

Keystone Symposia in Breckenridge

Uncovering Mechanisms of Immune-Based Therapy in Cancer and Autoimmunity

Beaver Run Resort | Breckenridge, Colorado, USA | February 18–22, 2019

Scientific Organizers:

Daniel J. Cua, Merck Research Laboratories, USA

E. John Wherry, University of Pennsylvania, USA

Carla V. Rothlin, Yale University, USA

Held in honor of cancer immunotherapy research pioneers Dr. Alan Korman and Dr. Nils Lonberg, thanks to generous support from an anonymous donor

Organized in collaboration with Cancer Research UK



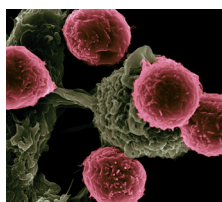
Significant progress has been made in the field of immunology over the past two decades. Therapeutic agents such as anti-TNF, anti-CD20, anti-CTLA4, and more recently anti-PD1 have benefited countless patients. This is a unique time for immunologists and clinical scientists to learn from the sheer number of clinical trials assessing immune targets for treatment of cancer and autoimmunity. Currently, there are more than 500 clinical studies testing combinations of checkpoint inhibitors with other pathway antagonists, which will begin to uncover the “immune mechanisms” driving the disease process. This is highlighted by the observation that more than 10-20% of patients treated with anti-PD1 and/or CTLA4 later suffer from autoimmunity (e.g., anti-PD1 treatment is linked to Type 1 diabetes and anti-CTLA-4 linked to IBD). The response rate to cancer treatment is greater in patients with autoimmune predisposition; therefore, the autoimmune side effect is in part associated with patient genetics. Conference topics will include discussions of combination immunotherapies, the genetics of patient response, and strategies to reprogram adaptive and innate immunity, which are key to harnessing the immune system to fight cancer and autoimmune diseases. The symposium will end with a special closing lecture on the future of immunotherapy.

Plenary Session Topics:

- Checkpoint Blockade Predisposes Patients to Autoimmunity
- Genetics of Autoimmunity and Cancer:
 - What Are the Common Denominators?
- Cellular Reprogramming: Regulatory vs. Functional Fate
- Workshop: Immune Monitoring of Checkpoint Blockade Therapies
- Cellular Reprogramming: CD8 T Cell Exhaustion and CD4 T Cell Lineages
- Macrophage Biology, Tissue Repair, Autoimmunity and Cancer
- Neutrophils and MDSCs in Host Defense and Cancer
- Finding the Cure for Cancer
- Integrated Themes across Preclinical and Clinical Treatment of Cancer and Autoimmunity

Abstract Deadline: Nov 15, 2018; Discounted Registration Deadline: Dec 18, 2018

Visit www.keystonesymposia.org/19B3 for more details.



KEYSTONE SYMPOSIA™
on Molecular and Cellular Biology
Accelerating Life Science Discovery
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Uncovering Mechanisms of Immune-Based Therapy in Cancer and Autoimmunity (B3)

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Abstract & Scholarship Deadline: October 23, 2018 / Abstract Deadline: November 15, 2018 / Discounted Registration Deadline: December 18, 2018

MONDAY, FEBRUARY 18

Arrival and Registration

TUESDAY, FEBRUARY 19

Welcome and Keynote Address

Arlene H. Sharpe, Harvard Medical School, USA
Checkpoint Blockade for Cancer Immunotherapy

Checkpoint Blockade Predisposes Patients to Autoimmunity

Jeffrey A. Bluestone, University of California, San Francisco, USA
Development of Syngeneic NOD Tumor Models to Study Tumor Immunity in Autoimmune-Prone Mice

Jennifer Ann Wargo, University of Texas MD Anderson Cancer Center, USA
Immune Mechanisms Influencing Checkpoint Therapy

Dario A. A. Vignali, University of Pittsburgh School of Medicine, USA
Regulation of Autoimmunity and Cancer by PD-1 and LAG3

Short Talk(s) Chosen from Abstracts

Genetics of Autoimmunity and Cancer: What are the Common Denominators?

