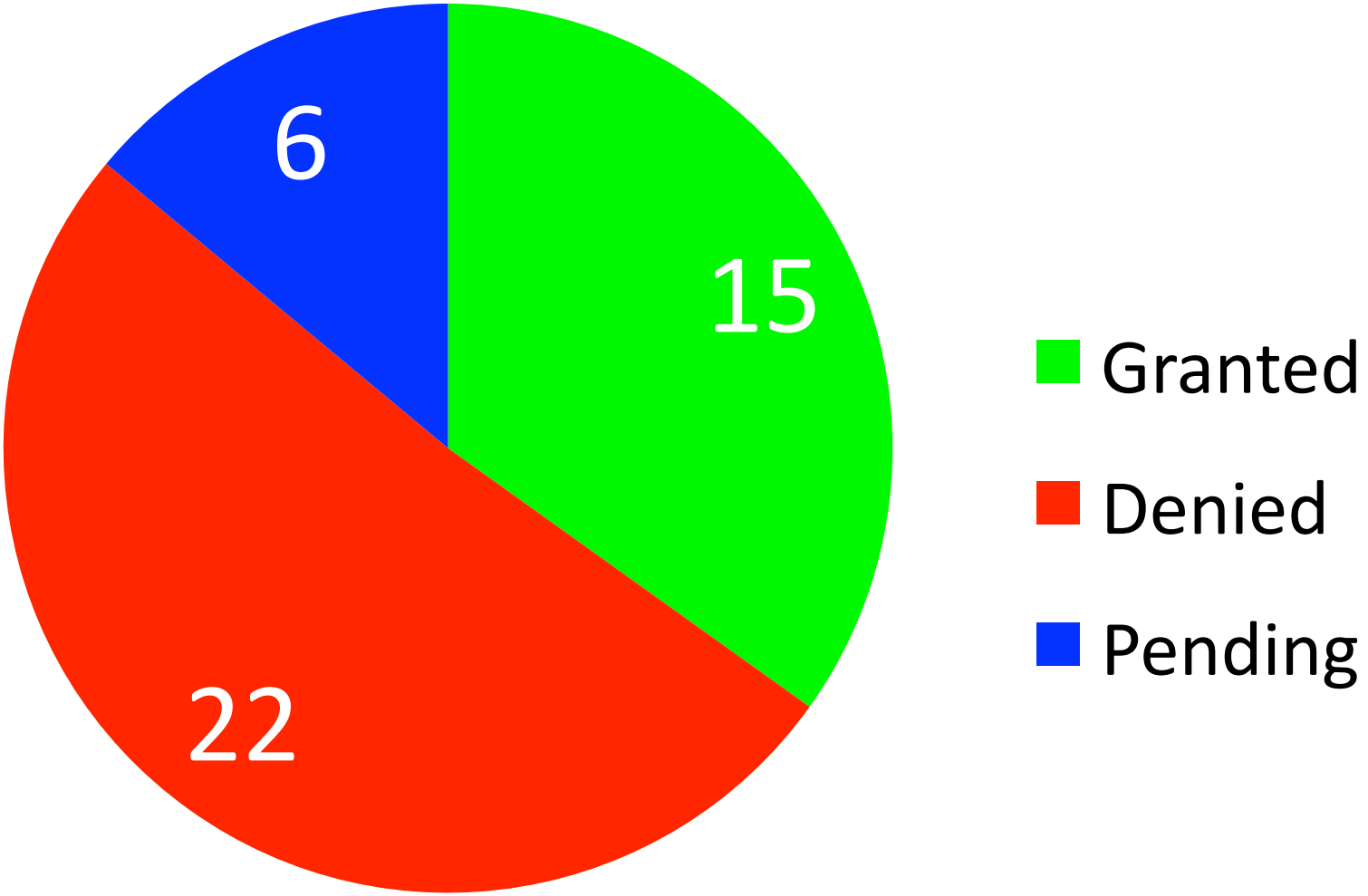
RMAT Designation Requests Status

- as of January 28, 2018



