Year_{in} Review

Proceedings from a Multitumor CME Symposium Focused on the Application of Emerging Research Information to the Care of Patients with Common Cancers

CME Information

TARGET AUDIENCE

This educational activity has been designed to meet the educational needs of medical oncologists, hematologists, hematology-oncology fellows and other allied cancer professionals.

OVERVIEW OF ACTIVITY

Clinical controversies and uncertainties persist in the management of all common cancers, and thousands of ongoing research trials worldwide attempt to provide new answers to long-standing clinical questions. As these trials reach maturity, clinical investigators initially present new data in abridged format at large scientific conferences and subsequently in full data sets formally published as part of peerreviewed journals. Today, numerous annual oncology conferences release new clinical data and hundreds of peer-reviewed publications feature articles related to cancer research, treatment and practical management. The extensive list of available treatment options poses a challenge to the practicing clinician who must maintain knowledge of appropriate clinical management strategies across a vast spectrum of liquid and solid tumors.

These proceedings from a daylong symposium combine the perspectives of 16 renowned investigators with a review of key recent presentations and publications across lung cancer, gastrointestinal cancers, melanoma, genitourinary cancers, multiple myeloma, breast cancer and Hodgkin and non-Hodgkin lymphoma to assist medical oncologists, hematologists, hematology-oncology fellows and other allied cancer professionals in the formulation of up-to-date clinical management strategies.

LEARNING OBJECTIVES

- Effectively apply the results of practice-changing clinical research to the care of patients with breast, lung, gastroin-testinal, genitourinary, dermatologic and select hematologic cancers.
- Appraise the clinical relevance of recent pivotal cancer research results published in peer-reviewed journals and/or presented at major oncology conferences.

- Recall ongoing trials in breast, lung, gastrointestinal, genitourinary, dermatologic and select hematologic cancers, and refer appropriate patients for study participation.
- Use an understanding of tumor biomarkers and single and multigene signatures to individualize the care of patients with cancer.
- Educate patients with diverse hematologic cancers and solid tumors about the benefits and risks of new therapeutic agents and strategies.
- Refine or validate existing cancer-specific treatment algorithms based on exposure to new data sets and the perspectives of tumor-specific clinical investigators.
- Recognize immune-related adverse events and other common side effects associated with approved and developmental immunotherapeutics in order to offer supportive management strategies.
- Evaluate the mechanisms of action, tolerability and efficacy of promising investigational agents, and consider their potential implications for clinical practice.

ACCREDITATION STATEMENT

Research To Practice is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

Research To Practice designates this enduring material for a maximum of 7 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMERICAN BOARD OF INTERNAL MEDICINE (ABIM) — MAINTENANCE OF CERTIFICATION (MOC)

Successful completion of this CME activity enables the participant to earn up to 7 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit. Please note, this program has been specifically designed for the following ABIM specialty: **medical oncology**.

Personal information and data sharing: Research To Practice aggregates deidentified user data for program-use analysis, program development, activity planning and site improvement. We may provide aggregate and deidentified data to third parties, including commercial supporters. We do not share or sell personally identifiable information to any unaffiliated third parties or commercial supporters. Please see our privacy policy at **ResearchToPractice.com/Privacy-Policy** for more information.

HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should watch the video, complete the Post-test with a score of 80% or better and fill out the Educational Assessment and Credit Form located at **ResearchToPractice.com/YiRMultitumor16/CME**.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-theart education. We assess conflicts of interest with faculty, planners and managers of CME activities. Conflicts of interest are identified and resolved through a conflict of interest resolution process. In addition, all activity content is reviewed by both a member of the RTP scientific staff and an external, independent physician reviewer for fair balance, scientific objectivity of studies referenced and patient care recommendations.

FACULTY — The following faculty (and their spouses/partners) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

Kenneth C Anderson, MD

Kraft Family Professor of Medicine Harvard Medical School Director, Jerome Lipper Multiple Myeloma Center Director, LeBow Institute for Myeloma Therapeutics Dana-Farber Cancer Institute Boston, Massachusetts

Advisory Committee: Bristol-Myers Squibb Company, Celgene Corporation, Gilead Sciences Inc, Takeda Oncology.

Tanios Bekaii-Saab, MD

Co-Leader GI Cancer Program Mayo Clinic Cancer Center Senior Associate Consultant Mayo Clinic Arizona Scottsdale, Arizona

Consulting Agreements: Bayer HealthCare Pharmaceuticals, Boehringer Ingelheim Pharmaceuticals Inc, Celgene Corporation, Genentech BioOncology, Merck, Taiho Oncology Inc; **Data and Safety Monitoring Board:** Exelixis Inc, Silagen.

Ian W Flinn, MD, PhD

Director of Blood Cancer Research Sarah Cannon Research Institute Tennessee Oncology Nashville, Tennessee

Contracted Research: Celgene Corporation, Genentech BioOncology, GlaxoSmithKline, Merck, Novartis Pharmaceuticals Corporation, Pfizer Inc, Takeda Oncology.

William J Gradishar, MD

Betsy Bramsen Professor of Breast Oncology Professor of Medicine Director, Maggie Daley Center for Women's Cancer Care Robert H Lurie Comprehensive Cancer Center Northwestern University Feinberg School of Medicine Chicago, Illinois

No relevant conflicts of interest to disclose.

Melissa Johnson, MD

Associate Director Lung Cancer Research Sarah Cannon Research Institute Nashville, Tennessee

Consulting Agreements: Astellas Pharma Global Development Inc, Otsuka Pharmaceutical Co Ltd.

