Sunday, November 15, 2009

10:00 a.m.-8:00 p.m. Registration

Lobby Area, Exhibit Hall C

**Educational Session 1:** 1:30 p.m.-3:30 p.m.

> **Predictive Biomarkers: Challenges in Measuring and**

**Using the Targets** 

Veteran's Memorial Auditorium

Chairperson: Tona M. Gilmer, GlaxoSmithKline, Research Triangle Park, NC, USA

HER2 as a marker for treatment selection in breast cancer Michael F. Press, USC/Norris Comprehensive Cancer Center, Los Angeles, CA, USA

Targeting ER and HER-2 in breast cancer\*

Giuseppe Viale, European Institute of Oncology, University of Milan, Milan, Italy

EGFR as a target in oncology: Caveats and pitfalls Frédérique Penault-Llorca, Société Française du Cancer, Paris, France

Beyond IHC: Quantitative measurement of protein analytes on tissue slides\*

David L. Rimm, Yale University School of Medicine, New Haven, CT, USA

3:30 p.m.-5:30 p.m.

**Educational Session 2: Emerging Targets in Cancer Prevention** 

Veteran's Memorial Auditorium

Chairperson: Powel H. Brown, UT M. D. Anderson Cancer Center, Houston, TX, USA

Molecular targets of cancer preventive agents\*

Powel H. Brown

Identifying women who will respond to preventive anti-estrogen treatment

Jack Cuzick, Cancer Research UK, Queen Mary University of London, London, United Kingdom

Metformin to target energy imbalance: Clinical experience in women with early breast cancer\*

Bernardo Bonanni, European Institute of Oncology, Milan, Italy Identifying targets for breast and ovarian cancer prevention\* Karen A. Johnson, National Cancer Institute, Bethesda, MD, USA

Scott M. Lippman, UT M. D. Anderson Cancer Center, Houston, TX, USA

5:30 p.m.-7:00 p.m.

**Networking Reception** 

Grand Ballroom, Sheraton Boston Hotel

Monday, November 16, 2009

7:00 a.m.-8:00 a.m.

**Continental Breakfast** 

**Boylston Street Hallway** 

8:00 a.m.-8:05 a.m.

**Opening Remarks** 

Veteran's Memorial Auditorium

Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA, USA

James H. Doroshow, National Cancer Institute, Bethesda, MD, USA

Ahmad Awada, Institut Jules Bordet, Brussels, Belgium

8:05 a.m.-10:05 a.m.

**Keynote Presentations** 

Veteran's Memorial Auditorium

Chairperson: Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA, USA

Lessons from resistance to targeted agents

Charles L. Sawyers, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Identifying tumor-specific targets: The role of clinical translational data

A. Hilary Calvert, University College London Partners, London, United Kingdom

10:05 a.m.-10:30 a.m. Coffee Break

**Boylston Street Hallway** 

10:30 a.m.-12:30 p.m.

**Plenary Session 1: Drug Responses in Genetically Engineered Mouse Models for Cancer** 

Veteran's Memorial Auditorium

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

Title to be announced Pier Paolo Pandolfi

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.







The use of genetically engineered mouse lung cancer models for testing of novel therapeutics

