

4TH ANNUAL

IO COMBINATIONS 360°



JUNE 20 -21, 2019
WYNDHAM PHILADELPHIA HISTORIC DISTRICT, PHILADELPHIA, PA



Executive Sponsors



DAY ONE - THURSDAY, JUNE 20, 2019**Registration and Breakfast****DISCOVERY / PRECLINICAL SCIENCE PLENARY SESSION****Opening Keynote****Drew Pardoll, MD, PhD**

*Director, Bloomberg-Kimmel Institute for Cancer Immunotherapy,
Professor of Oncology, Johns Hopkins University School of
Medicine*

Preclinical combinations with Bispecific T-cell engager (BiTE®) Immune-therapy and Translation to the Clinic

This talk will focus on PD1 combinations including an update on Blynicyto/Keytruda combination.

Julie Bailis, PhD

Principal Scientist, Oncology Research, Amgen

Recombinant MVA an Immunotherapy for Cancer: More Than a Vaccine

This talk will include preclinical data on Bavarian Nordic's vaccine platform as a tool to modify the global immune response by encoding target antigens, encoding costimulatory molecules, and encoding cytokines. This allows one agent to be used that can solve many problems that otherwise are being addressed, clinically, by multiple agents. Instead of combining vaccine + cytokine + checkpoint, in turn may be able to repurpose vectors to give them either intravenously or intratumorally (or both) to modify the TME, active innate immune responses including NK cells, generate T cell activation peripherally and locally. Then, combine with checkpoint inhibitors and ADCC-inducing antibodies to drive potent anti-tumor effect. These findings will be translated into various clinical trials in the next 6-18 months.

Christopher Heery, MD

Chief Medical Officer, Bavarian Nordic

TRANSLATIONAL SCIENCE & EMERGING BIOMARKERS PLENARY SESSION PT 1**Phase III Data with Atezolizumab and Bevacizumab in Kidney Cancer****Mahrukh Huseni**

Scientific Manager, Genentech

The Functional Capacity of Immune Cells as Measured by Single Cell Proteomics Predicts Clinical Outcome Across IO Therapies

Using single cell proteomics to measure the functional capacity or 'fitness' of immune cells has correlated with and been predictive of clinical outcome in CAR-T, TIL, Cancer Vaccine and Checkpoint Inhibitor therapy. This talk will review several of these data sets and discuss applications of IsoPlexis' single cell technology.

Will Singleterry, PhD

Director of Business Development, IsoPlexis

Updates on PARP Inhibition**Darren Hodgson, PhD**

Senior Principal Translational Scientist, Oncology iMED, AstraZeneca

Maximizing immunotherapy Biomarker Discovery with a Multidimensional Tumor Immunogenomics Platform

More accurate, predictive biomarker analysis may assist in the selection of effective combinatorial immunotherapy treatments for patients. Additionally, the complexity of both the tumor and tumor microenvironment suggests a comprehensive approach is needed for robust characterization of the cancer ecosystem. The ImmunolD NeXT platform investigates key aspects of immuno-oncology; from elucidating mechanisms of tumor escape and detecting neoantigens, to identifying novel biomarker signatures and characterizing the immune repertoire. This presentation will focus on the current challenges facing investigators in immuno-oncological translational research including maximizing data generation from a single sample and the analysis of complex data.

Erin Newburn, MS, PhD

Associate Director, Field Applications Scientist, Personalis, Inc

Data-Driven Case Studies by: Mitra Biotech**Mark Paris, PhD**

Associate Director, Translational Applications

Networking Lunch**IO NOVEL TECHNOLOGIES**

This session showcases companies that have technologies and solutions that will help stakeholders in the IO field advance developments that provide treatment for cancer patients.

TRANSLATIONAL SCIENCE & EMERGING BIOMARKERS PLENARY SESSION PT 2**PD1 Resistance with a Multi-Omic Approach**

Anti-PD-1 therapy has transformed cancer care but most patients do not respond. It is increasingly clear that there will be no single biomarker of response to aPD-1, and that a multi-omic approach will be required. This talk will address:

- Orthogonality and correlation of response biomarkers across histologies
- Integration of multi-omic data sets for mechanistic insights into tumor immunobiology
- The translational approaches to PD1 resistance program at the Parker Institute

The focus throughout will be on leveraging molecular data for translational impact.

Danny Wells, PhD

Senior Data Scientist, Parker Institute for Cancer Immunotherapy

How Biomarker Combinations are as Rational as IO Combinations**Jon Armstrong**

Chief Scientific Officer, Cofactor Genomics

Panel: Next Generation Biomarkers

- What's the cutting edge thinking on biomarkers?
- Predictive markers and what are they telling us about the biology?
- What are the mechanisms of resistance/action?
- How do you measure them like PD1 expression and PDL1 expression?
- How much do you need to see in order to have confidence that that combination is going to work? With other agents that target other receptors, biomarkers could be a way to drive a patient stratification. Is that evolving in a positive way? Are we seeing novel things?
- Beyond that are there emerging technologies? Can we detect from blood, biomarkers that will be able to enable clinical desire?
- How are we using machine learning and AI to find additional insights?

