An AACR Special Conference Advances in Melanoma: From Biology to Therapy

September 20-23, 2014 • Loews Philadelphia • Philadelphia, PA

Conference Co-Chairpersons

Suzanne L. Topalian, Johns Hopkins Kimmel Comprehensive Cancer Center, Baltimore, MD Keith T. Flaherty, Massachusetts General Hospital, Boston, MA Levi A. Garraway, Dana-Farber Cancer Institute, Boston, MA

With so many recent advances in treating metastatic melanoma, including approaches like immunotherapies, targeted therapies, and combination therapies, melanoma research is at a critical point where it is extremely important for the field to have a continuous exchange of information. Despite the success of various "targeted" inhibitors, therapeutic responses in melanoma patients are often short-lived due to rapidly acquired drug resistance. Therefore, it is essential that melanoma researchers translate the novel understanding of melanoma biology to decipher the mechanisms of innate and acquired drug resistance for the development of improved therapeutic options. To bridge the gap between scientists and clinician-scientists' professional practice, this Special Conference will provide a platform for discussion and potential collaborations for the discovery of new therapeutic targets.

The AACR would like to thank the following organizations for their generous support of this conference.

Professional Educational Grants Amgen **Genentech Merck Supporters Melanoma** Celgene **Research Alliance 1FLANOMA** OUNDATION **Travel Award Supporters** Af ac. Center to Reduce **Cancer Health** Disparities Grants

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ADVANCES IN MELANOMA: FROM BIOLOGY TO THERAPY

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Conference Program

Saturday, September 20

7:00 p.m8:00 p.m.		Welcome Remarks and Keynote Address Commonwealth Hall	
		Session Chairperson: Suzanne L. Topalian, Johns Hopkins Kimmel Comprehensive Cancer Center, Baltimore, MD	
	BRAF a	and RAS signaling in melanoma: From biology to therapy d Marais, Cancer Research UK Manchester Institute, Manchester, UK	
8:00 p.m9:30 p.m.		Welcome Reception Millennium Hall and Foyer area	
Sunday, Septe	mber 21	I	
7:00 a.m8:00 a.m.		Continental Breakfast Millennium Hall and Foyer area	
8:00 a.m10:00 a.m.		Session 1: Advances in Melanoma Biology Session Chairperson: Levi A. Garraway, Dana-Farber Cancer Institute, Boston, <i>MA</i> Commonwealth Hall	
8:00 a.m.	Micro R Eva M.	NA as prognostic tools and therapeutic targets in melanoma Hernando, New York University, New York, NY	
8:30 a.m.	Epigenomic landscape of human melanoma Lynda Chin, The University of Texas MD Anderson Cancer Center, Houston, TX		
9:00 a.m.	Lineage-specific oncogenic pathways in melanoma progression and drug response Maria S. Soengas, Spanish National Cancer Research Centre, Madrid, Spain		
9:30 a.m.	Small RNAs reveal nuclear hormone receptor targeting as a novel therapy for melanoma Sohail Tavazoie, Rockefeller University, New York, NY		
10:00 a.m10:	15 a.m.	Break	

Commonwealth Foyer

10:15 a.m.-12:15 p.m. Session 1: Advances in Melanoma Biology (continued)

- **10:15 a.m.** Genetic alterations in melanocytic neoplasia Boris C. Bastian, University of California, San Francisco, CA
- **10:45 a.m.** Metastasis in the zebrafish system Richard M. White, Memorial Sloan Kettering Cancer Center, New York, NY
- 11:05 a.m. Integrative analysis of functional genomics and copy number variation nominates potential therapeutic intervention targets for melanoma* Banu Eskiocak, UT Southwestern Medical Center, Dallas, TX
- 11:25 a.m. Specific inhibition of hTERT expression in melanoma by targeting common promoter mutations which cause quadruplex DNA instability* Donald M. Miller, University of Louisville, Louisville, KY
- 11:45 a.m. Principles of resistance to targeted therapy Levi A. Garraway
- 12:15 p.m.-2:30 p.m. Poster Session A with Lunch Millennium Hall
- 2:30 p.m.-4:00 p.m. Session 2: Advances in Melanoma Pathogenesis and Risk Session Chairperson: J. William Harbour, University of Miami, Miami, FL Commonwealth Hall
 - **2:30 p.m.** What's new in melanoma etiology? Margaret A. Tucker, National Cancer Institute, Bethesda, MD
 - **3:00 p.m.** Molecular and genomic landscape of uveal melanoma J. William Harbour Dr. Harbour's talk is supported by the Ocular Melanoma Foundation.
 - **3:30 p.m.** The genetic architecture of melanoma susceptibility Nicholas K. Hayward, Queensland Institute of Medical Research, Herston, Australia
- 4:00 p.m.-5:00 p.m. Break and travel to the site of Joint Session with AACR Special Conference on Hematologic Malignancies: Translating Discoveries to Novel Therapies

*Short talks from proffered papers.

