2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

CONFERENCE PROGRAM

Friday, July 19

5:00 p.m.-7:00 p.m. **OPENING KEYNOTE LECTURES**
Grand Ballroom A

Next-generation CAR T cells
Crystal Mackall, Stanford University, Stanford, CA

A path towards successful T-cell therapy for solid cancers
Patrick Hwu, The University of Texas MD Anderson Cancer Center, Houston, TX

7:00 p.m.-9:00 p.m. **OPENING RECEPTION**
Grand Ballroom BC

Saturday, July 20

7:00 a.m.-8:00 a.m. **BREAKFAST**
Grand Ballroom BC

8:00 a.m.-10:00 a.m. **PLENARY SESSION 1: CELLULAR THERAPY CLINICAL UPDATES (I)**
Grand Ballroom A
Session Chair: Christine E. Brown, City of Hope National Medical Center, Duarte, CA

8:00 a.m.-8:30 a.m. **Chimeric antigen receptor T-cell therapy for chronic lymphocytic leukemia**
Saar Gill, University of Pennsylvania, Philadelphia, PA

8:30 a.m.-9:00 a.m. **CAR-T antigen evasion: The emerging role for multitargeted CAR therapy**
David B. Miklos, Stanford University, Stanford, CA

9:00 a.m.-9:30 a.m. **Advancing CAR T cells for the treatment of brain tumors**
Christine E. Brown

9:30 a.m.-9:45 a.m. **Targeting pancreatic cancer using nonengineered, multiantigen-specific T cells (TACTOPS)***
Brandon G. Smaglo, Baylor College of Medicine, Houston, TX

2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

9:45 a.m.-10:00 a.m.	**Cellular immunomonitoring for the first personalized adoptive cellular therapy trial using defined multiple targets (ACTolog® IMA101-101)*** Anna Nowak, Immatics Biotechnologies GmbH, Tübingen, Germany
10:00 a.m.-10:30 a.m.	**BREAK** Grand Ballroom Foyer
10:30 a.m.-12:30 p.m.	**PLENARY SESSION 2: CAR T-CELL ENGINEERING—BARRIERS FOR TARGETING SOLID TUMORS** Grand Ballroom A **Session Chair: Philip D. Greenberg,** Fred Hutchinson Cancer Research Center, Seattle, WA
10:30 a.m.-11:00 a.m.	**Engineering lymphocytes for the adoptive immunotherapy of solid tumors** Stephen Gottschalk, St. Jude Children's Research Hospital, Memphis, TN
11:00 a.m.-11:30 a.m.	**Molecular and epigenetic programs defining tumor-specific T-cell dysfunction and therapeutic reprogrammability** Andrea Schietinger, Memorial Sloan Kettering Cancer Center, New York, NY
11:30 a.m.-12:00 p.m.	**Engineering T cells to eradicate tumors: It starts with the TCR but doesn't stop there** Philip D. Greenberg
12:00 p.m.-12:15 p.m.	**HER2-specific chimeric antigen receptor T cells with NKILA knockout improves therapeutic effects towards HER2+ breast cancer*** Erwei Song, Sun Yat-sen University, Guangzhou, China
12:15 p.m.-12:30 p.m.	**Regulation of CD40L on chimeric antigen receptor T cells enhances immune function translating to antitumor effects*** Michelle Fleury, Obsidian Therapeutics, Cambridge, MA
12:30 p.m.-2:30 p.m.	**LUNCH / POSTER SESSION A** Grand Ballroom BC
2:30 p.m.-4:00 p.m.	**PLENARY SESSION 3: SCALABILITY OF T-CELL THERAPY—DRIVING DOWN COSTS** Grand Ballroom A **Session Chair: Barbra J. Sasu,** Allogene Therapeutics, San Francisco, CA