12/13/2016 – 01/28/2018

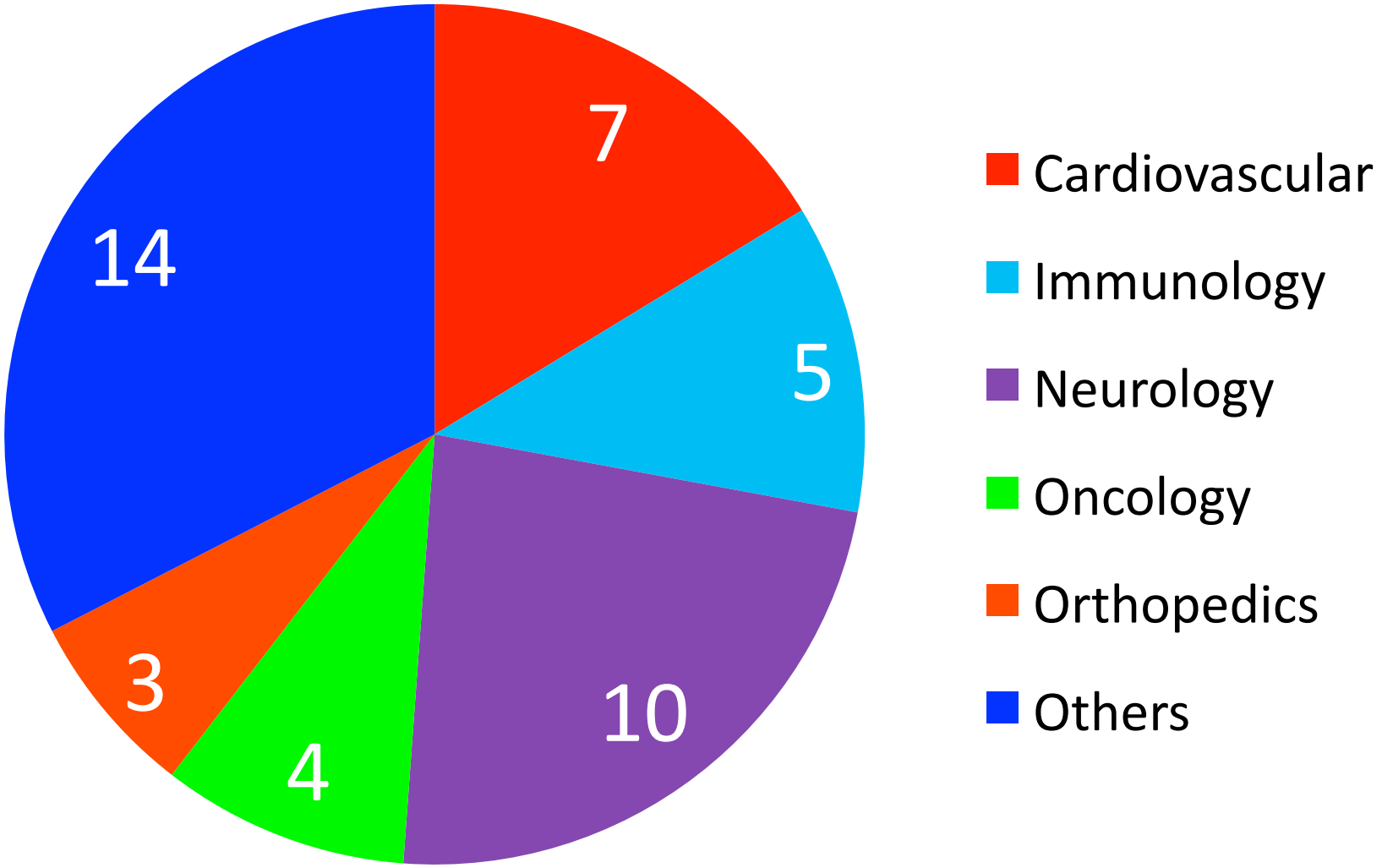
RMAT Designation Requests Status - as of January 28, 2018



