U.S. Food and Drug Administration

Department of Health and Human Services

CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

FDA Regulatory Updates: Related to Cancer Immunotherapy

Society for Immunotherapy of Cancer (SITC)

Raj K. Puri, M.D., Ph.D.

Director, DCGT

Office of Cellular, Tissue and Gene Therapies, FDA, CBER

Date: November 7, 2014
Time: 8:05 to 8:20 AM
Location: National Harbor, MD

FDA Organization

- CBER (Center for Biologics Evaluation and Research): vaccines, blood and blood products, human tissue/tissue products for transplantation, cells, gene therapy
  - Office of Cellular, Tissue, and Gene Therapies
  - Office of Vaccines Research and Review
  - Office of Blood Research and Review

  Product Offices
- CDER (Center for Drug Evaluation and Research): drugs, some biological products
- CDRH (Center for Devices and Radiological Health): devices for treatment, implants, diagnostic devices
- CVM (Center for Veterinary Medicine)
- CFSAN (Center for Food Safety and Applied Nutrition)
- NCTR (National Center for Toxicological Research)
- CTP (Center for Tobacco Products)
- ORA (Office of Regulatory Affairs)
- OC (Office of Commissioner)

2

FDA Regulation of Oncology Products

- Office of Hematology and Oncology Drug Products (OHOP), CDER
  - Drugs (small molecules)
  - Biologics, including Monoclonal Antibodies, Therapeutic Proteins, Cytokines
- Office of Cellular, Tissue and Gene Therapy, (OCTGT) CBER
  - Cell therapies
  - Gene Therapies
  - Oncolytic viruses
  - Therapeutic vaccines and immunotherapies
- Center for Device Radiological Health (CDRH)
  - Devices
    - Companion Diagnostics
    - Delivery devices

CBER Office of Cellular, Tissue, and Gene Therapies (OCTGT)

Office of the Director
Celia M.Witten, Ph.D., M.D., Director
Stephanie Simek, Ph.D. Deputy Director
Suzanne Epstein, Ph.D. Associate Director of Research
Richard McFarland, M.D., Ph.D., Associate Director of Policy

Division of Cellular and Gene Therapies
Raj Puri, M.D., Ph.D., Director
Kimberly Benton, Ph.D., Deputy Director

Division of Human Tissues
Ellen Lazarus, M.D., Director

Division of Clinical Evaluation and Pharmacology/Toxicology
Wilson Bryan, M.D., Director
Oncology Branch (Chief: Ke Liu, M.D., Ph.D.)

CDER Office of Hematology and Oncology Products (OHOP)

Office of the Director
Richard Pazdur, M.D. Director

Division of Hematology Oncology Toxicology
John Leighton, Ph.D., Director

Division of Oncology Products 1
Amna Ibrahim, M.D., Acting Director

Division of Oncology Products 2
Patricia Keegan, M.D, Director

Division of Hematology Products
Ann Farrell, M.D., Director

Oncology Product Approvals by OCTGT

- APC-pulsed with GMCSF-PAP – for ARPC
- BCG Live (Intravesical) – for bladder cancer
- HPC, Cord Blood from 5 Blood Centers
  - *Indication:* HPC, Cord Blood is an allogeneic cord blood hematopoietic progenitor cell therapy indicated for use in unrelated donor hematopoietic progenitor cell transplantation procedures in conjunction with an appropriate preparative regimen for hematopoietic and immunologic reconstitution in patients with disorders affecting the hematopoietic system that are inherited, acquired, or result from myeloablative treatment.

Recent Guidances (OCTGT)

- Guidance for Industry: Preclinical Assessment of Investigational Cellular and Gene Therapy Products 11/2013

- Draft Guidance for Industry: Considerations for the Design of Early Phase Clinical Trials of Cellular and Gene Therapy Products 7/2013
  - CTGT Advisory Committee discussion April 2014

- Draft Guidance for Industry: Determining the Need for and Content of Environmental Assessments for Gene Therapies, Vectored Vaccines, and Related Recombinant Viral or Microbial Products. 6/2014.
- This guidance will supplement the guidance entitled "Guidance for Industry: Environmental Assessment of Human Drug and Biologics Applications" dated July 1998, (July 27, 1998, 63 FR 40127).

7

Recent Guidances (OCTGT)

- Draft Guidance: Design and Analysis of Shedding Studies for Virus or Bacteria-Based Gene Therapy and Oncolytic Products. 7/2014.
  - This guidance describes FDA's current thinking on how and when shedding data should be collected, and how that shedding data can be used to evaluate the potential for the unintended transmission to untreated individuals. http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/CellularandGeneTherapy/ucm404050.htm

    - CTGT Advisory Committee discussion held 11/6/2014

Recent Guidances (CDER/CBER)

- Guidance for Industry: Expedited Programs for Serious Conditions—Drugs and Biologics. 5/30/2014
  - (*A single resource for information on FDA's policies and procedures as well as threshold criteria generally applicable to conclude that a drug is a candidate for one or more of the expedited development and review programs:* ***fast track designation, breakthrough therapy designation, accelerated approval, and priority review designation***)

- Guidance for Industry: Pathologic Complete Response in Neoadjuvant Treatment of High-Risk Early-Stage Breast Cancer: Use as an Endpoint to Support Accelerated Approval 10/2014 [CDER]

9

Recent Guidances (CDRH)

- **Guidance for Industry: In Vitro Companion Diagnostic Devices (August 6, 2014)**

- ***Draft Guidance for Industry, Food and Drug Administration Staff, and Clinical Laboratories: Framework for Regulatory Oversight of Laboratory Developed Tests (LDTs). October 3, 2014**

  This draft Guidance document proposes a risk-based phased-in framework for oversight of laboratory developed tests (LDTs)

- ***Draft Guidance for Industry, Food and Drug Administration Staff, and Clinical Laboratories: FDA Notification and Medical Device Reporting for Laboratory Developed Tests (LDTs). October 3, 2014**

  This accompanying draft guidance describes the notification process for LDTs and the Medical Device Reporting (MDR) requirements

The dockets for public comment for these guidances will be open for 120 days from October 3, 2014.

Workshops

- **Synergizing Efforts in Standards Development for Cellular Therapies and Regenerative Medicine Products**. March 31, 2014.

- **FDA Public Workshop: Innovations in Breast Cancer Drug Development – Next Generation Oncology Trials, Breast Cancer Workshop**, October 21, 2014.

- **Clinical Investigator Training Course**, November 4-6, 2014.

Breakthrough Therapy Designation

- New designation created on July 9, 2012 the Food and Drug Administration Safety and Innovation Act (FDASIA) Criteria
  - Serious condition
  - Preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapy on one or more clinically significant endpoints
- Features
  - Intensive guidance on efficient drug development
  - Organizational commitment
  - Eligible for rolling review

12

Breakthrough Therapy Designation

- As of October 1, 2014, FDA received numerous BT designation requests for oncology products.
  - ~30 requests granted

13

Useful FDA Information

- References for the Regulatory Process for the Office of Cellular, Tissue, and Gene Therapies (OCTGT) http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/OtherRecommendationsforManufacturers/ucm094338.htm

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

Public Access to CBER

CBER website:
http://www.fda.gov/BiologicsBloodVaccines/default.htm

Phone: 1-800-835-4709 or 240-402-8010

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

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

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or Lori.Tull@fda.hhs.gov or by calling (240) 402-8361