2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

2:30 p.m.-3:00 p.m.	**Allogene: Leading the next revolution in cell therapy** Barbra J. Sasu
3:00 p.m.-3:30 p.m.	**Scalability of T-cell therapy** Gwen Binder-Scholl, Cabaletta Bio Inc., Philadelphia, PA
3:30 p.m.-4:00 p.m.	**Innovating and planning our way to improve affordability and accessibility for chimeric antigen receptor (CAR) T-cell therapies** Heidi Zhang, Celgene Corp., San Francisco, CA
4:00 p.m.-4:30 p.m.	**BREAK** Grand Ballroom Foyer
4:30 p.m.-6:30 p.m.	**PLENARY SESSION 4: NK AND OTHER IMMUNE CELL THERAPIES** Grand Ballroom A **Session Chair: Catherine M. Bollard,** Children's National Health System, Washington, DC
4:30 p.m.-5:00 p.m.	**Off-the-shelf, CAR-engineered, cord blood–derived NK cells for the treatment of cancer** Katy Rezvani, The University of Texas MD Anderson Cancer Center, Houston, TX
5:00 p.m.-5:30 p.m.	**TGFβ-resistant T and NK cells for cancer** Catherine M. Bollard
5:30 p.m.-6:00 p.m.	**Selective expansion of adaptive natural killer cells for cancer immunotherapy** Karl-Johan Malmberg, The University of Oslo, Oslo, Norway
6:00 p.m.-6:15 p.m.	**ACTR and BOXR T-cell therapies: Addressing the challenges of solid tumors*** Heather Huet, Unum Therapeutics, Cambridge, MA
6:15 p.m.-6:30 p.m.	**Targeting the chemokine receptor CCR4 using chimeric antigen receptor T cells for the treatment of CCR4+ T-cell malignancies*** Marissa Del Real, City of Hope, Duarte, CA
6:30 p.m.	**DINNER ON OWN**

Sunday, July 21

2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

7:00 a.m.-8:00 a.m.	**BREAKFAST** Grand Ballroom BC
8:00 a.m.-10:00 a.m.	**PLENARY SESSION 5: CELLULAR THERAPY CLINICAL UPDATES (II)** Grand Ballroom A **Session Chair: Sattva S. Neelapu,** The University of Texas MD Anderson Cancer Center, Houston, TX
8:00 a.m.-8:30 a.m.	**CAR T-cell therapy for lymphomas: Current and future strategies** Sattva S. Neelapu
8:30 a.m.-9:00 a.m.	**Expanding CAR T-cell therapy to a wide spectrum of pediatric malignancies** Julie R. Park, Seattle Children's Hospital, Seattle, WA
9:00 a.m.-9:30 a.m.	**Addressing relapse associated with leukemic resistance to CAR T cells** Terry J. Fry, University of Colorado Denver Children's Hospital Colorado, Aurora, CO
9:30 a.m.-9:45 a.m.	**Predicting CD19Neg relapse following CAR T-cell therapy in B-cell precursor acute lymphoblastic leukemia*** Pablo Domizi, Stanford University School of Medicine, Stanford, CA
9:45 a.m.-10:00 a.m.	**Phase I adoptive cellular therapy trial with endogenous CD8+ T cells (ACTolog IMA101) in patients with relapsed and/or refractory solid cancers*** Harpreet Singh, Immatics US, Inc., Houston, TX
10:00 a.m.-10:30 a.m.	**BREAK** Grand Ballroom Foyer
10:30 a.m.-12:15 p.m.	**PLENARY SESSION 6: OPTIMIZATION OF TARGET ANTIGENS FOR TCR AND TIL** Grand Ballroom A **Session Chair: Alex Franzusoff,** PACT Pharma, Inc., South San Francisco, CA
10:30 a.m.-11:00 a.m.	**Novel naturally presented targets for personalized T-cell therapies** Harpreet Singh, Immatics US, Inc., Houston, TX
11:00 a.m.-11:30 a.m.	**Personalized neoantigen-targeting adoptive TCR-T cell therapies for solid tumors** Alex Franzusoff