5:00 p.m.-7:30 p.m. Joint Session: Clinical Science Intersections between Melanoma and Hematologic Malignancies Sheraton Philadelphia Downtown Hotel Liberty Ballroom AB (Ballroom Level)

Two melanoma experts will be joined by two speakers from the AACR Special Conference on Hematologic Malignancies: Translating Discoveries to Novel Therapies to create a unique session and an opportunity to interact with colleagues across disciplines. Overlapping themes in solid and blood cancers will be discussed in the areas of signaling, targeted therapy, and immunotherapy.

This session is generously supported by Celgene and the Melanoma Research Alliance.

5:00 p.m.	Introduction by Session Chairpersons Kenneth C. Anderson, Dana-Farber Cancer Institute, Boston, MA Levi A. Garraway, Dana-Farber Cancer Institute, Boston, MA
	MRA: Powerful research, faster results Wendy K.D. Selig, President and CEO, Melanoma Research Alliance, Washington, DC
	Research: Moving beyond hope to outcomes Elizabeth Thompson, CEO, Lymphoma Research Foundation, New York, NY
5:15 p.m.	Preclinical models for targeting oncogenic Ras signaling in cancer Kevin M. Shannon, University of California, San Francisco, CA
5:45 p.m.	Treatment of non-V600-mutated BRAF melanoma: A role for combination MEK and CDK4/6 inhibition Jeffrey A. Sosman, Vanderbilt University Medical Center, Nashville, TN
6:15 p.m.	PD-1 pathway immunotherapy Gordon J. Freeman, Dana-Farber Cancer Institute, Boston, MA
6:45 p.m.	Adoptive T cell therapy with CAR modified T cells: We have a model A Ford, can we build a Ferrari? Renier J. Brentjens, Memorial Sloan Kettering Cancer Center, New York, NY
7:15 p.m.	Panel Discussion

7:30 p.m.-9:00 p.m. Reception for the attendees of both AACR Special Conferences Sheraton Philadelphia Downtown Hotel Liberty Ballroom Foyer and Liberty Ballroom D (Ballroom Level) 7:00 a.m.-8:00 a.m. Continental Breakfast Millennium Hall and Foyer area

8:00 a.m.-10:00 a.m. Session 3: Principles of Response and Resistance to Therapy Session Chairperson: Suzanne L. Topalian, Johns Hopkins Kimmel Comprehensive Cancer Center, Baltimore, MD Commonwealth Hall

- 8:00 a.m. A unified model for RAF activation and therapeutic inhibition in human tumors Neal Rosen, Memorial Sloan Kettering Cancer Center, New York, NY
- 8:30 a.m. Evolution of melanoma resistance to MAPK inhibition Roger S. Lo, University of California, Los Angeles, CA
- **9:00 a.m.** Adoptive T-cell transfer for metastatic melanoma: What are the relevant antigens? James C. Yang, National Cancer Institute, Bethesda, MD
- 9:30 a.m. Response and resistance to PD-1 pathway blockade Suzanne L. Topalian
- 10:00 a.m.-10:15 a.m. Break Commonwealth Foyer
- 10:15 a.m.-12:15 p.m. Session 3: Principles of Response and Resistance to Therapy (continued)
 - **10:15 a.m.** Targeting AMPK signaling in melanoma Bin Zheng, Massachusetts General Hospital, Boston, MA
 - 10:35 a.m. CD8+ T-cell distribution and immunomodulator expression in BRAF-mutant melanoma affect the response to BRAF inhibitor and chemotherapy* (not designated for CME credit) Matthew J. Wongchenko, Genentech, Inc., South San Francisco, CA
 - 10:55 a.m. CD40L- and IFNγ-mediated signaling is required for BRAF inhibitor-mediated antitumor immunity* Susan M. Kaech, Yale University, New Haven, CT
 - **11:15 a.m.** Skin pigmentation pathways and melanoma risk David E. Fisher, Massachusetts General Hospital, Boston, MA

11:45 a.m.-2:00 p.m. Lunch on Own/Free Time

*Short talks from proffered papers.