Jason J Luke, MD

Assistant Professor of Medicine University of Chicago Chicago, Illinois

Consulting Agreements: Amgen Inc, Array BioPharma Inc; **Contracted Research:** AbbVie Inc, BBI Therapeutics, Bristol-Myers Squibb Company, Celldex Therapeutics, Corvus Pharmaceuticals, Delcath Systems Inc, EMD Serono Inc, Five Prime Therapeutics Inc, Genentech BioOncology, Incyte Corporation, MedImmune Inc, Merck, Novartis Pharmaceuticals Corporation, Pharmacyclics LLC, an AbbVie Company.

Loretta J Nastoupil, MD

Assistant Professor Department of Lymphoma/Myeloma Division of Cancer Medicine Director, Lymphoma Outcomes Database The University of Texas MD Anderson Cancer Center Houston, Texas

Advisory Committee: Gilead Sciences Inc, Janssen Biotech Inc, TG Therapeutics Inc; Consulting Agreement: Gilead Sciences Inc; Contracted Research: Abbott Laboratories, Celgene Corporation, Genentech BioOncology, Janssen Biotech Inc, TG Therapeutics Inc.

Robert Z Orlowski, MD, PhD

Director, Myeloma Section Florence Maude Thomas Cancer Research Professor Departments of Lymphoma/Myeloma and Experimental Therapeutics Division of Cancer Medicine The University of Texas MD Anderson Cancer Center Houston, Texas **Consulting Agreements:** Amgen Inc, Bristol-Myers Squibb Company, Celgene Corporation, FORMA Therapeutics, Janssen Biotech Inc, Onyx Pharmaceuticals, an Amgen subsidiary, Takeda Oncology; **Contracted Research:** Amgen Inc, Bristol-Myers Squibb Company, Celgene Corporation, Onyx Pharmaceuticals, an Amgen subsidiary, Spectrum Pharmaceuticals Inc, Takeda Oncology.

Geoffrey R Oxnard, MD

Lowe Center for Thoracic Oncology Dana-Farber Cancer Institute Assistant Professor of Medicine Harvard Medical School Boston, Massachusetts

Advisory Committee: ARIAD Pharmaceuticals Inc, AstraZeneca Pharmaceuticals LP, Boehringer Ingelheim Pharmaceuticals Inc, Genentech BioOncology, Inivata, Takeda Oncology; **Consulting Agreements:** AstraZeneca Pharmaceuticals LP, Boehringer Ingelheim Pharmaceuticals Inc.

Philip A Philip, MD, PhD

Professor of Oncology and Medicine Director of GI and Neuroendocrine Tumors Vice President of Medical Affairs Karmanos Cancer Institute Wayne State University Detroit, Michigan

Advisory Committee: bioTheranostics Inc, Caris Life Sciences, Celgene Corporation, EMD Serono Inc, Halozyme Therapeutics, Lexicon Pharmaceuticals Inc, Merrimack Pharmaceuticals Inc; Contracted Research: Acerta Pharma, Bayer HealthCare Pharmaceuticals, Celgene Corporation, Incyte Corporation, Karyopharm Therapeutics, Lilly, Merck, Momenta Pharmaceuticals Inc, Novartis Pharmaceuticals Corporation, Roche Laboratories Inc, Taiho Oncology Inc, XBiotech; Speakers Bureau: Amgen Inc, Celgene Corporation, Genentech BioOncology, Novartis Pharmaceuticals Corporation.

Elizabeth R Plimack, MD, MS

Director, Genitourinary Clinical Research Associate Professor Department of Hematology/Oncology Fox Chase Cancer Center Temple Health Philadelphia, Pennsylvania

Advisory Committee: Acceleron Pharma, Bristol-Myers Squibb Company, Genentech BioOncology, Novartis Pharmaceuticals Corporation, Pfizer Inc, Roche Laboratories Inc; Consulting Agreements: Bristol-Myers Squibb Company, Lilly, Pfizer Inc; Contracted Research: Acceleron Pharma, AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, GlaxoSmithKline, Lilly, Merck, Pfizer Inc.

David I Quinn, MBBS, PhD

Medical Director, Norris Cancer Hospital and Clinics Head, GU Cancer Section Division of Cancer Medicine and Blood Diseases USC/Norris Comprehensive Cancer Center Los Angeles, California Advisory Committee and Consulting Agreements: Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Dendreon Pharmaceuticals Inc, EMD Serono Inc, Exelixis Inc, Genentech BioOncology, Lilly, Merck, Novartis Pharmaceuticals Corporation, Pfizer Inc, Roche Laboratories Inc, Sanofi.

Naiyer Rizvi, MD

Professor of Medicine Director of Thoracic Oncology and Phase I Immunotherapeutics Price Chair in Clinical Translational Research Columbia University Medical Center New York, New York

Advisory Committee and Consulting Agreements: AstraZeneca Pharmaceuticals LP, Merck, Novartis Pharmaceuticals Corporation, Roche Laboratories Inc; **Ownership Interest:** Gritstone Oncology.

George W Sledge Jr, MD

Professor of Medicine Chief, Division of Oncology Department of Medicine Stanford University School of Medicine Stanford, California

Board of Directors: Syndax Pharmaceuticals Inc; **Contracted Research:** Lilly; **Scientific Advisory Board:** Nektar, Radius Health Inc, Symphogen A/S.

Jeffrey Weber, MD, PhD

Deputy Director Laura and Isaac Perlmutter Cancer Center Professor of Medicine NYU Langone Medical Center New York, New York

Advisory Committee and Consulting Agreements: Amgen Inc, AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Genentech BioOncology, GlaxoSmithKline, Merck, Novartis Pharmaceuticals Corporation; **Stock Ownership:** Altor Bioscience Corp, Celldex Therapeutics, CytomX Therapeutics; **Scientific Advisory Board:** Altor Bioscience Corp, Celldex Therapeutics, CytomX Therapeutics, Lion Biotechnologies.

