



Facilitating the Development of Cellular Therapy Products

Peter Marks, MD, PhD

Regenerative Medicine Congressional Staff Briefing

September 19, 2019



Bottom Line Up Front

- FDA is committed to advancing the development of safe and effective cellular therapies to help address unmet medical needs
- This will be accomplished by
 - Encouraging sponsor interactions with the agency
 - Deployment of all applicable development programs
 - Appropriate action when needed to protect patients

Human Cells, Tissues, or Cellular or Tissue-Based Products (HCT/Ps)

- Articles containing or consisting of human cells or tissues that are intended for implantation, transplantation, infusion, or transfer into a human recipient (§ 1271.3(d))
- Examples
 - Skin
 - Mesenchymal stem cells
 - Hematopoietic progenitor cells from cord blood



Laws Relevant to HCT/P Regulation

- Section 351 of the Public Health Service Act
 - License needed to distribute in interstate commerce
 - Product must be safe, pure, potent
 - Suspension/revocation power, recall authority
- Section 361 of the Public Health Service Act
 - Authorizes FDA to issue and enforce regulations necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the US, or interstate

Two Regulatory Tiers for HCT/Ps Established (21 CFR 1271)

1. Drugs, devices, biological products (351 HCT/Ps)
 - Regulated under authority of section 361 and section 351 of Public Health Service Act and/or the Federal Food, Drug, & Cosmetic Act
2. 361 HCT/P (meet criteria to be kicked down)
 - Regulated solely under authority of section 361
 - Subject to “Tissue Regulations” (21 CFR Part 1271)
 - **Premarket review and approval not required**

Section 361 HCT/Ps

To be regulated solely under section 361 of the PHS Act, HCT/Ps must meet the following criteria (21 CFR Part 1271.10(a)):

1. Minimally manipulated (MM)*;
2. Intended for homologous use (HU)** only;
3. Not combined with another article (with some exceptions); AND
4. Either:
 - i. Does not have a systemic effect and is not dependent upon the metabolic activity of living cells for its primary function; or
 - ii. Has a systemic effect or is dependent upon the metabolic activity of living cells for its primary function, and is for autologous, 1st or 2nd degree blood relative, or reproductive use

* Defined in § 1271.3(f)

** Defined in § 1271.3(c)

Objectives of Suite of Regenerative Medicine Guidance Documents

- Clarify existing regulations to make it simpler for sponsors to determine if they need to obtain premarket authorization for their products
- Expedite the development and approval of safe and effective innovative regenerative medicine therapies and associated devices

Suite of Regenerative Medicine Final Guidance Documents



1. Same Surgical Procedure Exception under 21 CFR 1271.15(b): Questions and Answers Regarding the Scope of the Exception
2. Regulatory Considerations for Human Cell, Tissues, and Cellular and Tissue-Based Products: Minimal Manipulation and Homologous Use
3. Evaluation of Devices Used with Regenerative Medicine Advanced Therapies
4. Expedited Programs for Regenerative Medicine Therapies for Serious Conditions



Guidance on MM and HU

Compliance and Enforcement Policy

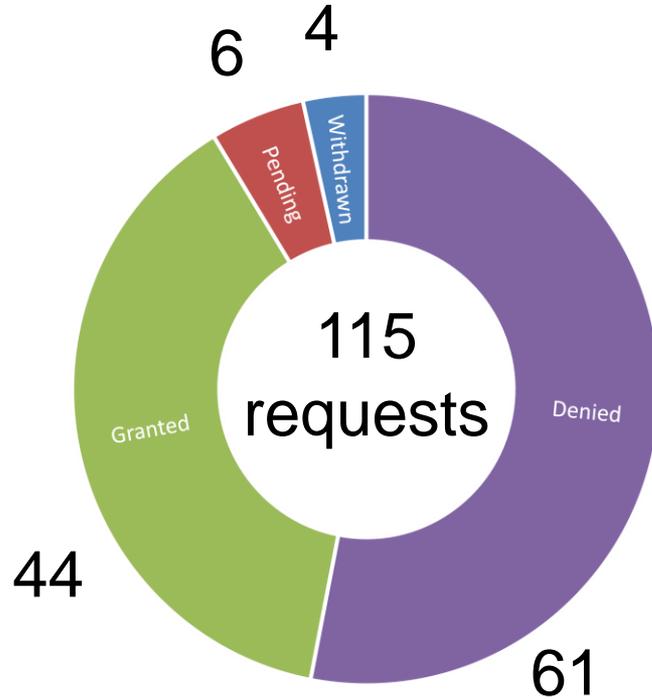
- To give manufacturers time to determine if they need to submit an IND or marketing application in light of this guidance and, if such an application is needed, to prepare the IND or marketing application the guidance describes a 36-month period of enforcement discretion ending on November 20, 2020 for products based on a determination of the risk to public health



Expedited Programs for Regenerative Medicine Therapies

- Describes FDA's considerations for the Regenerative Medicine Advanced Therapy Designation (RMAT)
- RMAT designation is applicable to products addressing serious conditions for which preliminary clinical evidence indicates the potential to address unmet medical needs
- Designated products are eligible as appropriate for priority review and accelerated approval

RMAT Designations Granted



- 44 products granted designation
- Majority have Orphan Product designation (27/44)
- Most are cellular therapy products or cell-based gene therapy products

INTERACT Program

Initial Targeted Engagement for Regulatory Advice on CBER products

- To further encourage early interaction with sponsors and replace the pre-pre-IND meeting process across the Center regarding preclinical, manufacturing and, clinical development plans

<https://www.fda.gov/BiologicsBloodVaccines/ResourcesforYou/Industry/ucm611501.htm>

Summary

- FDA is committed to advancing the development of safe and effective cellular therapies to help address unmet medical needs
- This will be accomplished by
 - Encouraging sponsor interactions with the agency
 - Deployment of all applicable development programs
 - Appropriate action when needed to protect patients



U.S. FOOD & DRUG
ADMINISTRATION