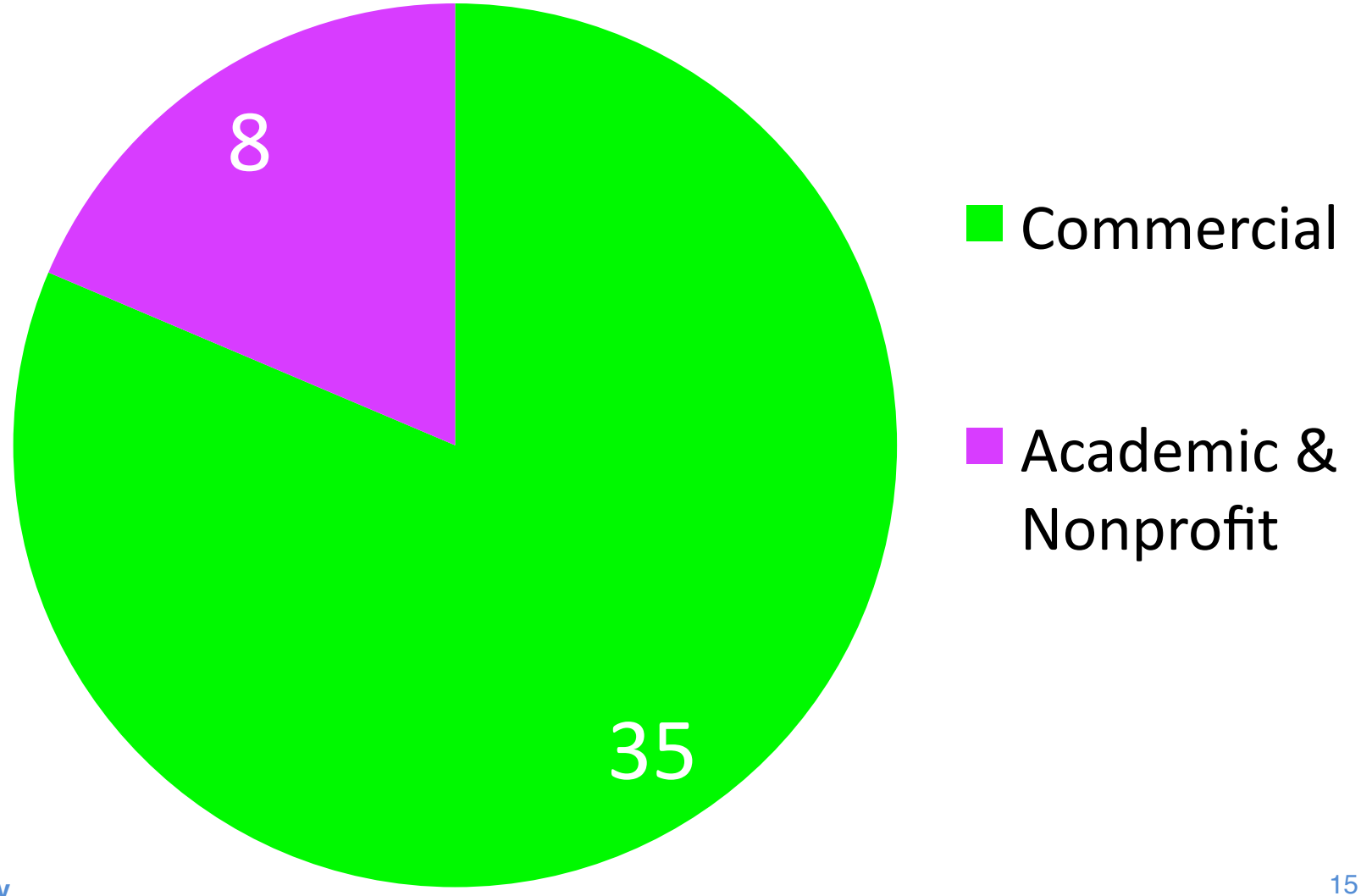
Analysis of Denied Regenerative Advanced Therapy Designation Requests

- Administrative Reasons
  - Inactive IND
  - No preliminary clinical evidence submitted
- CMC Reasons
  - Different product
- Insufficient Preliminary Clinical Evidence
  - Study design issues
  - Inconsistent results with regard to product activity