**Kwok-Kin Wong**, Dana-Farber Cancer Institute, Boston, MA, USA

Drug resistance and tumor maintenance in genetically engineered mice\*

**Scott W. Lowe**, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA

PI3 kinases in cancer: Determining the roles of individual PI3K isoforms

**Thomas M. Roberts**, Dana-Farber Cancer Institute, Boston, MA, USA

# 12:30 p.m.-2:30 p.m. Poster Session A/Exhibit Show

Exhibit Halls C-D

Angiogenesis and Antiangiogenesis Agents 1

**Animal Models** 

**Bioinformatics** 

Biomarkers 1

Cancer Stem Cells

Cell Cycle Regulators

Cellular Responses to Therapy

Chemistry

Chemoprevention

Clinical Trials 1

Differentiation

**DNA Repair and Modulation** 

**Drug Delivery** 

Drug Design

Drug Metabolism, Transport, and Biodistribution

Drug Resistance and Modifiers 1

**Drug Screening** 

**Drug Synthesis** 

EGFR/HER2 1

**Epigenetic Targets** 

**Gene Therapies** 

Genomics, Proteomics, and Target Discovery

**Heat Shock Proteins 1** 

Hormonal Agents and Therapy

**Imaging** 

In vitro and In vivo Models for Targets

Therapeutic Agents: Small Molecule Kinase Inhibitors 1

# 1:00 p.m.-2:30 p.m. Networking Session for Young Investigators

Back Bay C, Sheraton Boston Hotel

#### 2:30 p.m.-4:30 p.m.

Plenary Session 2: Targeting the PI3K Pathway

Veteran's Memorial Auditorium

Chairperson: Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA, USA

Targeting the PI3K pathway in cancer\*

**William R. Sellers**, Novartis Institutes for BioMedical Research, Inc., Cambridge, MA, USA

Growth control by the mTOR pathway

**David M. Sabatini**, The Whitehead Institute for Biomedical Research, Cambridge, MA, USA

Targeting PI3K isoforms in cancer

Jean J. Zhao, Dana-Farber Cancer Institute, Boston, MA, USA

Finding biomarkers of resistance to EGFR-targeted therapy in cancer

René Bernards, The Netherlands Cancer Institute, Amsterdam, The Netherlands

#### 4:30 p.m.-5:00 p.m.

**Special Lecture** 

Veteran's Memorial Auditorium

**Chairperson: Lewis C. Cantley**, Beth Israel Deaconess Medical Center, Boston, MA, USA

Therapeutic targeting of ERK signaling: Why is RAF inhibition more effective than MEK inhibition?

**Neal Rosen**, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

### 5:00 p.m.-5:30 p.m.

**Proffered Paper Session 1** 

Veteran's Memorial Auditorium

**Chairperson: Lewis C. Cantley**, Beth Israel Deaconess Medical Center, Boston, MA, USA

PR-1 AGENDA: Results of a randomized, double-blind phase III trial of dacarbazine with or without Bcl-2 targeted therapy (oblimersen) in a biomarker-defined patient population with advanced melanoma\*\*

Celeste Lebbe, Hôpital Saint-Louis, Paris, France

PR-2 Discovery of p21-activated kinase inhibitor PF-03758309\*\* **Chuangxing Guo**, Pfizer Global Research & Development, San Diego, CA, USA

#### 5:30 p.m.-7:30 p.m.

Poster Session A/Exhibit Show (continued)

Exhibit Halls C-D

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.

<sup>\*\*</sup>An extended abstract for this presentation is available in the Proferred Papers section of this *Program and Proceedings*.

Tuesday, November 17, 2009

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

**Boylston Street Hallway** 

8:00 a.m.-10:00 a.m. Plenary Session 3: Acquired

**Drug Resistance** 

Veteran's Memorial Auditorium

**Chairperson: Carlos L. Arteaga**, Vanderbilt-Ingram Cancer Center, Nashville, TN, USA

Lessons learned from acquired resistance to kinase inhibitors in chronic myeloid leukemia

**Neil P. Shah**, UCSF Comprehensive Cancer Center, San Francisco, CA, USA

Resistance to EGFR inhibitors in lung cancer: Where do we go from here?