Michael E Williams, MD, ScM

Byrd S Leavell Professor of Medicine Chief, Hematology/Oncology Division University of Virginia School of Medicine Charlottesville, Virginia

Advisory Committee and Consulting Agreements: Celgene Corporation, Gilead Sciences Inc, Takeda Oncology, TG Therapeutics Inc; Contracted Research: Allos Therapeutics, Celgene Corporation, Gilead Sciences Inc, Takeda Oncology.

MODERATOR — **Dr Love** is president and CEO of Research To Practice, which receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma, Agendia Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Baxalta Inc, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, CTI BioPharma Corp, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, Halozyme Therapeutics, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Lilly, Medivation Inc, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology, Tokai Pharmaceuticals Inc and VisionGate Inc.

RESEARCH TO PRACTICE STAFF AND EXTERNAL

REVIEWERS — The scientific staff and reviewers for Research To Practice have no relevant conflicts of interest to disclose.

This educational activity contains discussion of published and/ or investigational uses of agents that are not indicated by the Food and Drug Administration. Research To Practice does not recommend the use of any agent outside of the labeled indications. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings. The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors.

This activity is supported by educational grants from AbbVie Inc, Acerta Pharma, Agendia Inc, Amgen Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, bioTheranostics Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Janssen Biotech Inc, Lilly, Medivation Inc, Merrimack Pharmaceuticals Inc, Novartis Pharmaceuticals Corporation, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Sanofi, Seattle Genetics, Taiho Oncology Inc and Takeda Oncology.

Hardware/Software Requirements:

A high-speed Internet connection A monitor set to 1280 x 1024 pixels or more Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later Adobe Flash Player 10.2 plug-in or later Adobe Acrobat Reader (Optional) Sound card and speakers for audio **Last review date:** February 2017

Expiration date: February 2018

Non-Small Cell Lung Cancer

Naiyer Rizvi, MD

Antonia S. Safety and antitumour activity of durvalumab plus tremelimumab in non-small cell lung cancer: A multicentre, phase 1b study. *Lancet Oncol* 2016;17(3):299-308.

Barlesi F et al. Primary analysis from OAK, a randomized phase III study comparing atezolizumab with docetaxel in 2L/3L NSCLC. *Proc ESMO* 2016; Abstract LBA44_PR.

Hellmann MD et al. CheckMate 012: Safety and efficacy of first-line (1L) nivolumab (nivo; N) and ipilimumab (ipi; I) in advanced (adv) NSCLC. *Proc ASCO* 2016; Abstract 3001.

Kelly K et al. Adjuvant erlotinib versus placebo in patients with stage IB-IIIA non-small-cell lung cancer (RADIANT): A randomized, double-blind, phase III trial. J Clin Oncol 2015;33(34):4007-14.

Langer C et al. Carboplatin and pemetrexed with or without pembrolizumab for advanced, non-squamous non-small-cell lung cancer: A randomised, phase 2 cohort of the open-label KEYNOTE-021 study. *Lancet Oncol* 2016;17(11):1497-508.

Langer C et al. Randomized, phase 2 study of carboplatin and pemetrexed with or without pembrolizumab as first-line therapy for advanced NSCLC: KEYNOTE-021 cohort G. *Proc ESMO* 2016; Abstract LBA46_PR.

Reck M et al. KEYNOTE-024: Pembrolizumab (pembro) vs platinum-based chemotherapy (chemo) as first-line therapy for advanced NSCLC with a PD-L1 tumor proportion score (TPS) \geq 50%. *Proc* ESMO 2016; Abstract LBA8_PR.

Reck M et al. **Pembrolizumab versus chemotherapy for PD-L1–positive non–small-cell lung cancer.** *N Engl J Med* 2016;375:1823-33.

Socinski M et al. CheckMate 026: A phase 3 trial of nivolumab vs investigator's choice (IC) of platinum-based doublet chemotherapy (PT-DC) as first-line therapy for stage iv/ recurrent programmed death ligand 1 (PD-L1)–positive NSCLC. *Proc ESMO* 2016;Abstract LBA7_PR.

Geoffrey R Oxnard, MD

Ahn MJ et al. Phase I study of AZD3759, a CNS penetrable EGFR inhibitor, for the treatment of non-small-cell lung cancer (NSCLC) with brain metastasis (BM) and leptomeningeal metastasis (LM). *Proc ASCO* 2016; Abstract 9003.

Kim D et al. Brigatinib in patients with crizotinib-refractory ALK+ non-small cell lung cancer: First report of efficacy and safety from a pivotal randomized phase 2 trial (ALTA). *Proc ASCO* 2016; Abstract 9007.

Nokihara H et al. Alectinib versus crizotinib in ALK-inhibitor naive ALK-positive non-small cell lung cancer: Primary results from the J-ALEX study. *Proc ASCO* 2016; Abstract 9008.

Oxnard G et al. Plasma genotyping for predicting benefit from osimertinib in patients (pts) with advanced NSCLC. *Proc ESMO* 2016; Abstract 1350_PR.

Oxnard GT et al. Association between plasma genotyping and outcomes of treatment with osimertinib (AZD9291) in advanced non-small-cell lung cancer. *J Clin Oncol* 2016;34(28):3375-82.

Park K et al. Afatinib versus gefitinib as first-line treatment of patients with EGFR mutation-positive non-small-cell lung cancer (LUX-Lung 7): A phase 2B, open-label, randomised controlled trial. *Lancet Oncol* 2016;17(5):577-89.

