An AACR Special Conference

Targeting PI3K/mTOR Signaling in Cancer

Februrary 24-27, 2011
Hyatt Regency San Francisco
San Francisco, California

Thursday, February 24

7:00 p.m.-8:00 p.m. **Keynote Address**
Chairperson: Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA

Targeting PI3K/mTOR in breast cancer
José Baselga, Massachusetts General Hospital, Charlestown, MA

8:00 p.m.-9:30 p.m. **Reception**

Friday, February 25

7:00 a.m.-8:00 a.m. **Continental Breakfast**

8:00 a.m.-10:15 a.m. **Session 1**
PI3K/mTOR Signaling
Chairperson: Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA

PI3-kinase and cancer cell metabolism
Lewis C. Cantley

Direct and indirect actions of PI3K in cancer
Bart Vanhaesebroeck, Queen Mary University of London Institute of Cancer, London, United Kingdom

Growth control by the mTOR pathway
David M. Sabatini, Whitehead Institute for Biomedical Research, Cambridge, MA

The TSC-mTOR pathway regulates metabolism downstream of PI3K
Brendan D. Manning, Harvard School of Public Health, Boston, MA

The regulation of the transcription factor SREBP by the Akt/mTORC1 pathway and hypoxia*
Caroline A. Lewis, CRUK London Research Institute, London, United Kingdom

*Indicates proffered presentations from selected abstracts

10:15 a.m.-10:45 a.m. Break

10:45 a.m.-1:00 p.m. Session 2
PI3K Pathway Aberrations in Human Cancer

Chairperson: Gordon B. Mills, University of Texas MD Anderson Cancer Center, Houston, TX

Strategies for targeting the PI3K pathway when employing combination therapies
Jeffrey A. Engelman, Massachusetts General Hospital, Charlestown, MA

Panning for PI3K pathway gold in the cancer genome: A tale of modern 49ers
Ramon Parsons, Columbia University, Manhasset, NY

PI3K signaling and therapeutic response in gliomas
Eric C. Holland, Memorial Sloan-Kettering Cancer Center, New York, NY

Signaling feedback upon inhibition of PI3K: Implications for clinical trials
Carlos L. Arteaga, Vanderbilt-Ingram Cancer Center, Nashville, TN

Identification of PHLPP as a tumor suppressor reveals the role of feedback compensation in PTEN-mutant prostate cancer progression and therapy*
Lloyd C. Trotman, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

1:00 p.m.-4:00 p.m. Poster Session A/Lunch

4:00 p.m.-6:15 p.m. Session 3
Development of Novel PI3K/mTOR Pathway Inhibitors

Chairperson: David M. Sabatini, Whitehead Institute for Biomedical Research, Cambridge, MA

Chemical genetic investigations of protein and lipid kinase signaling
Kevan Shokat, University of California, San Francisco, CA

The development of PI3K and mTOR inhibitors in cancer
William R. Sellers, Novartis Institutes for BioMedical Research, Cambridge, MA

Targeting the PI3K-mTOR pathway with cancer therapeutics: More or less
Robert T. Abraham, Pfizer Biopharmaceuticals, Pearl River, NY

GSK2126458: A potent inhibitor of PI3K and mTOR
Joel Greshock, GlaxoSmithKline, Collegeville, PA

INK1117: A potent and orally efficacious PI3Kα-selective inhibitor for the treatment of cancer*
Yi Liu, Intellikine, Inc., La Jolla, CA

6:15 p.m. Dinner On Own/Evening Off

*Indicates proffered presentations from selected abstracts

Saturday, February 26

7:00 a.m.-8:00 a.m. **Continental Breakfast**

8:00 a.m.-10:00 a.m. **Session 4**
Targeting mTOR
Chairperson: Funda Meric-Bernstam, University of Texas MD Anderson Cancer Center, Houston, TX

Determinants of rapamycin resistance
Funda Meric-Bernstam

Translating the PI3K/mTOR pathway and translational control to radiation therapy
Robert J. Schneider, New York University Cancer Institute, New York, NY

Pharmacology of AZD8055, a selective mTOR kinase inhibitor
Sylvie M. Guichard, AstraZeneca R&D, Macclesfield, United Kingdom

Title to be announced
Neal Rosen, Memorial Sloan-Kettering Cancer Center, New York, NY