**Jeffrey A. Engelman**, Massachusetts General Hospital, Boston, MA, USA

ERBB3 (HER3): Role in HER2-mediated tumorigenesis and resistance to anti-HER2 drugs

Carlos L. Arteaga

Epigenetics of resistance to endocrine therapy

Myles A. Brown, Dana-Farber Cancer Institute, Boston, MA, USA

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

**Boylston Street Hallway** 

10:30 a.m.-12:30 p.m. Plenary Session 4: Targeting
Tumor Cell Metabolism

Veteran's Memorial Auditorium

**Chairperson: Chi Van Dang**, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Validating metabolic targets for cancer therapy **Craig B. Thompson**, University of Pennsylvania, Philadelphia, PA, USA

Cell death under metabolic stress

Tak W. Mak, University of Toronto, Toronto, ON, Canada

Extracellular matrix control of tumor cell metabolism

Joan S. Brugge, Harvard Medical School, Boston, MA, USA

Tumor cell metabolism in the response to chemotherapy **Guido Kroemer**, Institut Gustave-Roussy, Villejuif, France

12:30 p.m.-2:30 p.m. Poster Session B/Exhibit Show Exhibit Halls C-D

Angiogenesis and Antiangiogenesis Agents 2

Apoptosis, Necrosis, and Autophagy 1

Biomarkers 2 Clinical Trials 2

Drug Resistance and Modifiers 2

EGFR/HER2 2

Heat Shock Proteins 2 MAPK Pathways

Metabolism

Metastasis and Invasion

**Molecular Classification of Tumors** 

**Monoclonal Antibodies** 

mTOR/PI3-Kinase 1

**Natural Products** 

New Molecular Targets 1

Novel Assay Technology

Other Therapeutic Agents 1

Pharmacokinetics and Pharmacodynamics 1

Target Identification and Validation 1 Therapeutic Agents: Biological 1

Therapeutic Agents: Small Molecule Kinase Inhibitors 2

2:30 p.m.-4:30 p.m.

Concurrent Session 1: *In vivo* Imaging of Drug Responses

Ballroom A, 3rd Floor

**Chairperson: David Piwnica-Worms**, Washington University School of Medicine, St. Louis, MO, USA

Imaging signal transduction pathways and targeted drug action in vivo

**David Piwnica-Worms** 

Detecting tumor responses to treatment using magnetic resonance imaging and spectroscopy\*

**Kevin M. Brindle**, University of Cambridge, Cambridge, United Kingdom

Detecting tumor responses to treatment using positron emission tomography

**Sigrid Stroobants**, University Hospital Antwerp, Antwerp, Belgium

Imaging-guided therapy in different tumor models using positron emission tomography (PET) and optical imaging\*

**Alexandra Winkeler**, INSERM-U803 Service Hospitalier Frédéric Joliot, Orsay, France

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.







2:30 p.m.-4:30 p.m.

Concurrent Session 2: Circulating Tumor Cells and Tumor Dormancy

Veteran's Memorial Auditorium

**Chairperson: Johann S. de Bono**, Royal Marsden Hospital, Sutton, United Kingdom

Circulating tumor cells as targets for cancer therapy\* **Klaus Pantel**, University Medical Center Hamburg-Eppendorf,
Hamburg, Germany

CTCs as pharmacodynamic and/or predictive biomarkers\* Caroline Dive, Paterson Institute for Cancer Research, University of Manchester, Manchester, United Kingdom

Circulating tumor cells as biomarkers in the development of the androgen receptor antagonist, MDV3100\*

**Howard I. Scher**, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Circulating tumor cells in anticancer drug development: The way ahead

Johann S. de Bono

2:30 p.m.-4:30 p.m.

Concurrent Session 3: Handling of Toxicities Related to Targeted Therapies Ballroom B, 3rd Floor

**Chairperson: Jean-Charles Soria,** Institut Gustave-Roussy, Villejuif, France

Dermatologic toxicities to targeted therapies

Mario E. Lacouture, Northwestern University, Chicago, IL, USA

Cardiac side effects of targeted therapy: Towards a better dialogue between the oncologist and the cardiologist\*

Stephane Ederhy, Saint Antoine Hospital, Paris, France

VEGF inhibitors and the kidney

Susan E. Quaggin, University of Toronto, Toronto, ON, Canada

Gastrointestinal and liver toxicities related to targeted therapies\*

Josep Tabernero, Vall d'Hebron Hospital, Barcelona, Spain

2:30 p.m.-4:30 p.m.