Paz-Ares L et al. Afatinib (A) vs gefitinib (G) in patients (pts) with EGFR mutation-positive (EGFRm+) non-small-cell lung cancer (NSCLC): Overall survival (OS) data from the phase IIb trial LUX-Lung 7 (LL7). *Proc ESMO* 2016;Abstract LBA43.

Wakelee HA et al. Epidermal growth factor receptor (EGFR) genotyping of matched urine, plasma and tumor tissue from non-small cell lung cancer (NSCLC) patients (pts) treated with rociletinib. *Proc ASCO* 2016; Abstract 9001.

Yang JC et al. Osimertinib activity in patients with leptomeningeal (LM) disease from non-small cell lung cancer (NSCLC): Updated results from BLOOM, a phase I study. *Proc ASCO* 2016;Abstract 9002.

Yu HA et al. Antitumor activity of ASP8273 300 mg in subjects with EGFR mutation-positive non-small cell lung cancer: Interim results from an ongoing phase 1 study. *Proc ASCO* 2016; Abstract 9050.

Melissa Johnson, MD

Drilon AE et al. Efficacy and safety of crizotinib in patients with advanced *MET* exon 14-altered non-small cell lung cancer (NSCLC). *Proc ASCO* 2016; Abstract 108.

Drilon AE et al. Phase II study of cabozantinib for patients with advanced *RET*-rearranged lung cancers. *Proc ASCO* 2015; Abstract 8007.

Govindan R et al. ALCHEMIST trials: A golden opportunity to transform outcomes in early-stage non-small cell lung cancer. *Clin Cancer Res* 2015;21(24):5439-44.

Gridelli C et al. *Nab*-paclitaxel + carboplatin (*nab*-P/C) in advanced non-small cell lung cancer (NSCLC): Outcomes in elderly patients (pts) with squamous (SCC) histology. *Proc ELCC* 2016;Abstract 216PD.

Lung-MAP: A biomarker-driven master protocol for previously treated squamous cell lung cancer. NCT02154490

Papadimitrakopoulou V et al. Lung-MAP (S1400) lung cancer master protocol: Accrual, demographics, and molecular markers. *Proc ASCO* 2016; Abstract 9088.

Planchard D et al. Dabrafenib plus trametinib in patients with previously treated BRAF(V600E)-mutant metastatic non-small cell lung cancer: An open-label, multicentre phase 2 trial. *Lancet Oncol* 2016;17(7):98493.

Rudin CM et al. Safety and efficacy of single-agent rovalpituzumab tesirine (SC16LD6.5), a delta-like protein 3 (DLL3)targeted antibody-drug conjugate (ADC) in recurrent or refractory small cell lung cancer (SCLC). *Proc ASCO* 2016; Abstract LBA8505.

Schrock AB et al. Comprehensive genomic profiling identifies frequent drug-sensitive EGFR exon 19 deletions in NSCLC not identified by prior molecular testing. *Clin Cancer Res* 2016;22(13):3281-5.

Breast Cancer

George W Sledge Jr, MD

Adams S et al. Phase Ib trial of atezolizumab in combination with *nab*-paclitaxel in patients with metastatic triple-negative breast cancer (mTNBC). *Proc ASCO* 2016; Abstract 1009.

Chan A et al. Neratinib after trastuzumab-based adjuvant therapy in patients with HER2-positive breast cancer (ExteNET): A multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Oncol* 2016;17(3):367-77.

Gianni L et al. ETNA (Evaluating Treatment with Neoadjuvant Abraxane) randomized phase III study comparing neoadjuvant *nab*-paclitaxel (*nab*-P) versus paclitaxel (P) both followed by anthracycline regimens in women with HER2-negative high-risk breast cancer: A MICHELANGO study. *Proc ASCO* 2016;Abstract 502.

Emens LA et al. IMpassion130: A Phase III randomized trial of atezolizumab with *nab*-paclitaxel for first-line treatment of patients with metastatic triple-negative breast cancer (mTNBC). *Proc ASCO* 2016; Abstract TPS1104.

IMpassion130: A phase III, multicenter, randomized placebo-controlled study of atezolizumab (anti-PD-L1 antibody) in combination with *nab*-paclitaxel compared with placebo with *nab*-paclitaxel for patients with previously untreated metastatic triple negative breast cancer. NCT02425891

Nanda R et al. Pembrolizumab in patients with advanced triple-negative breast cancer: Phase Ib KEYNOTE-012 study. *J Clin Oncol* 2016;34(21):2460-67.

OlympiAD: A phase III, open label, randomized, controlled, multi-centre study to assess the efficacy and safety of olaparib monotherapy versus physicians choice chemotherapy in the treatment of metastatic breast cancer patients with germline BRCA1/2 mutations. NCT02000622

Rugo HS et al. Adaptive randomization of veliparib-carboplatin treatment in breast cancer. N Engl J Med 2016;375(1):23-34.

Toi M et al. A phase III trial of adjuvant capecitabine in breast cancer patients with HER2-negative pathologic residual invasive disease after neoadjuvant chemotherapy (CREATE-X, JBCRG-04). San Antonio Breast Cancer Symposium 2015; Abstract S1-07.

Untch M et al. *Nab*-paclitaxel versus solvent-based paclitaxel in neoadjuvant chemotherapy for early breast cancer (Gepar-Septo-GBG 69): A randomised, phase 3 trial. *Lancet Oncol* 2016;17(3):345-56.

Urruticoechea A et al. PHEREXA: A phase III study of trastuzumab (H) + capecitabine (X) ± pertuzumab (P) for patients (pts) who progressed during/after one line of H-based therapy in the HER2-positive metastatic breast cancer (MBC) setting. *Proc* ASCO 2016; Abstract 504.