2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

11:30 a.m.-11:45 p.m.	**Personalized gene editing of T cells to express neoantigen-specific TCRs isolated from peripheral blood of patients on PD-1 blockade therapy*** Cristina Puig-Saus, David Geffen School of Medicine, University of California Los Angeles, Los Angeles, CA
11:45 a.m.-12:00 p.m.	**Finding CAR-T drivers for GBM: Building a translational discovery pipeline*** Sheila Kumari Singh, McMaster University Medical Center, Hamilton, ON, Canada
12:00 p.m.-12:15 p.m.	**Immunopeptidomics and peptide expression profiles to develop T-cell receptors against glioma-associated antigens*** Diego A. Carrera, University of California San Francisco School of Medicine, San Francisco, CA
12:15 p.m.-2:30 p.m.	**LUNCH ON OWN**
2:30 p.m.-4:30 p.m.	**PLENARY SESSION 7: COMBINATION THERAPY WITH ADOPTIVE CELL THERAPY** Grand Ballroom A **Session Chair: Ivan M. Borrello,** Johns Hopkins University, Baltimore, MD
2:30 p.m.-3:00 p.m.	**Unveiling mechanisms of response and resistance to instruct next-generation cancer immunotherapy** Aude G. Chapuis, Fred Hutchinson Cancer Research Center, Seattle, WA
3:00 p.m.-3:30 p.m.	**Marrow-infiltrating lymphocytes; Biology and practice** Ivan M. Borrello
3:30 p.m.-4:00 p.m.	**Combining checkpoint blockade with CAR T-cell therapy to augment response** Shannon L. Maude, Children's Hospital of Philadelphia, Philadelphia, PA
4:00 p.m.-4:15 p.m.	**Conditioning treatment with a CD27 antibody enhances in vivo expansion and antitumor activity of adoptively transferred T cells*** Li-Zhen He, Celldex Therapeutics, Inc., Hampton, NJ
4:15 p.m.-4:30 p.m.	**IL-2 limits CAR T-cell efficacy through selective expansion of a differentiated and less functional subset marked by the loss of CD27 expression*** Dongrui Wang, City of Hope National Medical Center, Duarte, CA

4:30 p.m.-6:30 p.m. **RECEPTION / POSTER SESSION B**
Grand Ballroom BC

Monday, July 22

7:00 a.m.-8:00 a.m. **BREAKFAST**
Grand Ballroom BC

8:00 a.m.-10:00 a.m. **PLENARY SESSION 8: ENHANCING IMMUNE CELL FUNCTION THROUGH GENETIC ENGINEERING**
Grand Ballroom A
Session Chair: Rodabe N. Amaria, The University of Texas MD Anderson Cancer Center, Houston, TX

8:00 a.m.-8:30 a.m. **Tumor-infiltrating lymphocyte therapy for metastatic melanoma**
Rodabe N. Amaria

8:30 a.m.-9:00 a.m. **Enhancing CAR T-cell therapy by enabling CAR T-cell interaction with antigen-presenting cells**
Clare Y. Slaney, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

9:00 a.m.-9:30 a.m. **Strategies to improve CAR T persistence and solid tumor targeting**
Avery D. Posey, Jr., University of Pennsylvania, Philadelphia, PA

9:30 a.m.-9:45 a.m. **Convertible CAR-T cells provide a highly modular universal system for dose control of activity, targeting flexibility, and in vivo CAR maintenance***
Kaman Kim, Xyphos Biosciences, San Francisco, CA

9:45 a.m.-10:00 a.m. **Adapter CAR T cells (AdCAR-T) allow precise control on effector function, prevent antigen evasion, and enable differential target cell lysis, based on complex antigen expression profiles***
Christian M. Seitz, University Children's Hospital Tübingen, Tübingen, Germany

10:00 a.m.-10:30 a.m. **BREAK**
Grand Ballroom Foyer

10:30 a.m.-12:00 p.m. **PLENARY SESSION 9: NOVEL APPROACHES FOR GENE DELIVERY (ENGINEERED VECTORS AND VIRAL DELIVERY SYSTEMS)**
Grand Ballroom A

2019 AACR Special Conference on Immune Cell Therapies for Cancer: Successes and Challenges of CAR T Cells and Other Forms of Adoptive Therapy

Session Chair: Laurence Cooper, Ziopharm Oncology, Boston, MA

10:30 a.m.-11:00 a.m.	**T cells genetically modified using nonviral gene transfer to target cancer** Laurence Cooper
11:00 a.m.-11:30 a.m.	**Reprogramming human immune cell circuitry** Alexander Marson, University of California San Francisco, San Francisco, CA
11:30 a.m.-12:00 p.m.	**Engineering smarter and stronger T cells for cancer immunotherapy** Yvonne Y. Chen, University of California Los Angeles, Los Angeles, CA
12:00 p.m.	**CONCLUSION**

*Short talk from proffered abstract