

# Assessment of Cardiovascular Toxicities in Immuno-Oncology Trials

December 1, 2017

Organized by FDA with support from: AACR, ACC, AHA & ASCO

Co-Chairs: Dr. Laleh Amiri-Kordestani and Dr. Javid Moslehi

## AGENDA

	Topics	Speakers
8:30-9:00	Registration	
9:00-9:10	Welcome and Introduction	<b>Laleh Amiri-Kordestani, MD</b> FDA/CDER <b>Javid Moslehi, MD</b> Vanderbilt School of Medicine Cardio-Oncology Program
<b>Session 1: Immuno-Oncology and Combination Immunotherapies</b> Moderator: <b>Marc Theoret, MD; FDA/OCE</b>		
9:10-9:25	Immunology Overview	<b>Andrew Lichtman, MD, PhD</b> Harvard Medical School Pathology
9:25-9:40	Introduction to Cancer Immunotherapies	<b>James Gulley, MD, PhD</b> National Cancer Institute Center for Cancer Research Immunotherapy
9:40-9:50	Combination Cancer Immunotherapies	<b>Jeffrey Sosman, MD</b> Northwestern University Robert H. Lurie Comprehensive Cancer Center; Immuno-Oncology
9:50-10:10	Summary and Panel Discussion Question and Answer	<b>Douglas Johnson, MD, MSCI</b> with Panel Vanderbilt-Ingram Cancer Center Hematology/Oncology
<b>Session 2: General Toxicities of Cancer Immunotherapies</b> Moderators: <b>Apostolia (Lia) Tsimberidou, MD, PhD; MD Anderson Cancer Center</b> <b>and Javid Moslehi, MD; Vanderbilt School of Medicine Cardio-Oncology Program</b>		
10:10-10:25	Clinical Toxicities with Immunotherapies	<b>Michael Atkins, MD</b> Georgetown-Lombardi Cancer Center Medical Oncology; Immunotherapy
10:25-10:35	Eligibility Criteria for Immune-oncology Trials	<b>Douglas Johnson, MD, MSCI</b> Vanderbilt-Ingram Cancer Center Hematology/Oncology
10:35-10:50	Autoimmunity Associated with Checkpoint Inhibitors: Rheumatologist's perspective	<b>Paul "PJ" Utz, MD</b> Stanford School of Medicine Rheumatology
10:50-11:10	Panel Discussion Question and Answer	<b>Nicole Gormley, MD</b> and Panel FDA/CDER
11:10-11:25	Break	

# Assessment of Cardiovascular Toxicities in Immuno-Oncology Trials

December 1, 2017

Organized by FDA with support from: AACR, ACC, AHA & ASCO

Co-Chairs: Dr. Laleh Amiri-Kordestani and Dr. Javid Moslehi

## AGENDA

<b>Session 3: Cardiometabolic Toxicities in Immuno-Oncology Trials</b>		
Moderator: <b>Jeffrey Sosman, MD</b> ; Northwestern Univ. Robert H. Lurie Comprehensive Cancer Center		
<b>11:25-11:35</b>	Immunotherapy-associated Myocarditis: Dilemmas for the Practicing Clinician	<b>JoAnn Lindenfeld, MD, FHSA</b> Vanderbilt Heart and Vascular Institute Heart Failure/Cardiac Transplant
<b>11:35-11:45</b>	Cardiovascular Toxicities Associated with Checkpoint-Inhibitors	<b>Javid Moslehi, MD</b> Vanderbilt School of Medicine Cardio-Oncology Program
<b>11:45-11:55</b>	Diabetes associated with Immune Checkpoint Inhibitors-Endocrinologist's Perspective	<b>Kevan Herold, MD</b> Yale School of Medicine Immunobiology
<b>11:55-12:05</b>	Cancer Immunotherapy-associated Myositis and Myasthenia Gravis	<b>Andrew Mammen, MD, PhD</b> National Cancer Institute Center for Cancer Research Laboratory of Muscle Stem Cells & Gene Regulation
<del><b>12:05-12:15</b></del>	<del>Cardiovascular Complications associated with Other Cancer Immunotherapies</del>	<del><b>Christian Hinrichs, MD</b> National Cancer Institute Center for Cancer Research Cellular Therapy</del>
<b>12:05-12:35</b>	Panel Discussion Question and Answer	<b>Chaohong Fan, MD, PhD</b> FDA/CBER <b>Javid Moslehi, MD</b> and Panel Vanderbilt School of Medicine Cardio-Oncology Program
<b>12:35-1:25</b>	Lunch	
<b>Session 4: Myocarditis Overview</b>		
Moderator: <b>Ana Barac, MD, PhD</b> ; MedStar Health Research Institute		
<b>1:25-1:40</b>	General Pathophysiology of Myocarditis	<b>Kirk Knowlton, MD</b> Intermountain Medical Center; Salt Lake City; Cardiovascular Research
<b>1:40- 1:55</b>	Clinical Myocarditis: Diagnosis and Management	<b>Mariell Jessup, MD, FAHA, FESC, FACC</b> Leducq Foundation Cardiovascular Disease
<b>1:55-2:05</b>	Immune-Checkpoint Inhibitor Related Myocarditis: Pathophysiology	<b>Andrew Lichtman, MD, PhD</b> Harvard Medical School Pathology <b>Javid Moslehi, MD</b> Vanderbilt School of Medicine Cardio-Oncology Program
<b>2:05-2:30</b>	Panel Discussion Question and Answer	<b>Shari Targum, MD</b> FDA/CDER/Division of Cardiovascular and Renal Products; <b>Mr. John DeWolf</b> and Panel Patient Perspective