Ian McCaffery, PhD

VP and Head of Oncology Translational Research, Janssen Research and Development

Panel: Advancing Bispecifics for Combination Immunotherapy

- What are the types of bispecifics and what are the limitations?
- What are the toxicity related side effects?
- What are the next steps/levels for bispecifics?
- What does the future hold for bispecifics?

Cokey Nguyen, PhD

Senior Director, Oncology R&D, Pfizer

Annual Networking Reception**DAY TWO - FRIDAY, JUNE 21, 2019****Registration and Breakfast****NEXT GENERATION CELL THERAPY PLENARY SESSION****Opening Keynote: Clinical Trials of Double Chimeric Antigen Receptor (CAR) T Cells and Engineered T Cell Combination Therapies**

Bruce Levine, PhD

Barbara and Edward Netter Professor in Cancer Gene Therapy, Perelman School of Medicine, University of Pennsylvania

NK CAR Combinations

Katy Rezvani, MD, PhD

Department of Stem Cell Transplantation and Cellular Therapy, Division of Cancer Medicine, MD Anderson Cancer Center

Combination Strategies for CART Therapies

Michael Kalos, PhD

VP, Immuno-Oncology and Oncology Cellular Therapies, Janssen Oncology

New Opportunities for Cell Therapy Combinations:

- What are the new opportunities in cell therapy for combinations?
- What the challenges are going to be with the microenvironment?
- What is being done to engineer cell therapy?

- How do you develop CARs and TCRs that deliver payloads?
- How do you manufacture all of this beyond mouse models to figure out how to effectively do this in patients?
- How do you actually go about designing trials and testing hypothesis?
- How do you create the regulatory framework to do these types of studies?
- How do you engage with regulatory agencies to get these things moving?

Michael Kalos, PhD

VP, Immuno-Oncology and Oncology Cellular Therapies, Janssen Oncology

Bruce Levine, PhD

Barbara and Edward Netter Professor in Cancer Gene Therapy, Perelman School of Medicine, University of Pennsylvania

BUSINESS ASPECTS FOR IO COMBINATIONS PLENARY SESSION**Approaches to IO Combination Collaborations and Building on Existing Partnerships**

- How do you think about partnering strategically?
- What are the innovative approaches?
- How can partnerships evolve between pharma and biotech?
- How can we as an industry consider those and improve on the process?
- If we look beyond checkpoint inhibitors, where is the next wave and how does that influence approaches to collaborations?

Evaluating and Investing in IO Combinations

This panel brings together perspectives from VCs, Crossover and Public Market investors along with Academia on the following:

- How to evaluate the science and how to figure out who the winners are?
- From an investment perspective, what are the technologies right now and what needs to develop to make them happen
- What science aspects and how much of it do investors at each stage require for decision making?

Asthika Goonewardene

Senior Biotech Analyst, Bloomberg Intelligence

Carlo Rizzuto, PhD

Partner, Versant Ventures

Networking Lunch

IO CLINICAL COMBINATIONS PLENARY SESSION**Pembrolizumab as a Foundational Partner for Combination Immune-Oncology Drug Development**

There are quite a number of evolving data sets which help inform the direction of combination therapy. This talk addresses:

- The foundational nature of PD-1 antibodies as combination partners
- The utility of precision based tools for suggesting potential combinations
- Emerging data which are exemplars of the approach including:
 - Chemo-combinations
 - TKI-combinations
 - IO-IO combinations

Roy Baynes, MD, PhD

SVP, Global Clinical Development, Merck Research Labs

Bempegaldesleukin (NKTR-214): Harnessing the IL-2 pathway in combination immunotherapies

Willem Overwijk, PhD

VP, Oncology Research, Nektar Therapeutics

Taking a “Toll” on Cancer: Combination Strategies with TLR9 to Overcome Immunotherapy Resistance

- Bempegaldesleukin: Structure and function of an engineered IL-2 cytokine prodrug providing sustained IL-2R $\beta\gamma$ -biased signaling
- Preclinical PK, PD, MOA and combination with PD-1 checkpoint inhibition
- Clinical PK, PD, clinical response data and biomarkers in patients with melanoma and bladder cancer
- Combinations under investigation

Joanna Horobin, MB, ChB

SVP, Chief Medical Officer, Idera Pharmaceuticals

Clinical Updates on Vemurafenib + Cobimetinib + Anti-PDL1

Justine Cohen, DO

Oncologist, Center for Melanoma, Massachusetts General Hospital

Conference Concludes