2:00 p.m4:00	p.m. Session 4: Immunity and Microenvironment Session Chairperson: Meenhard Herlyn, The Wistar Institute, Philadelphia, PA Commonwealth Hall
2:00 p.m.	The immunobiology of the melanoma tumor microenvironment and efficacy of immunotherapies Thomas F. Gajewski, University of Chicago, Chicago, IL
2:30 p.m.	Using genomics to identify tumor specific antigens and inform cancer immunotherapy Robert D. Schreiber, Washington University School of Medicine, St. Louis, MO
3:00 p.m.	Mechanisms of protective tumor immunity Glenn Dranoff, Dana-Farber Cancer Institute, Boston, MA
3:30 p.m.	Macrophage and B cell support for melanoma cells Meenhard Herlyn

4:15 p.m.-5:15 p.m. Panel Discussion Unmet Medical and Scientific Needs in Melanoma: What Are They Now? Moderator: Michael B. Atkins, Georgetown Lombardi Comprehensive Cancer Center, Washington, DC Commonwealth Hall

Panelists:

Ze'ev Ronai, Sanford-Burnham Medical Research Institute, La Jolla, CA

Andrew E. Aplin, Thomas Jefferson University Kimmel Cancer Center, Philadelphia, PA

Cyril Konto, Bristol-Myers Squibb, Wallingford, CT

Lynn Schuchter, University of Pennsylvania School of Medicine, Philadelphia, PA

John A. Thompson, University of Washington, Seattle, WA

Magdalena Thurin, DCTD, National Institutes of Health, Bethesda, MD

5:15 p.m.-7:30 p.m. Poster Session B and Reception Millennium Hall

7:30 p.m. - Evening on Own

Tuesday, September 23

7:00 a.m.-8:00 a.m. Continental Breakfast Millennium Hall and Foyer area

- 8:00 a.m.-10:00 a.m. Session 5: Principles of Novel Therapeutics in Combinations Session Chairperson: Keith T. Flaherty, Massachusetts General Hospital, Boston, MA Commonwealth Hall
 - 8:00 a.m. Towards a unified model of RAF inhibitor sensitivity David B. Solit, Memorial Sloan Kettering Cancer Center, New York, NY
 - 8:30 a.m. Combination immunotherapy for melanoma Jedd D. Wolchok, Memorial Sloan Kettering Cancer Center, New York, NY
 - 9:00 a.m. Combinations with immune therapy F. Stephen Hodi, Dana-Farber Cancer Institute, Boston, MA
 - 9:30 a.m. PI3-kinase inhibition forestalls the onset of MEK1/2 inhibitor resistance in BRAFV600E/PTENNull melanoma Martin McMahon, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

10:00 a.m.-10:15 a.m. Break Commonwealth Foyer

10:15 a.m.-12:15 p.m. Session 5: Principles of Novel Therapeutics in Combinations (continued)

- **10:15 a.m.** Combined targeted therapies: Where to next? Georgina V. Long, Melanoma Institute Australia and the University of Sydney, Sydney, Australia
- 10:45 a.m. Combining targeted therapy and immune checkpoint blockade to improve responses Jennifer A. Wargo, The University of Texas MD Anderson Cancer Center, Houston, TX
- 11:05 a.m. Combination therapy with anti-CTLA4 and anti-PD1 leads to distinct immunologic changes in vivo* Kavita Dhodapkar, Yale University, New Haven, CT
- 11:25 a.m. Integrated epigenomic profiling reveals widespread demethylation in melanoma and reveals CSF-1 receptor as an aberrant regulator of malignant growth and invasion* Orsolya Giricz, Albert Einstein College of Medicine, Bronx, NY
- 11:45 a.m. Prospects for personalizing combination therapy with predictive or early response biomarkers Keith T. Flaherty
- 12:15 p.m. Closing Remarks and Departure

 Commonwealth Hall

Keith T. Flaherty, Massachusetts General Hospital, Boston, MA

*Short talks from proffered papers.