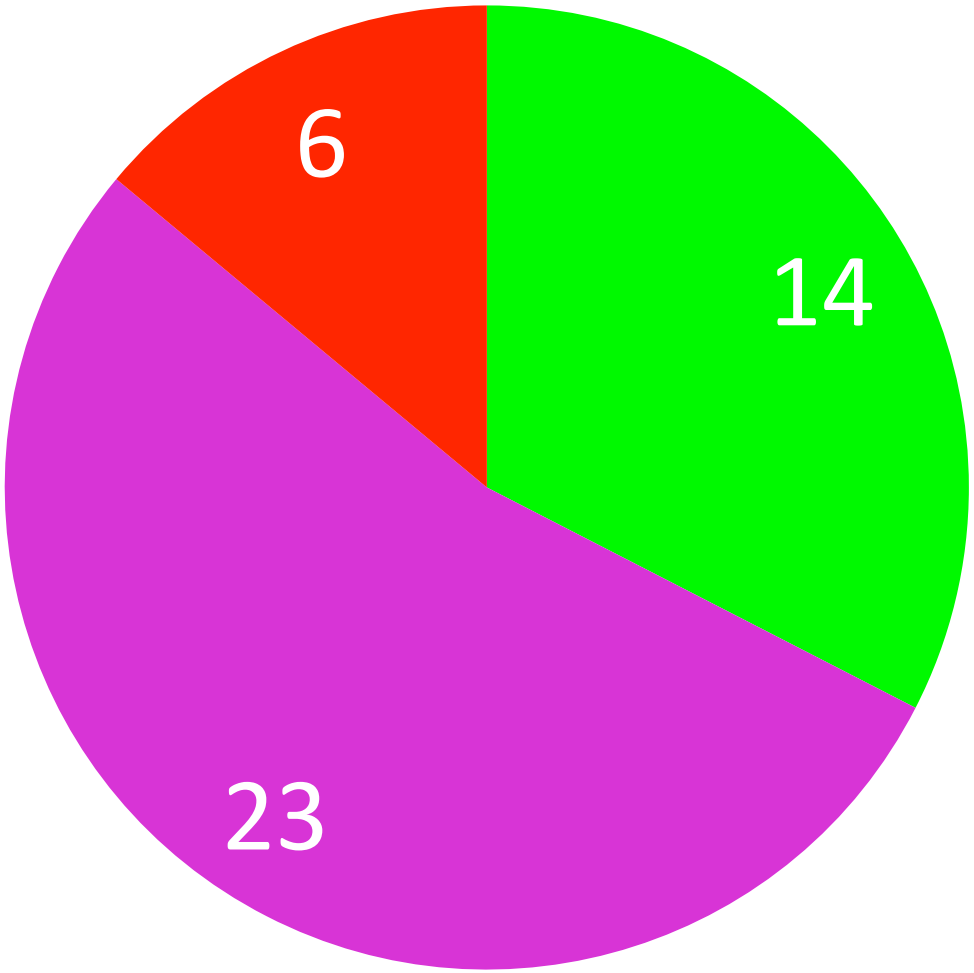
RMAT Designation Requests
- Distribution by Specialty