Concurrent Session 4: Proof of Concept Clinical Trial Design

Ballroom C, 3rd Floor

**Chairperson: Jaap Verweij**, Erasmus University Medical Center, Rotterdam, The Netherlands

From preclinical concept to man

**James H. Doroshow**, National Cancer Institute, Bethesda, MD, USA

Phase I trials: Limits and limitations in proof of concept\*

Jaap Verweij

Proposals for proof of principle designs in oncology\*

Jan Bogaerts, EORTC Data Center, Brussels, Belgium

Credentialing biomarkers in early-phase clinical trials: Crossing the bridge from discovery to validation **Lillian L. Siu**, Princess Margaret Hospital, Toronto, ON, Canada

4:30 p.m.-5:30 p.m.

**Proffered Paper Session 2** 

Veteran's Memorial Auditorium

**Chairperson: Ahmad Awada**, Institut Jules Bordet, Brussels, Belgium

PR-3 Antitumor efficacy on glioma models of the dual CDK/TRKA inhibitor PHA-848125, able to cross the blood-brain barrier\*\*

Marina Ciomei, Nerviano Medical Sciences, Nerviano, Italy

PR-4 From mice to men: Guiding cancer treatment through Personalized Tumorgraft™ models results in prolonged clinical responses in patients with refractory advanced cancers and discovery of novel predictive biomarkers\*\*

Manuel Hidalgo, Johns Hopkins University, Baltimore, MD, USA

PR-5 Signal pathway profiling of cancer cell lines derived from serially passaged human tumorgrafts for guiding drug development\*\*

Greg Donoho, Eli Lilly and Co., Indianapolis, IN, USA

PR-6 Src family kinases mediate PI3K-Akt pathway activation and resistance to lapatinib in HER2-overexpressing human breast cancer cells\*\*

**Brent Rexer**, Vanderbilt University School of Medicine, Nashville, TN, USA

5:30 p.m.-7:30 p.m.

Poster Session B/Exhibit Show (continued) Exhibit Halls C-D

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.

<sup>\*\*</sup>An extended abstract for this presentation is available in the Proferred Papers section of this *Program and Proceedings*.

Wednesday, November 18, 2009

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

Boylston Street Hallway

8:00 a.m.-10:00 a.m. Plenary Session 5: The Cancer Genome

Veteran's Memorial Auditorium

Chairperson: Heinz H. Fiebig, Oncotest GmbH, Freiburg, Germany

Translational pharmacogenomics\*

**Spyro Mousses**, Translational Genomics Research Institute, Scottsdale, AZ, USA

Functionalizing the cancer genome

Lynda Chin, Dana-Farber Cancer Institute, Boston, MA, USA

Future challenges of targeted therapy\*

**Frank McCormick**, UCSF Comprehensive Cancer Center, San Francisco, CA, USA

Gene signatures for targeted and cytotoxic agents can guide new anticancer drug development\*

Heinz H. Fiebig

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

**Boylston Street Hallway** 

10:30 a.m.-12:30 p.m. Plenary Session 6: The Cancer Epigenome

Veteran's Memorial Auditorium

**Chairperson: Peter A. Jones**, USC/Norris Comprehensive Cancer Center, Los Angeles, CA, USA

Targeted inhibition of chromatin modifying enzymes as cancer therapeutics: The HDAC inhibitor vorinostat and beyond\* **Victoria M. Richon**, EpiZyme, Inc., Cambridge, MA, USA

Sensitivity and resistance to DNA hypomethylating drugs **Jean-Pierre Issa**, UT M. D. Anderson Cancer Center, Houston, TX. USA

Cellular reprogramming: Clues to establishing the cancer epigenome

**Stephen B. Baylin**, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Cracking chromatin open with DNA methylation inhibitors **Peter A. Jones** 