Alex Marson, University of California, San Francisco, USA
Decoding T Cell Circuitry

Elissa K. Deenick, Garvan Institute of Medical Research, Australia
Talk Title to be Announced

Wenjun Ouyang, Amgen, Inc., USA
Lessons from Human Genetics for Autoimmunity and Cancer Therapy
Short Talk(s) Chosen from Abstracts

Poster Session 1

WEDNESDAY, FEBRUARY 20

Cellular Reprogramming: Regulatory vs. Functional Fate

Alexander Y. Rudensky, HHMI/Memorial Sloan Kettering Cancer Center, USA
Treg Stability in Disease

Mark S. Anderson, University of California, San Francisco, USA
Modulating Self-Tolerance in Autoimmunity and Cancer

Maria Grazia Roncarolo, Stanford University School of Medicine, USA
T Regulatory Cell-Based Therapy in Cancer and Autoimmunity

Eric Meffre, Yale University School of Medicine, USA
Impaired B Cell Tolerance and Autoimmunity: CTLA-4 Blockade Dirty Secret

Short Talk(s) Chosen from Abstracts

Workshop 1: Immune Monitoring of Checkpoint Blockade Therapies

Short Talks Chosen from Abstracts

Cellular Reprogramming: CD8 T Cell Exhaustion and CD4 T Cell Lineages

E. John Wherry, University of Pennsylvania, USA
T Cell Exhaustion and Fate Decisions – Implications for Immunotherapy

Andrea Schietinger, Memorial Sloan Kettering Cancer Center, USA
Epigenetics of Tumor Immunity

W. Nicholas Haining, Dana-Farber Cancer Institute, USA
Epigenetic Engineering of Tumor Immunity
Short Talk(s) Chosen from Abstracts

Poster Session 2

THURSDAY, FEBRUARY 21

Macrophage Biology, Tissue Repair, Autoimmunity and Cancer

Mikael J. Pittet, Massachusetts General Hospital, USA
Myeloid Cells in Cancer Therapies

Carla V. Rothlin, Yale University, USA
Coincidence Detectors in Tissue Repair

Ming O. Li, Memorial Sloan Kettering Cancer Center, USA
Deconstructing the Antigen-Presenting Cell Compartment in Cancer

Fiona M. Powrie, University of Oxford, UK
Inflammation Driven Cancer: Host and Microbial Pathways

Short Talk(s) Chosen from Abstracts

Neutrophils and MDSCs in Host Defense and Cancer

Matthew F. Krummel, University of California, San Francisco, USA
Myeloid Cells as Arbiters of Self

Catherine Hedrick, La Jolla Institute for Allergy and Immunology, USA
Neutrophil Heterogeneity in Cancer

Susan M. Kaech, The Salk Institute, USA
Nutrient Regulation of Anti-Tumor Immunity

Dmitry I. Gabrilovich, Wistar Institute, USA
Neutrophils and PMN-MDSC in Cancer: Two Sides of Functional Diversity

Short Talk(s) Chosen from Abstracts

Poster Session 3

FRIDAY, FEBRUARY 22

Finding the Cure for Cancer

Drew M. Pardoll, Johns Hopkins University School of Medicine, USA
Checkpoint Inhibition

Alan J. Korman, Bristol-Myers Squibb, USA
Immune Checkpoint Blockade and Adverse Events in Mice, Cynos and Man

Emmett V. Schmidt, Merck Research Labs, USA
Drivers in the Clinical Development of Cancer Combination Therapy – Pembrolizumab Combination Therapies, Emerging Results

Robert L. Coffman, Dynavax Technologies, USA
Talk Title to be Announced

Short Talk(s) Chosen from Abstracts

Integrated Themes across Preclinical and Clinical Treatment of Cancer and Autoimmunity

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Mark J. Smyth, QIMR Berghofer Medical Research Institute, Australia

What we can Learn from Combination Immunotherapy

Hergen Spits, University of Amsterdam, Netherlands

Harnessing the Power of the Immune System for Therapy: Past

Present and Future

Daniel J. Cua, Merck Research Laboratories, USA

Autoimmunity

Short Talk Chosen from Abstracts

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

SATURDAY, FEBRUARY 23

Departure