RMAT Designation Requests
- Distribution by Applicant

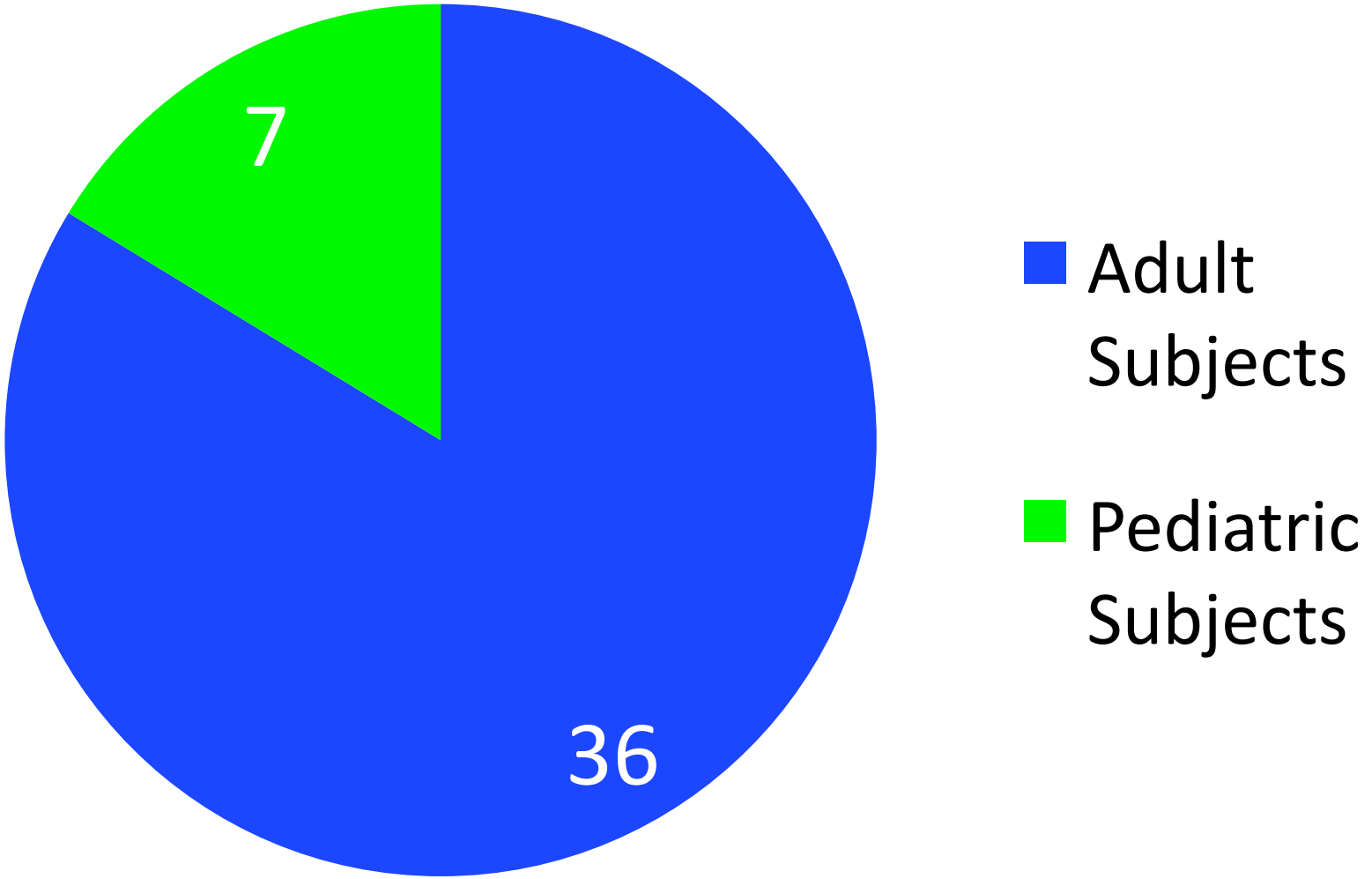


RMAT Designation Requests
- Distribution by Product Type



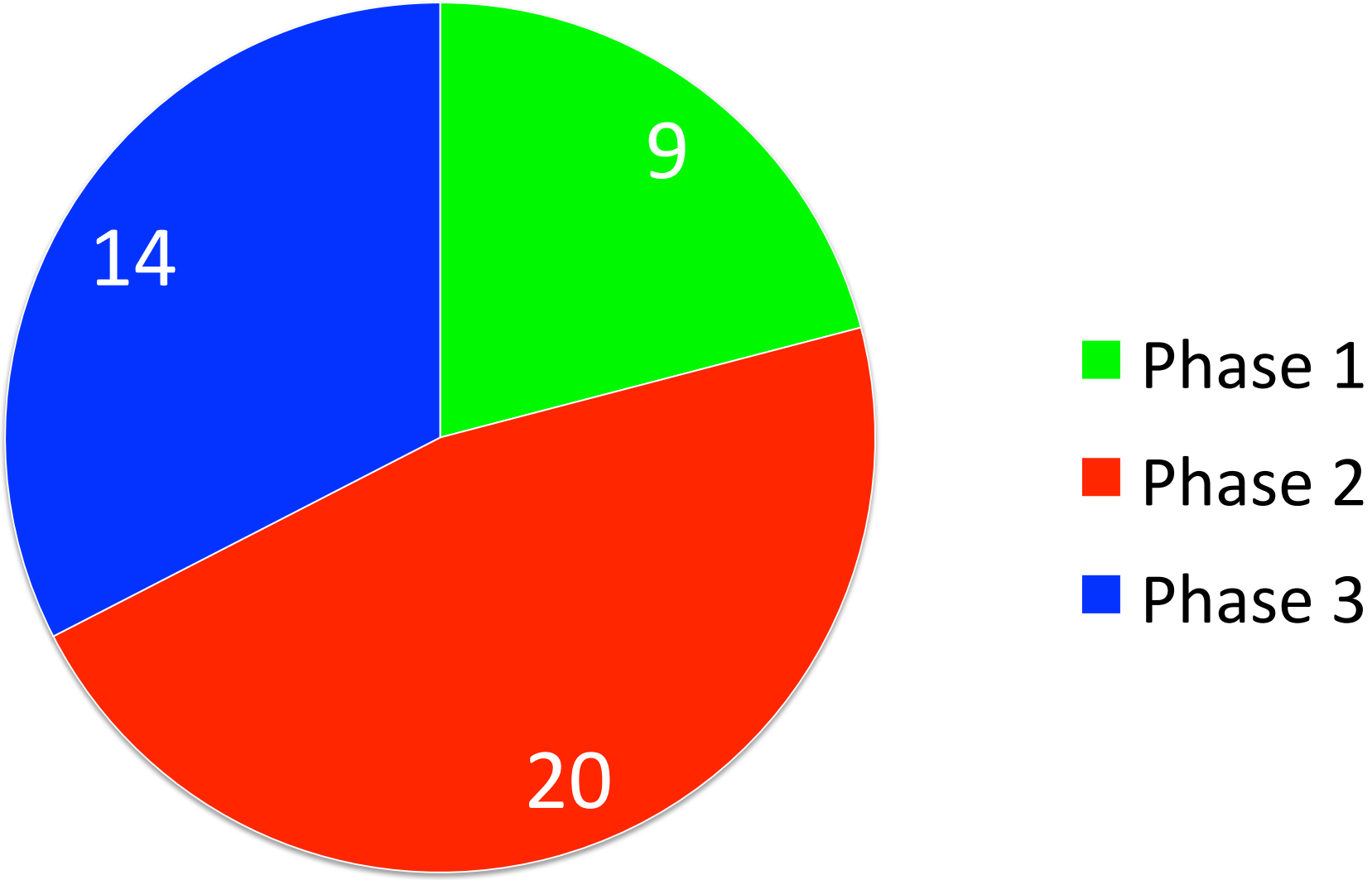
- Cell Therapy Product - Autologous Cells
- Cell Therapy Product - Allogeneic Cells
- Others

RMAT Designation Requests
- Distribution by Study Population



RMAT Designation Requests

- Distribution by Current Study Status



Public access to CBER

- **CBER website:**
  http://www.fda.gov/BiologicsBloodVaccines/default.htm
  Phone: 1-800-835-4709

- **Consumer Affairs Branch (CAB) Email: ocod@fda.hhs.gov**

- **Manufacturers Assistance and Technical Training Branch (MATTB) Email: industry.biologics@fda.gov**

- **Follow us on Twitter**
  https://www.twitter.com/fdacber

OTAT Contact Information

- **Regulatory Questions**:
  Contact the Regulatory Management Staff in OCTGT at CBEROCTGTRMS@fda.hhs.gov or Ramani.Sista@fda.hhs.gov

- **References for the regulatory process for OTAT**
  - **http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/OtherRecommendationsforManufacturers/ucm094338.htm**

- **OTAT Learn Webinar Series:**
  http://www.fda.gov/BiologicsBloodVaccines/NewsEvents/ucm232821.htm

Acknowledgements

- Rachael Anatol, PhD
- Kimberly Benton, PhD
- Xiaofei Wang, PhD

Questions

1) How are eligibility determinations for patients made?
2) What types of endpoints are acceptable?
3) What level of validation is expected?
4) Where can we find information on products that have been approved?
5) Are public data being collected in a registry?

Questions

1) How does RMAT relate to the Guidance "Expedited Programs for Serious Conditions – Drugs and Biologics"?
2) Is there a timeline or schematic to make clear the steps that are necessary to complete an application?

Response: See FDA *Draft Guidance for Industry: Expedited Programs for Regenerative Medicine Therapies for Serious Conditions* (November 2017)

Contact Information

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