Yamamoto Y et al. **PRECIOUS: A randomized, open-label phase III trial of pertuzumab retreatment in HER2-positive locally advanced/metastatic breast cancer patients who were previously treated with pertuzumab, trastuzumab, and chemotherapy.** *Proc ASCO* 2016; Abstract TPS636.

William J Gradishar, MD

Cardoso F et al. **70-gene signature as an aid to treatment decisions in early-stage breast cancer.** *N Engl J Med* 2016;375(8):717-29.

Dickler MN et al. MONARCH1: Results from a Phase 2 study of abemaciclib, a CDK4 and CDK6 inhibitor, as monotherapy, in patients with HR+/HER2- breast cancer, after chemotherapy for metastatic disease. *Proc ASCO* 2016;Abstract 510.

Fasching PA et al. Phase III study of ribociclib (LEE011) plus fulvestrant for the treatment of postmenopausal patients with hormone receptor-positive (HR+), human epidermal growth factor receptor 2-negative (HER2-) advanced breast cancer (aBC) who have received no or only one line of prior endocrine treatment (ET): MONALEESA-3. *Proc* ASCO 2016; Abstract TPS624.

Finn RS et al. PALOMA-2: Primary results from a Phase 3 trial of palbociclib plus letrozole compared with placebo plus letrozole in postmenopausal women with ER+/HER2- advanced breast cancer. *Proc ASCO* 2016; Abstract 507.

Goss PE et al. A randomized trial (MA.17R) of extending adjuvant letrozole for 5 years after completing an initial 5 years of aromatase inhibitor therapy alone or preceded by tamoxifen in postmenopausal women with early-stage breast cancer. *Proc* ASCO 2016; Abstract LBA1.

Goss PE et al. Extending aromatase-inhibitor adjuvant therapy to 10 years. N Engl J Med 2016;375(3):209-19.

Hortobagyi GN et al. First-line ribociclib + letrozole for postmenopausal women with hormone receptor-positive (HR+), HER2-negative (HER2-), advanced breast cancer. *Proc ESMO* 2016; Abstract LBA1_PR.

Hortobagyi GN et al. **Ribociclib as first-line therapy for HR-positive, advanced breast cancer.** *N Engl J Med* 2016;3;375(18):1738-48.

Hurvitz S et al. Interim results from neoMONARCH: A neoadjuvant Phase II study of abemaciclib in postmenopausal women with HR+/HER2- breast cancer (BC). *Proc ESMO* 2016;Abstract LBA13.

MONALEESA-3: A randomized double-blind, placebo-controlled study of ribociclib in combination with fulvestrant for the treatment of men and postmenopausal women with hormone receptor positive, HER2-negative, advanced breast cancer who have received no or only one line of prior endocrine treatment. NCT02422615

neoMONARCH: A phase 2 neoadjuvant trial comparing the biological effects of 2 weeks of abemaciclib (LY2835219) in combination with anastrozole to those of abejaciclib monotherapy and anastrozole monotherapy and evaluating the clinical activity and safety of a subsequent 14 weeks of therapy with abemaciclib in combination with anastrozole in postmenopausal women with hormone receptor positive, HER2 negative breast cancer. NCT02441946

Pan H et al. Predictors of recurrence during years 5-14 in 46,138 women with ER+ breast cancer allocated 5 years only of endocrine therapy (ET). *Proc ASCO* 2016; Abstract 505.

Roberts MC et al. Breast cancer-specific survival in patients with node-positive hormone receptor positive invasive breast cancer and Oncotype DX recurrence score results in the SEER database. *Proc ASCO* 2016; Abstract 6575.

Zhang Y et al. Validation of a prognostic model integrating Breast Cancer Index (BCI) with tumor size and grade for prediction of distant recurrence in hormone receptor-positive (HR+) breast cancer with 1-3 positive nodes. *Proc ASCO* 2016; Abstract 541.

Multiple Melanoma

Jason J Luke, MD

Algazi A et al. Clinical outcomes in metastatic uveal melanoma treated with PD-1 and PD-L1 antibodies. *Cancer* 2016;122(21):3344-53.

Goldberg S et al. Pembrolizumab for patients with melanoma or non-small-cell lung cancer and untreated brain metastases: Early analysis of a non-randomised, open-label, phase 2 trial. *Lancet Oncol* 2016;17:976-83.

Puzanov I et al. Talimogene laherparepvec in combination with ipilimumab in previously untreated, unresectable Stage IIIB-IV melanoma. *J Clin Oncol* 2016;34:2619-26.

Robert C et al. Three-year overall survival for patients with advanced melanoma treated with pembrolizumab in KEYNOTE-001. *Proc ASCO* 2016;34:Abstract 9503.

Schachter J et al. Pembrolizumab versus ipilimumab for advanced melanoma: Final overall survival analysis of KEYNOTE-006. *Proc ASCO* 2016; Abstract 9504.

Jeffrey Weber, MD, PhD

Dummer R et al. Results of NEMO: A phase III trial of binimetinib (BINI) vs dacarbazine (DTIC) in *NRAS*-mutant cutaneous melanoma. *Proc ASCO* 2016; Abstract 9500.

Eggermont AMM et al. Ipilimumab (IPI) vs placebo (PBO) after complete resection of stage III melanoma: Final overall survival results from the EORTC 18071 randomized, double-blind, phase 3 trial. *Proc ESMO* 2016; Abstract LBA2_PR.

Eggermont AMM et al. Prolonged survival in Stage III melanoma with ipilimumab adjuvant therapy. N Engl J Med 2016;[Epub ahead of print].