10:00 a.m.-10:30 a.m. **Break**

10:30 a.m.-12:00 p.m. **Session 5**
Late-Breaking Research/Hot Topics
Co-Chairpersons: Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA, and David M. Sabatini, Whitehead Institute for Biomedical Research, Cambridge, MA

IKK-dependent phosphorylation and feedback inhibition of PI3K promotes nutrient deprivation-induced autophagy*
William C. Comb, University of North Carolina, Chapel Hill, NC

Identification of STAT3 as a necessary component of PI3K-mediated oncogenic transformation*
Jonathan Ross Hart, The Scripps Research Institute, La Jolla, CA

Specific amino acid substitutions in mutant KRAS differentially regulate PI3K signaling and predict patient survival and response to targeted therapy*
Nathan T. Ihle, University of Texas MD Anderson Cancer Center, Houston, TX

Proliferation in response to the PI3K/Akt pathway is suppressed by activation of p57Kip2*
Devin T. Worster, Harvard Medical School, Boston, MA

PHLPP phosphatase regulation of growth factor receptor signaling*
Matt J. Niederst, University of California, San Diego, La Jolla, CA

*Indicates proffered presentations from selected abstracts

mTORC1 is an important downstream mediator of WNT signaling activation in the intestinal epithelium*
William J. Faller, Beatson Institute for Cancer Research, Glasgow, United Kingdom

Autophagy suppression promotes apoptotic cell death in response to inhibition of the PI3K-mTOR pathway in pancreatic adenocarcinoma*
Olga K. Mirzoeva, University of California, San Francisco, CA

12:00 p.m.-2:00 p.m. Lunch On Own

2:00 p.m.-4:30 p.m. Session 6
PI3K/mTOR Signaling

Chairperson: Pier Paolo Pandolfi, Beth Israel Deaconess Medical Center, Boston, MA

Title to be announced
Pier Paolo Pandolfi

ATM signaling to TSC2 in the cytoplasm: The secret life of a DNA repair protein
Cheryl Lyn Walker, University of Texas MD Anderson Cancer Center, Smithville, TX

The phosphorylation tightrope: Balancing kinase and phosphatase activities in cancer
Alexandra Newton, University of California, San Diego, La Jolla, CA

Targeting PI3K in cancer: Mechanistic insights from genetic mouse models
Jean J. Zhao, Dana-Farber Cancer Institute, Boston, MA

Pharmacogenetic targeting of the translational machinery downstream of oncogenic mTOR signaling
Davide Ruggero, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

4:30 p.m.-7:30 p.m. Dinner on Own

7:30 p.m.-10:00 p.m. Poster Session B/Reception

Sunday, February 27

7:00 a.m.-8:00 a.m. **Continental Breakfast**

8:00 a.m.-9:30 a.m. **Session 7**
Novel PI3K/mTOR Pathway Inhibitors in Clinical Trials I
Chairperson: Funda Meric-Bernstam, University of Texas MD Anderson Cancer Center, Houston, TX

Molecular marker-based clinical trial designs to target the PI3K pathway
Ana M. Gonzalez-Angulo, University of Texas MD Anderson Cancer Center, Houston, TX

Overcoming challenges to targeting the PI3K pathway in cancer
Gordon B. Mills, University of Texas MD Anderson Cancer Center, Houston, TX

Clinical development of MK-2206: A potent oral allosteric AKT inhibitor
Li Yan, Merck & Co., North Wales, PA

9:30 a.m.-10:00 a.m. **Break**

10:00 a.m.-11:45 a.m. **Session 8**
Novel PI3K/mTOR Pathway Inhibitors in Clinical Trials II
Chairperson: Funda Meric-Bernstam, University of Texas MD Anderson Cancer Center, Houston, TX

Targeting the PI3K/AKT/mTOR pathway in the clinic: Early results from the PREDICT program
Razelle Kurzrock, University of Texas MD Anderson Cancer Center, Houston, TX

Title to be announced
Mark R. Lackner, Genentech, Inc., South San Francisco, CA

Clinical development of PI3K/mTOR pathway inhibitors, SAR245408 (XL147) and SAR245409 (XL765)
Joanne J. Lager, sanofi-aventis, Cambridge, MA

Biological effects of metformin in early stage breast cancer*
Ryan J.O. Dowling, Ontario Cancer Institute, University Health Network, Toronto, ON, Canada

11:45 a.m. **Departure**

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