12:30 p.m.-2:30 p.m. Poster Session C/Exhibit Show Exhibit Halls C-D

Apoptosis, Necrosis, and Autophagy 2

Biomarkers 3 Clinical Trials 3 EGFR/HER2 3 Miscellaneous Topics mTOR/PI3-Kinase 2

New Molecular Targets 2 Other Therapeutic Agents 2

Pediatric-Early Drug Development

Pharmacogenetics, Pharmacogenomics, and Therapeutic Response

Pharmacokinetics and Pharmacodynamics 2

Protein-Protein Interaction

Radiotherapeutics

RNA and RNA-based Technologies and Therapies

Signal Transduction Modulators
Target Identification and Validation 2
Telomerase-targeting Agents
Therapeutic Agents: Biological 2

Therapeutic Agents: Small Molecule Kinase Inhibitors 3

**Topoisomerase Inhibitors** 

Toxicology

Tubulin-interacting Agents Tumor Immunology Targets Tumor Microenvironment Tumor Suppressors Vaccines

2:30 p.m.-4:30 p.m.

Concurrent Session 5: Protein Kinase Inhibitors in Cancer

**Clinical Trials** 

Veteran's Memorial Auditorium

**Chairperson: Sara A. Courtneidge**, Burnham Institute for Medical Research, La Jolla, CA, USA

Learnings from an oncogene-selective B-Raf inhibitor **Gideon Bollag**, Plexxikon, Inc., Berkeley, CA, USA

ALK and EGFR inhibitors in clinical development

Pasi A. Jänne, Dana-Farber Cancer Institute, Boston, MA, USA

JAK2 inhibitors in myeloproliferative neoplasms Ayalew Tefferi, Mayo Clinic, Rochester, MN, USA

Clinical development of selective RAF/MEK inhibitors **David B. Solit**, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.







2:30 p.m.-4:30 p.m.

Concurrent Session 6: Autophagy

Ballroom A, 3rd Floor

Chairperson: Eileen P. White, The Cancer Institute of New Jersey, New Brunswick, NJ, USA

Role of autophagy-mediated protein quality control in tumor suppression

Eileen P. White

Autophagy as an effector program in senescence **Masashi Narita**, Cancer Research UK, Cambridge, United Kingdom

The TSC-mTOR pathway

Kun Liang Guan, UCSD Moores Cancer Center, La Jolla, CA, USA

Autophagy and tumor dormancy in ovarian cancer: The role of an imprinted tumor suppressor gene *ARHI (DIRAS3)* 

**Robert C. Bast, Jr.,** UT M. D. Anderson Cancer Center, Houston, TX, USA

2:30 p.m.-4:30 p.m.

**Concurrent Session 7: Monoclonal Antibody Therapies** 

Ballroom B, 3rd Floor

Chairperson: Mark X. Sliwkowski, Genentech, Inc., South San Francisco, CA, USA

Two-in-one antibody: Herceptin variants that target HER2 and VEGF\*

Germaine Fuh, Genentech, Inc., South San Francisco, CA, USA

Disrupting insulin-like growth factor signaling with monoclonal antibodies\*

**Douglas Yee**, Masonic Cancer Center, University of Minnesota, Minneapolis, MN, USA

CD47 is an adverse prognostic factor and therapeutic antibody target on human AML stem cells\*

**Ravindra Majeti**, Stanford Institute for Stem Cell Biology and Regenerative Medicine, Palo Alto, CA, USA

Preoperative systemic therapy as a model to probe drug modulation of HER2 in breast cancer

Luca Gianni, Istituto Nazionale Tumori, Milan, Italy

2:30 p.m.-4:30 p.m.