Hodi FS et al. Combined nivolumab and ipilimumab versus ipilimumab alone in patients with advanced melanoma: 2-year overall survival outcomes in a multicentre, randomised, controlled, phase 2 trial. *Lancet Oncol* 2016;17(11):1558-68.

Weber JS et al. Sequential administration of nivolumab and ipilimumab with a planned switch in patients with advanced melanoma (CheckMate 064): An open-label, randomised, phase 2 trial. *Lancet Oncol* 2016;17(7):943-55.

Genitourinary Cancers

David I Quinn, MBBS, PhD

James ND et al. Addition of docetaxel, zoledronic acid, or both to first-line long-term hormone therapy in prostate cancer (STAMPEDE): Survival results from an adaptive, multiarm, multistage, platform randomised controlled trial. *Lancet* 2016;387(10024):1163-77.

Penson DF et al. Enzalutamide versus bicalutamide in castration-resistant prostate cancer: The STRIVE trial. *J Clin Oncol* 2016;34(18):2098-106.

Saad F et al. Radium-223 and concomitant therapies in patients with metastatic castration-resistant prostate cancer: An international, early access, open-label, single-arm phase 3b trial. *Lancet Oncol* 2016;17(9):1306-16.

Sartor AO et al. Cabazitaxel vs docetaxel in chemotherapy-naive (CN) patients with metastatic castration-resistant prostate cancer (mCRPC): A three-arm phase III study (FIRSTANA). *Proc ASCO* 2016; Abstract 5006.

Scher HI et al. Association of AR-V7 on circulating tumor cells as a treatment-specific biomarker with outcomes and survival in castration-resistant prostate cancer. *JAMA Oncology* 2016;2(11):1441-49.

Elizabeth R Plimack, MD, MS

Balar AV et al. Atezolizumab as first-line (1L) therapy in cisplatin-ineligible locally advanced/metastatic urothelial carcinoma (mUC): Primary analysis of IMvigor210 cohort 1. *Proc ASCO* 2016;Abstract LBA4500.

Balar AV et al. Pembrolizumab (pembro) as first-line therapy for advanced/unresectable or metastatic urothelial cancer: Preliminary results from the Phase 2 KEYNOTE-052 study. *Proc ESMO* 2016; Abstract LBA32_PR.

Choueiri TK et al. CABOzantinib versus SUNitinib (CABOSUN) as initial targeted therapy for patients with metastatic renal cell carcinoma (mRCC) of poor and intermediate risk groups: Results from ALLIANCE A031203 trial. *Proc ESMO* 2016;Abstract LBA30_PR.

Dreicer R et al. Updated efficacy from IMvigor210: Atezolizumab in platinum treated locally advanced/metastatic urothelial carcinoma (mUC). *Proc ASCO* 2016; Abstract 4515.

Escudier BJ et al. Treatment beyond progression with nivolumab (nivo) in patients with advanced renal cell carcinoma (aRCC) in the Phase III CheckMate 025 study. *Proc ASCO* 2016; Abstract 4509.

Galsky M et al. Efficacy and safety of nivolumab monotherapy in patients with metastatic urothelial cancer (mUC) who have received prior treatment: Results from the Phase II CheckMate 275 study. *Proc ESMO* 2016; Abstract LBA31_PR.

Massard C et al. Safety and efficacy of durvalumab (MEDI4736), an anti-programmed cell death ligand-1 immune checkpoint inhibitor, in patients with advanced urothelial bladder cancer. *J Clin Oncol* 2016;34(26):3119-25.

Motzer RJ et al. Lenvatinib, everolimus, and the combination in patients with metastatic renal cell carcinoma: A randomised, phase 2, open-label, multicentre trial. *Lancet Oncol* 2015;16(15):1473-82.

Motzer RJ et al. Nivolumab versus everolimus in advanced renal-cell carcinoma. N Engl J Med 2015;373(19):1803-13.

Ravaud A et al. Adjuvant sunitinib in high-risk renal-cell carcinoma after nephrectomy. N Engl J Med 2016; [Epub ahead of print].

Ravaud A et al. Phase III trial of sunitinib (SU) vs placebo (PBO) as adjuvant treatment for high-risk renal cell carcinoma (RCC) after nephrectomy (S-TRAC). Proc ESMO 2016; Abstract LBA11_PR.

Hodgkin and Non-Hodgkin Lymphomas

Michael E Williams, MD, ScM

Byrd JC et al. Acalabrutinib (ACP-196) in relapsed chronic lymphocytic leukemia. N Engl J Med 2016;374(4):323-32.

Flinn IW et al. Safety and efficacy of a combination of venetoclax (GDC-0199/ABT-199) and obinutuzumab in patients with relapsed/refractory or previously untreated chronic lymphocytic leukemia — Results from a Phase 1b study (GP28331). *Proc* ASH 2015;Abstract 494.

Leblond V et al. Preliminary safety data from the Phase 3b GREEN study of obinutuzumab (G) alone or combined with chemotherapy for previously untreated or relapsed/refractory chronic lymphocytic leukemia (CLL). *Proc EHA* 2016; Abstract S427.

Roberts AW et al. Targeting BCL2 with venetoclax in relapsed chronic lymphocytic leukemia. *N Engl J Med* 2016;374(4):311-22.

Zelenetz AD et al. Idelalisib plus bendamustine and rituximab (BR) is superior to BR alone in patients with relapsed/refractory chronic lymphocytic leukemia: Results of a Phase 3 randomized double-blind placebo-controlled study. *Proc ASH* 2015;Abstract LBA-5.