# Assessment of Cardiovascular Toxicities in Immuno-Oncology Trials

December 1, 2017

Organized by FDA with support from: AACR, ACC, AHA & ASCO

Co-Chairs: Dr. Laleh Amiri-Kordestani and Dr. Javid Moslehi

## AGENDA

<b>Session 5: Screening/Monitoring for Cardiovascular Toxicities associated with Cancer Immunotherapies</b>		
Moderator: <b>Daniel Lenihan, MD</b> ; <i>Washington University</i>		
<b>2:30-2:40</b>	How to Screen for Cardiotoxicity	<b>Susan Gilchrist, MD</b> MD Anderson Cancer Center Cardiology
<b>2:40-2:50</b>	Imaging Modalities to Diagnose Cardiovascular Toxicities	<b>Bonnie Ky, MD, MSCE</b> University of Pennsylvania, Perelman School of Medicine Translational Cardiovascular Epidemiology
<b>2:50-3:00</b>	Adjudicating Cardiovascular Events in Immuno-Oncology Trials	<b>Marc Bonaca, MD, MPH</b> Brigham and Women's Hospital, Harvard Medical School Heart & Vascular Medicine
<b>3:00 to 3:25</b>	Panel Discussion Question and Answer	<b>Alexander Lyon, MA, BM, BCh, PhD, FRCP, FHFA</b> and Panel Royal Brompton Hospital, London Cardiology
<b>3:25 to 3:35</b>	Break	
<b>3:35 to 3:50</b>	Modernizing Eligibility Criteria for Oncology Clinical Trials	<b>Julia Beaver, MD</b> FDA/CDER
<b>Session 6: From Big data to Smart Data for Identification of Cardiovascular Toxicities</b>		
Moderators: <b>Sean Khozin, MD</b> ; <i>FDA/OCE</i> and <b>Elad Sharon, MD, MPH</b> ; <i>NCI, Investigational Drugs</i>		
<b>3:50-4:00</b>	Leveraging Big Data in Drug Development: Toxicity Assessment & Signal Detection	<b>Sean Khozin, MD, MPH</b> FDA/OCE
<b>4:00-4:10</b>	ASCO's CancerLinQ: Using real-world evidence for discovery	<b>Robert Miller, MD, FACP, FASCO</b> CancerLinQ American Society of Clinical Oncology
<b>4:10-4:20</b>	Patient-Generated Data	<b>Sally Okun, RN, MMHS</b> Patients Like Me
<b>4:20-4:40</b>	Post-Marketing Drug Safety Surveillance: Cardiovascular Toxicities	<b>Connie Cheng, PharmD, BCOP</b> FDA/CDER/Office of Surveillance and Epidemiology (OSE) <b>Pritpal Singh, PharmD, BCOP</b> FDA/CDER/OSE
<b>4:40-5:00</b>	Panel Discussion Question and Answer	FDA/CDER/OSE: <b>Daniel Woronow, MD</b> ; <b>Afrouz Nayernama, PharmD</b> ; <b>Peter Waldron, MD</b> ; and Panel
<b>5:00</b>	Adjournment	