Concurrent Session 8: Topoisomerase I and II Alpha-Specific Inhibitors Ballroom C, 3rd Floor

**Chairperson: Yves G. Pommier**, National Cancer Institute, Bethesda, MD, USA

3D-QSAR-based design of novel inhibitors of topoisomerase II\* **Brian B. Hasinoff**, University of Manitoba, Winnipeg, MB, Canada

Repair of topoisomerase II mediated DNA damage: A potential mechanism for targeting specific Top2 isoforms\*

**John L. Nitiss**, St. Jude Children's Research Hospital, Memphis, TN, USA

Targeting topoisomerase II inhibitors to cancer cells via the polyamines transport system\*

Christian Bailly, Pierre Fabre Research Institute, Toulouse, France

Novel topoisomerase I inhibitors in development\*

Yves G. Pommier

4:30 p.m.-5:30 p.m.

**Proffered Paper Session 3** 

Veteran's Memorial Auditorium

**Chairperson: James H. Doroshow**, National Cancer Institute, Bethesda, MD, USA

PR-7 Overcoming chemoresistance in solid cancers by targeting quiescent tumor cells\*\*

Alastair H. Kyle, BC Cancer Research Centre, Vancouver, BC, Canada

PR-8 XIAP inhibitors prime acute leukemia cells for TRAIL- or chemotherapy-induced apoptosis, bypass Bcl-2-imposed resistance and exert anti-leukemic activity in a NOD/SCID mouse model of pediatric acute leukemia\*\*

Simone Fulda, Ulm University, Ulm, Germany

PR-9 Differences in effects on myocardium and mitochondria by VEGF receptor inhibitors suggest separate mechanisms of cardiotoxicity\*\*

Kevin French, GlaxoSmithKline, King of Prussia, PA, USA

PR-10 RNAi-directed identification of chemosensitizers of GSK923295 response\*\*

**Holly Yin**, Translational Genomics Research Institute, Scottsdale, AZ, USA

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.

<sup>\*\*</sup>An extended abstract for this presentation is available in the Proferred Papers section of this Program and Proceedings.

5:30 p.m.-7:30 p.m. Poster Session C/Exhibit Show

(continued) Exhibit Halls C-D

Thursday, November 19, 2009

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

**Boylston Street Hallway** 

8:00 a.m.-10:00 a.m. Plenary Session 7: Targeting the Tumor Microenvironment

Veteran's Memorial Auditorium

Chairperson: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, MA, USA

Targeting mechanisms of evasive resistance to antiangiogenic therapies

**Douglas Hanahan**, UCSF Comprehensive Cancer Center and Cancer Research Institute, San Francisco, CA, USA

Cancer and inflammation: Common pathways and targets

Frances R. Balkwill, Barts and The London School for Medicine
and Dentistry, London, United Kingdom

Targeting the hedgehog pathway in cancer\*
Frederic J. de Sauvage, Genentech, Inc.,
South San Francisco, CA, USA

The premetastatic niche: Adapting the foreign soil **David C. Lyden**, Weill Medical College of Cornell University, New York, NY, USA

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

**Boylston Street Hallway** 

10:30 a.m.-12:30 p.m. Plenary Session 8:

Plenary Session 8:
Using Drug Combinations
in Targeted Therapy
Veteran's Memorial Auditorium

**Chairperson: Barbara L. Weber**, Novartis Institutes for BioMedical Research, Cambridge, MA, USA

Combination therapy with MEK inhibitors: Moving synergy to the clinic

Peter F. Lebowitz, GlaxoSmithKline, Collegeville, PA, USA

Genome-wide RNAi screens as a tool to develop new combination therapeutic strategies

**Scott Powers**, Cold Spring Harbor Laboratory, Woodbury, NY, USA

Synthetic lethal approaches to the development of new therapies targeting DNA repair deficiencies in cancer **Alan Ashworth**, Institute of Cancer Research, London, United Kingdom

Modeling genotype-associated sensitivity to anticancer agents in tumor-derived cell lines

**Jeffrey Settleman**, Massachusetts General Hospital Cancer Center, Charlestown, MA, USA

12:30 p.m.-12:45 p.m. Closing Remarks

Veteran's Memorial Auditorium

**Lewis C. Cantley**, Beth Israel Deaconess Medical Center, Boston, MA, USA

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of this *Program and Proceedings*.