Ian W Flinn ,MD, PhD

Evens AM et al. Effect of bortezomib on complete remission (CR) rate when added to bendamustine-rituximab (BR) in previously untreated high-risk (HR) follicular lymphoma (FL): A randomized Phase II trial of the ECOG-ACRIN Cancer Research Group (E2408). *Proc ASCO* 2016; Abstract 7507.

Ruan J et al. Lenalidomide plus rituximab as initial treatment for mantle-cell lymphoma. *N Engl J Med* 2015;373(19):1835-44.

Sehn LH et al. **Obinutuzumab plus bendamustine versus bendamustine monotherapy in patients with rituximab-refractory indolent non-Hodgkin lymphoma (GADOLIN): A randomised, controlled, open-label, multicentre, phase 3 trial.** *Lancet Oncol* 2016;17(8):1081-93.

Trneny M et al. Lenalidomide versus investigator's choice in relapsed or refractory mantle cell lymphoma (MCL-002; SPRINT): A phase 2, randomised, multicentre trial. *Lancet Oncol* 2016;17(3):319-31.

Loretta J Nastoupil, MD

Armand P et al. **Programmed death-1 blockade with pembrolizumab in patients with classical Hodgkin lymphoma after brentuximab vedotin failure.** *J Clin Oncol* 2016;34(31):3733-39.

Kumar A et al. Brentuximab vedotin and AVD followed by involved-site radiotherapy in early stage, unfavorable risk Hodgkin lymphoma. *Blood* 2016;128(11):1458-64.

Park SI et al. A Phase 2 trial of ABVD followed by brentuximab vedotin consolidation in limited stage non-bulky Hodgkin lymphoma (LCCC 1115). *Proc ASCO* 2016; Abstract 7508.

Roemer MG et al. **PD-L1 and PD-L2 genetic alterations define classical Hodgkin lymphoma and predict outcome.** *J Clin Oncol* 2016;34(23):2690-7.

Yasenchak CA et al. Brentuximab vedotin in combination with dacarbazine or bendamustine for frontline treatment of Hodgkin lymphoma in patients aged 60 years and above: Interim results of a multi-cohort Phase 2 study. *Proc ASH* 2015; Abstract 587.

Younes A et al. Nivolumab for classical Hodgkin's lymphoma after failure of both autologous stem-cell transplantation and brentuximab vedotin: A multicentre, multicohort, single-arm phase 2 trial. *Lancet Oncol* 2016;17(9):1283-94.

Multiple Myeloma

Robert Z Orlowski, MD, PhD

Attal M et al. Autologous transplantation for multiple myeloma in the era of new drugs: A Phase III study of the Intergroupe Francophone Du Myelome (IFM/DFCI 2009 trial). *Proc ASH* 2015; Abstract 391.

Avet-Loiseau H et al. Evaluation of minimal residual disease (MRD) by next generation sequencing (NGS) is highly predictive of progression free survival in the IFM/DFCI 2009 trial. *Proc ASH* 2015; Abstract 191.

Cavo M et al. Upfront autologous stem cell transplantation (ASCT) versus novel agent-based therapy for multiple myeloma (MM): A randomized phase 3 study of the European Myeloma Network (EMN02/H095 MM trial). *Proc ASCO* 2016;Abstract 8000.

Durie B et al. Bortezomib, lenalidomide and dexamethasone vs lenalidomide and dexamethasone in patients (pts) with previously untreated multiple myeloma without an intent for immediate autologous stem cell transplant (ASCT): Results of the randomized Phase III trial SWOG S0777. *Proc ASH* 2015;Abstract 25.

Jakubowiak A et al. Improved efficacy after incorporating autologous stem cell transplant (ASCT) into KRD treatment with carfilzomib (CFZ), lenalidomide (LEN), and dexamethasone (DEX) in newly diagnosed multiple myeloma. *Proc EHA* 2016; Abstract S101.

Lacy M et al. Phase 1/2 trial of ixazomib, cyclophosphamide, and dexamethasone for newly diagnosed multiple myeloma (NDMM). *Proc ASCO* 2016; Abstract 8002.

Mateos MV et al. Lenalidomide plus dexamethasone versus observation in patients with high-risk smouldering multiple myeloma (QuiRedex): Long-term follow-up of a randomised, controlled, phase 3 trial. *Lancet Oncol* 2016;17(8):1127-36.

Shah JJ et al. Phase I/II trial of the efficacy and safety of combination therapy with lenalidomide/bortezomib/dexamethasone (RVD) and panobinostat in transplant-eligible patients with newly diagnosed multiple myeloma. *Proc ASH* 2015;Abstract 187.

Kenneth C Anderson, MD

Ali SA et al. **T cells expressing an anti-B-cell maturation antigen chimeric antigen receptor cause remissions of multiple myeloma.** *Blood* 2016;128(13):1688-700.

Ali SA et al. Remissions of multiple myeloma during a first-in-humans clinical trial of T cells expressing an anti-B-cell maturation antigen chimeric antigen receptor. *Proc ASH* 2015; Abstract LBA-1.

Berenson J et al. CHAMPION-1: A phase 1/2 study of once-weekly carfilzomib and dexamethasone for relapsed or refractory multiple myeloma. *Blood* 2016;127(26):3360-68.

Berenson J et al. Weekly carfilzomib with dexamethasone for patients with relapsed or refractory multiple myeloma: Updated from the Phase 1/2 study Champion-1 (NCT01677858). *Proc ASH* 2015; Abstract 373.

Dimopoulos MA et al. An open-label, randomised phase 3 study of daratumumab, lenalidomide, and dexamethasone (DRd) versus lenalidomide and dexamethasone (Rd) in relapsed or refractory multiple myeloma (RRMM): POLLUX. *Proc EHA* 2016;Abstract LB2238.

Dimopoulos MA et al. Daratumumab, lenalidomide, and dexamethasone for multiple myeloma. *N Engl J Med* 2016;375(14):1319-31.

Mateos MV et al. Pembrolizumab in combination with lenalidomide and low-dose dexamethasone for relapsed/refractory multiple myeloma (RRMM): Final efficacy and safety analysis. *Proc ASCO* 2016; Abstract 8010.

Palumbo A et al. Daratumumab, bortezomib, and dexamethasone for multiple myeloma. N Engl J Med 2016;375(8):754-66.

Palumbo A et al. Phase III randomized controlled study of daratumumab, bortezomib, and dexamethasone (DVd) versus bortezomib and dexamethasone (Vd) in patients (pts) with relapsed or refractory multiple myeloma (RRMM): CASTOR study. *Proc ASCO* 2016; Abstract LBA4.

Ramasamy K et al. Safety of treatment (Tx) with pomalidomide (POM) and low-dose dexamethasone (LoDEX) in patients (pts) with relapsed or refractory multiple myeloma (RRMM) and renal impairment (RI), including those on dialysis. *Proc ASH* 2015; Abstract 374.

Colorectal, Gastric and Pancreatic Cancer

Philip A Philip, MD, PhD

Becerra C et al. BBI608-201: Phase 1b/2 study of cancer stemness inhibitor BBI608 combined with paclitaxel in advanced gastric and gastroesophageal junction (GEJ) adenocarcinoma. *Proc ASCO* 2015; Abstract 4069.

Corcoran RB et al. Combined BRAF and MEK inhibition with dabrafenib and trametinib in BRAF V600-mutant colorectal cancer. *J Clin Oncol* 2015;33(34):4023-31.

Lee MS et al. Association of primary site and molecular features with progression-free survival and overall survival of metastatic colorectal cancer after anti-epidermal growth factor receptor therapy. *Proc ASCO* 2016; Abstract 3506.

Mayer RJ et al. TAS-102 versus placebo plus best supportive care in patients with metastatic colorectal cancer refractory to standard therapies: Final survival results of the phase III RECOURSE trial. Gastrointestinal Cancers Symposium 2016; Abstract 634.

Ohtsu A et al. Onset of neutropenia as an indicator of treatment response in the phase III RECOURSE trial of TAS-102 vs placebo in patients with metastatic colorectal cancer. *Proc ASCO* 2016; Abstract 3556.

Overman M et al. Nivolumab ± ipilimumab in treatment (tx) of patients (pts) with metastatic colorectal cancer (mCRC) with and without high microsatellite instability (MSI-H): CheckMate-142 interim results. *Proc ASCO* 2016; Abstract 3501.

Sartore-Bianchi A et al. Dual-targeted therapy with trastuzumab and lapatinib in treatment-refractory, KRAS codon 12/13 wild-type, HER2-positive metastatic colorectal cancer (HERACLES): A proof-of-concept, multicentre, open-label, phase 2 trial. *Lancet Oncol* 2016;17(6):738-46.

Schrag D et al. The relationship between primary tumor sidedness and prognosis in colorectal cancer. *Proc ASCO* 2016; Abstract 3505.

Shah MA et al. The BRIGHTER trial: A phase III randomized double-blind study of napabucasin (BBI-608) + weekly paclitaxel versus placebo (PBO) + weekly paclitaxel in patients (pts) with pretreated advanced gastric and gastro-esophageal junction (GEJ) adenocarcinoma. *Proc ASCO* 2016;Abstract TPS4144.

Venook AP et al. Impact of primary tumor location on overall survival and progression-free survival in patients with metastatic colorectal cancer: Analysis of CALGB/SWOG 80405 (Alliance). *Proc ASCO* 2016; Abstract 3504.

Tanios Bekaii-Saab, MD

Bruix J et al. Efficacy and safety of regorafenib versus placebo in patients with hepatocellular carcinoma progressing on sorafenib: Results of the international, randomized Phase 3 RESORCE trial. *Proc ESMO GI* 2016; Abstract LBA03.

El-Khoueiry AB et al. Phase I/II safety and antitumor activity of nivolumab in patients with advanced hepatocellular carcinoma: Interim analysis of the CheckMate-040 dose escalation study. *Proc ASCO* 2016; Abstract 4012.

Le DT et al. Safety and activity of nivolumab monotherapy in advanced and metastatic gastric or gastroesophageal junction cancer (GC/GEC): Results from the CheckMate-032 study. Gastrointestinal Cancers Symposium 2016; Abstract 6.

Muro K et al. Pembrolizumab for patients with PD-L1-positive advanced gastric cancer (KEYNOTE-012): A multicentre, openlabel, phase 1b trial. *Lancet Oncol* 2016;17:717-26.

Neoptolemos JP et al. ESPAC-4: A multicenter, international, open-label randomized controlled Phase III trial of adjuvant combination chemotherapy of gemcitabine (GEM) and capecitabine (CAP) versus monotherapy gemcitabine in patients with resected pancreatic ductal adenocarcinoma. *Proc ASCO* 2016;Abstract LBA4006.

Sangro B et al. A randomized, multicenter, Phase 3 study of nivolumab vs sorafenib as first-line treatment in patients with advanced hepatocellular carcinoma: CheckMate-459. *Proc ASCO* 2016; Abstract TPS4147.

Sangro B et al. Safety and antitumor activity of nivolumab in patients with advanced hepatocellular carcinoma: Interim analysis of dose-expansion cohorts from the Phase 1/2 CheckMate-040 study. *Proc ASCO* 2016; Abstract 4078.